Conservation Masterplan

A Vision for Transforming the Trent Headwaters

Part of Transforming the Trent Valley

Summary

This report outlines the approach taken to develop a new landscape-scale initiative centred on the headwaters of the River Trent. It introduces the newly formed partnership, sets out the shared aims and vision, and details the next steps toward bringing that vision to life.

Staffordshire Wildlife Trust

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Staffordshire Wildlife Trust

SUPPORT STAFFORDSHIRE

Staffordshire County Council

Contents

Purpose of the Masterplan

This document has been prepared by Staffordshire Wildlife Trust with support from a wide range of partners. Over an 18-month period, from April 2024 to September 2025, the Trust, in collaboration with Support Staffordshire, Staffordshire County Council, and others, carried out a detailed study of the River Trent's headwaters. The purpose of this work was to explore the feasibility of a new, landscape-scale partnership project with a focus on nature and heritage.

Extensive consultation formed a key part of the process. Through direct engagement with local communities, two staff members visited a diverse range of community groups to better understand what people value about the landscape and to identify unmet needs. This was complemented by in-depth conversations with local organisations, community leaders, and individuals to gather insight into the region's needs, opportunities, and priorities.

Specialist consultants were commissioned to conduct research and produce informed audits of the area's natural and cultural heritage. These audits were developed in close collaboration with local experts, external partners, and communities, and have helped to identify key priorities that future projects can address. The findings from both the audits and the community consultations will be made publicly available, enabling groups across the region to benefit from this shared knowledge and use it to drive positive change.

A new partnership - Transforming the Trent Headwaters - has since been established. It emerged from a call-out to stakeholders active in the region, including local authorities, government agencies, academic institutions, and Voluntary, Community and Social Enterprise (VCSE) organisations. These range from wildlife and environmental groups to organisations focused on health, wellbeing, heritage, sports, and the arts. The partnership is underpinned by a formal Terms of Reference, which sets out a clear framework for collaboration and accountability.

This masterplan brings together the knowledge and insights gathered throughout the study and presents a clear vision for transforming the Trent Headwaters for the benefit of people, wildlife, and heritage. It acts as a strategic guide to support Staffordshire Wildlife Trust and its partners in shaping a new landscape-scale initiative, and it lays the groundwork for future fundraising and project development.

1. Introduction and vision

1.1 Project Overview

The River Trent is one of the UK's most celebrated rivers. It begins its 185-mile journey across England to the Humber Estuary and the North Sea from Biddulph Moor, a small village in North Staffordshire. Rising from a freshwater spring, the river then flows down into the industrial heartlands of Stoke-on-Trent. In these upper reaches, the river is fed by numerous streams and tributaries that rise in Stoke-on-Trent and Newcastle-under-Lyme each holding ecological, historical, and cultural significance.

The landscape of the headwaters is predominantly urban, and the area has a long industrial history including pottery and coal mining that is closely connected to the rivers. Two canals, the Trent and Mersey Canal and the Caldon Canal, serve the landscape, fed by the watercourses and creating a vital link through the towns for both people and wildlife. The legacy of industry and development has meant that large stretches of the rivers and streams are heavily modified and constrained, making this a critical area for conservation and environmental restoration.

Within the urban landscape, many stretches of the fledgling river have been hidden from public view, meaning the River Trent has become disconnected from those who live and work around it. Decades of urbanisation have also taken their toll on the river's water quality and wildlife.

This masterplan sets out a vision for a landscape-scale scheme that will be known as 'Transforming the Trent Headwaters' and will focus upon the region's natural and cultural heritage and bring partners and communities together to create meaningful and transformative change. The identified area upon which this new scheme will focus will be referred to as the Trent Headwaters.

1.2 Vision Statement

To create a restored, resilient headwaters landscape where rivers, wildlife, and heritage flourish, driven by strong partnerships and empowered communities - ensuring a sustainable future for Stoke-on-Trent, Newcastle-under-Lyme, and Staffordshire Moorlands.

1.3 Aims

- To conserve, enhance and restore the cultural, historic and natural heritage of the Trent headwaters.
- To empower communities to shape, lead and co-create the future of their landscape by supporting informed, independent action and fostering meaningful engagement.
- To improve physical, digital and intellectual access to the landscape heritage, creating better links and opportunities for learning, enjoyment and wellbeing.
- To create a lasting legacy of a resilient and restored landscape for both people and wildlife.

1.4 Objectives

1. *Conserve, enhance and restore our natural and cultural heritage*
   - Identify, restore and protect critical habitats within the Trent headwaters landscape.
   - Undertake invasive species management and seek opportunities for native species reintroductions.
   - Establish a citizen science programme to implement biodiversity and water quality monitoring as a legacy.
   - Identify and protect local cultural and historical assets and intangible heritage linked to the area's rich heritage.

2. *Empower communities*
   - Involve communities in the planning, development and delivery of projects across the landscape.
   - Promote volunteering and participation activities and provide opportunities for independent action.
   - Collaborate with local groups, specialists and artists to interpret and celebrate the river's natural and historical significance.

3. *Improve access and engagement*
   - Provide opportunities for learning and support active engagement.
   - Improve physical and virtual access to the landscape and the watercourses.
   - Ensure that the scheme is accessible to all, providing opportunities for diverse community groups to engage with the landscape and its benefits.

4. *Build long-term resilience*
   - Delivery habitat restoration that supports biodiversity and ecosystem services.
   - Promote practices that are sustainable, community-supported and climate adaptive.
   - Embed legacy planning in all activities including knowledge sharing, supporting sustainable partnerships and identifying future funding.

1.5 Associated audits and reports

This masterplan is a summary of the extensive research and consultation that has taken place over an 18-month period. This masterplan takes directly from this information and should be read in tandem with the original reports for a more in-depth analysis of the needs, opportunities and priorities identified across the landscape. These reports are available on the Transforming the Trent Valley website www.thetrentvalley.org.uk and are identified below:

- Transforming the Trent Headwaters Natural Heritage Audit – terrestrial habitats, Staffordshire Wildlife Trust, June 2025.
- Transforming the Trent Headwaters Natural Heritage Audit – watercourses and water dependent habitats, Middlemarch, July 2025.
- Transforming the Trent Headwaters Cultural Heritage Audit Report, York Archaeology, July 2025.
- Transforming the Trent Headwaters Community Engagement Analysis, Support Staffordshire and VAST, April 2025.
- Community Engagement and Advocacy Report, Support Staffordshire, August 2025.

2. Understanding the landscape

2.1 About the Trent Headwaters

The Trent Headwaters, as an identified area, are solely within the county of Staffordshire. The landscape covers Biddulph Moor in Staffordshire Moorlands, Stoke-on-Trent, urban Newcastle-under-Lyme and Trentham in Stafford.

The map below (Figure 1) shows the boundary that defines this area (red line). This boundary has been refined through consultation with partners and exploration of maps to ensure it fits the aims of our scheme. It is defined by the physical attributes of the landscape, whilst also taking the distribution of local communities into consideration.

It broadly follows the watershed of the catchment to the north and west. The watershed, or drainage basin, is the area of land that feeds rainfall, snowmelt and runoff into the river channel. The downstream limit of the headwaters is open to interpretation, and we have chosen Trentham, in the borough of Stafford, as this limit due to the character of the river and its tributaries changing from this point.

We have also included areas outside of the watershed within the landscape boundary but defined using a dotted line (pink). These areas represent communities with a strong connection to the landscape, and we term them as ‘engagement areas’. Physical interventions in these areas would not benefit the watercourses of the Trent headwaters, but here communities should be engaged in decisions and activities relating to the scheme. When referring to the Trent Headwaters as a defined landscape and as a scheme, we refer to the broader landscape, which incorporates these ‘engagement areas’.

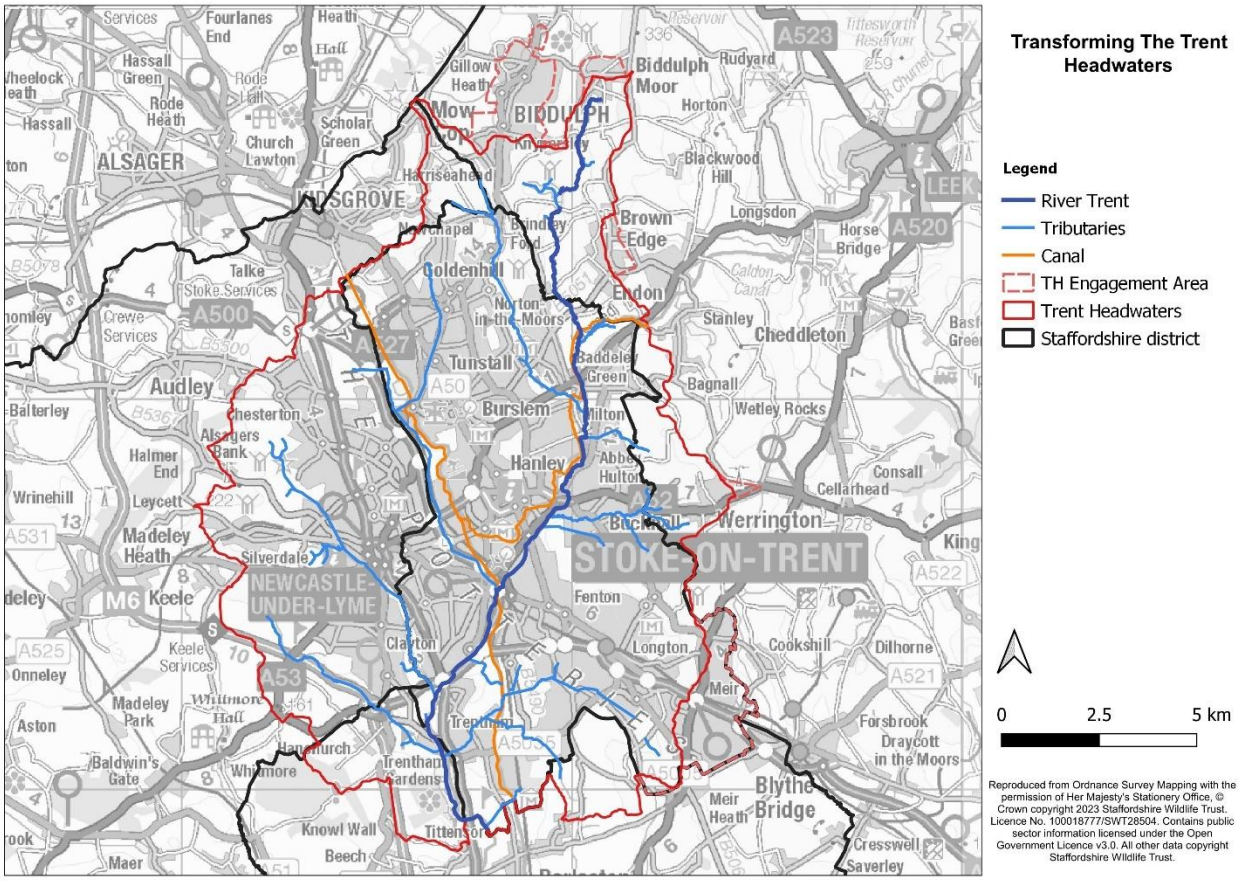


Figure 1: Map of the Trent Headwaters landscape area showing the route of the River Trent and its main tributaries, the canals and the political boundaries.

2.1.1 Communities

Our communities have a deep cultural connection with the landscape; whilst the routes of the River Trent and its tributaries are not always clear on the ground, the two main urban areas, Stoke-on-Trent and Newcastle-under-Lyme, are named for the watercourses they are built upon. There is a strong industrial history, predominantly focused on the potteries, but also relating to coal mining, that gives this area its character and people are deeply proud of their heritage.

More recently, the city has become culturally diverse with a mix of heritage and traditions that opens new opportunities for understanding our place and narrating the oral histories, stories and folktales that define us through time[1].

2.1.2 Heritage

The landscape holds layers of heritage from prehistory through to modern day. Historically, the river served as a vital waterway for local people and industry, and today the remnants of mining, pottery kilns, canals and old transport routes indicate this industrial past. Today, the region is under pressure from challenges relating to urban expansion, land management and climate change that threaten our heritage[1].

We want to preserve both tangible (monuments, artefacts and sites) and intangible (traditions, stories and memories) heritage. The historic environment is not renewable so once lost it will be lost forever. If we are to be the generation that leaves the environment in a better state than we found it, action must be taken now[2].

2.1.3 Habitats

Terrestrial habitats within the landscape have been assigned a distinctiveness level, based on their ecological characteristics, which serves as an indicator of their broader biodiversity value[1]. Due to the predominantly urban nature of the landscape, the majority of habitats fall into the low or very low distinctiveness categories, such as residential gardens and amenity grasslands. However, there are also pockets of semi-natural habitat of varying size and condition, including unmanaged rank grassland and well-managed species-rich grasslands. Irreplaceable habitats, primarily represented by long-established and ancient woodland, are also present.

The ecological condition of watercourses and associated wet habitats were assessed to determine their overall health. These habitats, such as wetlands, reedbeds, wet woodlands, ponds, open water, rivers, streams, and brooks, play a critical role in supporting natural flood management and building resilience to drought, amongst other ecosystem services.

During the Natural Heritage Audit, multiple references to industrial heritage were identified, including historic landfill sites, disused mines, spoil heaps, and other legacy industrial features[3]. These may pose potential constraints to habitat restoration efforts and warrant further investigation. They also represent opportunities, particularly for their potential as UK priority habitat '*Open Mosaic Habitat on Previously Developed Land'*.

There is significant potential for habitat restoration across the city, offering opportunities to enhance both green and blue spaces. Alongside this, there is scope to explore species reintroduction initiatives and the control of invasive non-native species[1].

2.1.4 Watercourses

The Trent headwaters is a fluvial landscape marking the upper reaches of the watercourse. It initially flows through open countryside, predominantly pasture and woodland, before entering the urban limits where the watercourse becomes heavily modified, and is often constrained within a concrete channel. There are also a number of tributaries in this catchment with over 260km of watercourses feeding into the River Trent[3], opening opportunities for a range of river and water environment initiatives.

There are diverse pressures on these watercourses including from diffuse and point-source pollution, physical modifications to the riverbed and banks, barriers to fish movement, and alterations to their natural flow regime[3].

Opportunities to re-naturalise the channel are varied and include the removal of river obstacles and constraints to allow natural processes to reestablish. There is scope to restore riparian and floodplain habitat, reconnecting the watercourses to their adjacent habitats to maximise aquatic habitat conditions[3].

2.2 Geography

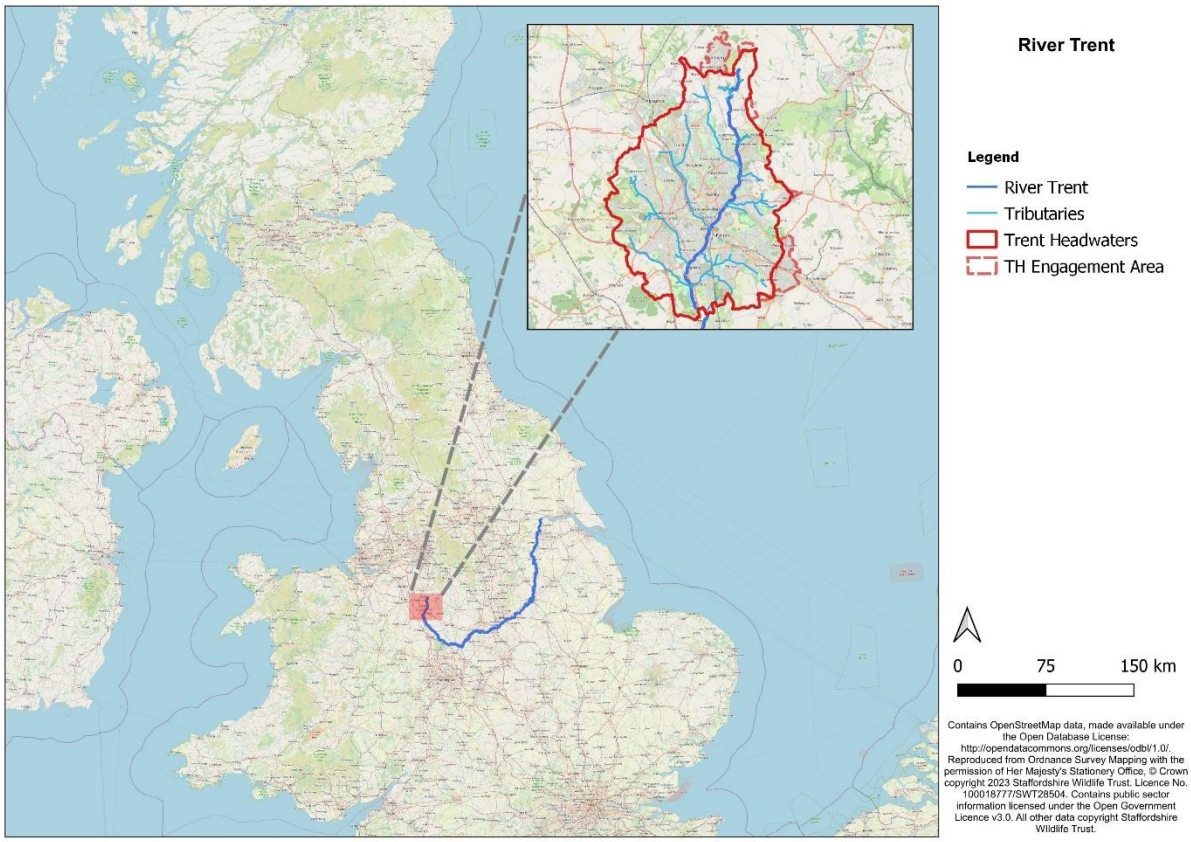


Figure 2. Location of the Trent Headwaters landscape within the catchment of the River Trent as it flows through the UK from source to sea.

The diverse landscape of the Trent headwaters is a mosaic of different habitats that exist as a result of the geography, geology and climate of the region. They have all been impacted by man over millennia and are the result of both ancient and modern settlement and land-use.

This is a heavily industrialised landscape; the geography and geomorphology of the region has changed over time due to development, industry, coal mining and transport. Canals cross this landscape; originally serving as vital transport links to the potteries, they now form green corridors that provide access for people and habitat for wildlife. We also find that large extents of the rivers and streams have been artificially straightened, deepened and narrowed, or even disappear altogether beneath urban infrastructure.

The River Trent rises in rural Biddulph and initially flows south through farmland and countryside before entering Knypersley Reservoir, a manmade feature that feeds the canal network. It then continues to flow through farmland and countryside before entering the urban landscape at Norton Green. From here, the river continues south through the city of Stoke-on-Trent where it occasionally disappears beneath roads and other structures. The river finally exits the city at Trentham where it continues south towards Stafford and Rugeley before continuing its more easterly and then northerly course through the Midlands.

The River Trent flows for 26km through the Trent Headwaters landscape and is fed by six primary tributaries: Lyme Brook, Fowlea Brook, Longton Brook, Park Brook, Ford Green Brook and Causley Brook. Numerous other small and often unnamed watercourses also contribute to the drainage of this catchment.

The City of Stoke-on-Trent resides almost entirely within the Trent headwaters. Originally six towns, the city sprawls across 93 square kilometres (36 square miles)[4] whilst the wider conurbation, comprising also Newcastle-under-Lyme and the villages, covers 150 square kilometres. The total area of our landscape covers 180 square kilometres, of which 84% is urban.

Stoke-on-Trent is the seventh most densely populated of the West Midland's 30 local authority areas and is ranked 69 out of 309 for total population in local authority areas in England[5]. Despite this, Stoke-on-Trent is the fourth greenest city in the UK, as measured by percentage of greenspace (23.82%)[6].

Table 1: The physical division of the landscape by local authority and landscape characteristics both including and excluding the 'engagement areas' in square kilometres.

	Total landscape including 'engagement areas'	**Landscape excluding 'engagement areas'**
Newcastle-under-Lyme	46.33 sq. km	46.33 sq. km
Stoke-on-Trent	93.29 sq. km	88.18 sq. km
Staffordshire Moorlands	26.31 sq. km	20.85 sq. km
Stafford	13.31 sq. km	13.31 sq. km
Total area	**179.25 sq. km**	**168.66 sq. km**
Urban	150.38 sq. km	140.32 sq. km
Urban percentage	84%	83%
Rural	28.86 sq. km	28.35 sq. km
Rural percentage	16%	17%

2.3 Natural Heritage

2.3.1 Terrestrial habitats

The scheme boundary has been determined with several objectives in mind, the foremost of which is the enhancement of the River Trent for wildlife. It is underpinned by environmental data with due consideration of the communities impacted. The core data source on which the Trent Headwaters boundary is based are the catchments identified in the Humber River Basin Management Plan, which ensures any restoration work within this boundary will impact the River Trent.

The project area falls within the Humber River Basin district which drains into the Humber Estuary and covers multiple counties. It falls within the Staffordshire Trent Valley management catchment and the Trent Source to Sow operational catchment.

There are multiple designated nature conservation sites within the landscape that offer both opportunities and additional considerations for future project work. Habitats in good condition may limit the variety opportunities due to preexisting land management

obligations being a priority, however there may be an opportunity to expand or connect these habitats. On the other hand, if the habitats are in poor condition, then they could be suitable for restoration.

Within the scheme area there are over 100 designated sites including one National Nature Reserve, 5 Sites of Special Scientific Interest (SSSI), and 14 Regionally Important Geological Sites (RIGS); not all were included within the Natural Heritage Audit due to their favourable condition restricting opportunity for intervention.

Brownfield sites have also emerged as important habitats due to the post-industrial nature of Stoke-on-Trent and urban Newcastle-under-Lyme, as well as the current built-up characteristic of this region. Brownfield sites are areas of land that have previously been developed but are cleared of buildings. These sites can support mosaics of early succession habitat styles including bare ground, short grassland, ruderal plants and even heathland and marsh. Some of these sites may meet the criteria of UK priority habitat '*Open Mosaic Habitat on Previously Developed Land*'. There are several existing brownfield sites in the landscape[1].

Other features of note include historic water meadows, irrigation systems implemented between Medieval and late Victorian periods that controlled the flow of water across grassland meadows, and palaeochannels, remnants of former river channels that have since been filled or buried. Both palaeochannels and historic water meadows are extensive across the landscape[3] [17].

The development of a strategy to restore the headwaters of the River Trent draws upon the principle that an ecological network must be 'more, bigger, better and joined' in order to accomplish sustainable restoration[7].

2.3.2 Fluvial habitats

Watercourses within the Trent Headwaters have experienced – and continue to experience – significant ecological pressures, leaving them in suboptimal condition. To enable these tributaries, and ultimately the River Trent, to achieve 'good ecological status', it is essential to address, mitigate, and reverse the impacts of historical degradation. Restoring these aquatic habitats will help support diverse, healthy ecosystems and deliver environmental, social, and economic benefits to communities across the catchment[3].

In the past, riparian zones and floodplains across the UK were more densely wooded than they are today. Over time, much of this natural tree cover has been lost, largely due to agricultural practices and other forms of floodplain development. River channels would also have commonly contained fallen woody material. The presence of riparian trees and shrubs provides valuable shading, which can lower local stream temperatures—typically reducing summer mean and peak water temperatures by 2°C to 3°C compared to unshaded, open stretches of river[3].

Tree roots, fallen trees, and woody material are key components of in-channel structural complexity. They play a vital role in shaping diverse hydro-geomorphological processes, including the erosion and deposition of riverbanks and bed substrates, whilst also creating complex habitats and food sources for a wide range of plants, invertebrates, and fish[3].

There are a range of environmental pressures across the Trent Headwaters river network. Notably, 133 in-channel barriers have been recorded that restrict the natural movement of fish, water, and river gravels. Additionally, over 3,700 hectares have been assessed as suitable for the creation or restoration of wetlands and ponds. A further 61 historic river channels (palaeochannels) have been highlighted as candidates for reconnection or restoration to create valuable offline habitats or wetland features. Approximately 88 km of river corridor has been identified where enhanced riparian tree cover would benefit habitat quality, and 850 hectares have been recognised as suitable for tree planting to support natural flood management[3].

Routine water quality monitoring has also detected ongoing pressures from sewage and mine discharges, as well as diffuse agricultural runoff. Addressing these issues will require collaborative action and the development of targeted solutions in partnership with stakeholders across the catchment.

2.3.3 Species

Many species have declined or been lost from the UK due to human impacts[8]. This decline can be the result of habitat loss or the degradation of habitats due to pollution, intensive agriculture, poor or inappropriate management, and development. It has been estimated that over 85% of the UK's rivers and streams have been severely modified from their natural state[9] and since the mid-20th century, there has been an estimated 97% loss of wildlife-rich lowland grassland[10].

Habitat restoration and a reduction in pressures such as pollution or predation can be sufficient for a species to recover, and there are opportunities to restore habitats across the headwaters, improve connectivity and influence future and ongoing management and maintenance. This will improve the extent of habitats within which species may live and migrate, building resilience and restoring stronger populations.

In some cases, however, species re-introductions may be more effective. Through re-introductions, also known as translocations, these species can be returned to their former habitats by re-locating them from existing healthy populations elsewhere, or from raising or propagating species in nursery sites[1].

A number of species have been identified as potentially suitable for reintroduction due to their particular strengths as ecological engineers, their historical significance, or intrinsic part of the headwaters environment. Beaver, water vole, white-clawed crayfish and black poplar are of particular interest[1] and are discussed in greater detail in the Natural Heritage Audit.

Depressed River Mussel © Josef Hlasek; Osprey © Peter Cairns 2020 VISION

2.4 Climate change

The UK has a temperate maritime climate meaning we have a cool and mild climate with changeable weather. More locally, the area experiences a significant amount of rainfall with an average temperature of 9.4˚C and approximately 820mm of rainfall annually[11]. As a result of anthropomorphic climate change, we can expect to see warmer and wetter winters, hotter and drier summers, and more frequent and intense weather extremes[12]. This means that the headwaters are going to experience more regular floods, droughts and temperature extremes, as well as windier conditions. This demonstrates the need to build climate resilience into our future plans to support habitat and species adaptation.

Flooding on agricultural land © Louise Morris, Staffordshire Wildlife Trust

As average summer air temperatures in the UK continue to rise, corresponding increases in river water temperatures are also anticipated. Even modest thermal shifts can adversely affect aquatic ecosystems. Species such as brown trout and Atlantic salmon are especially sensitive, with sustained water temperatures exceeding 22°C for more than seven consecutive days posing a potentially lethal risk to brown trout. In recent years, several rivers across England and Wales have already experienced such temperature extremes during prolonged periods of hot, dry weather, resulting in significant stress on salmonid populations and contributing to marked population declines[3]. Techniques to increase shading of watercourses and reduce water temperatures are therefore critical for supporting biodiversity.

2.4.1 Urban Heat-Island Effect

Climate change is making hot spells more frequent and severe, and heatwaves are a risk to health and increase the risks for loss of life[12]. As shown in Figure 3, the temperature difference during a heatwave between urban and rural areas can differ by an extreme amount. This results in what is known as the urban heat island effect. As discussed in section 2.2 above, over 84% of our landscape is urban and Stoke-on-Trent is one of the most densely populated local authority areas in the Midlands.

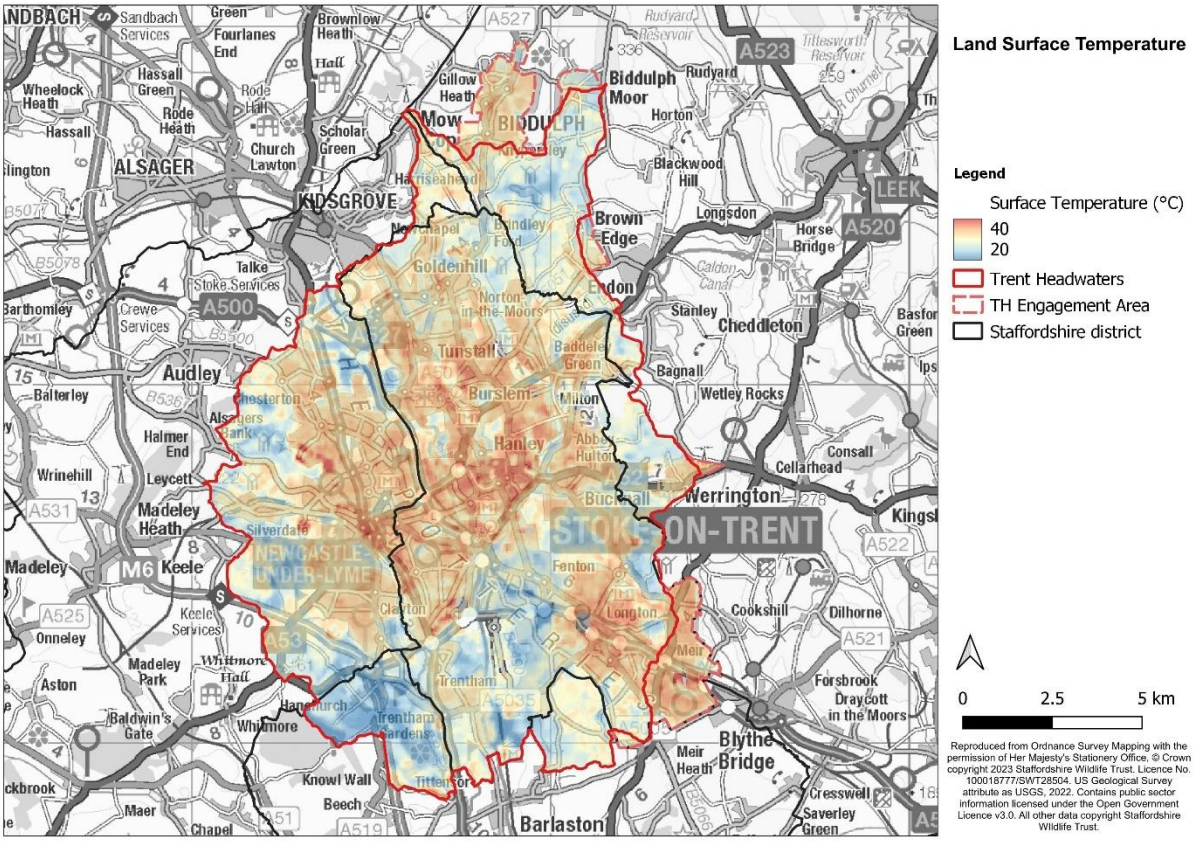


Figure 3. Remote sensing estimate of land surface temperature on 6th July 2022

The urban heat-island effect refers to the phenomenon whereby urban areas experience significantly higher temperatures when compared to the surrounding rural area. This is due to the quantity of hard surface, such as buildings and roads, which absorb and retain heat to a greater degree than vegetation or bodies of water[1].

The land surface temperature map in Figure 3 estimates the temperature across the Trent Headwaters area during the heatwave of July 2022. It suggests a 20°C difference between the warmest and coolest locations, with warmer locations corresponding approximately to built-up areas and cooler locations corresponding largely to woodland and water bodies but also vegetation more generally.

Land surface temperature is calculated using satellite remote sensing techniques and measures the temperature of the surface as a proxy for air temperature; therefore, this may not represent actual air temperatures at the time. To understand how temperature varies both spatially and through time would require further study, however the land surface temperature map does adequately evidence the difference created by vegetation and water bodies.

Socio-economically deprived areas have been shown to experience higher temperatures[13] and higher mortality risk in response to heat[14]. This is often attributed to fewer greenspaces and fewer street trees in lower socio-economic areas, resulting in a heat sink and elevated temperatures.

Tree Equity Score UK combines information from a variety of sources to create a score reflecting the level of need in an area. The sources of information include tree canopy cover, income, temperature, and air pollution[15]. Comparing the map to the Indices of

Multiple Deprivation[16] there is an observable trend between the most deprived deciles and the lowest scoring areas on the Tree Equity Score. For example, Hanley has a tree equity score of 53, ranking them 161st out of 163. Hanley has a heath ranking of 152 and an income ranking of 1,246 out of 32,844, putting it in the first and second more deprived decile. In contrast, Clayton Road in Newcastle-under-Lyme is amongst the least deprived decile, ranking ninth, and has a tree equity score of 100.

It should be noted that Stoke-on-Trent is a very green city and so this trend is not universal, Abbey Hulton being an example of an area in the most deprived deciles whilst having the highest tree equity score of 100. It does, however, help to illustrate some of the inequalities at play across the urban area and how climate change can impact communities unequally.

2.4.2 Natural Flood Management

Increased rainfall will exacerbate the risk of flooding, and climate change could mean we see summer rainfall increasing by 20% and winter rainfall increasing by 25%. When the hourly rainfall exceeds 30mm per hour, this is the threshold that is used by the Met Office and the Environment Agency to issue flash flood alerts. It is expected that this threshold will be met twice as often by 2070 as it was in 1990[12].

Flooding can have a devastating impact on homes, businesses and transport infrastructure, causing millions of pounds in damage, losses in travel time and a lack of confidence in our watercourses and infrastructure. Flooding is also a potential risk to life and can impact health and mental wellbeing. Flooding creates uncertainty and vulnerability with the result that many communities have turned their backs on the watercourses, perceiving them as issues rather than assets.

Natural Flood Management (NFM) is a flood risk reduction strategy that harnesses natural features and processes to slow, store, or redirect water. By restoring or enhancing the natural functions of catchments and floodplains, NFM supports the management of floodwaters in a more sustainable way. This approach works in harmony with natural systems and is often used to complement conventional, engineered flood defences[3].

NFM is important for storing flood waters and reducing flood peaks. Reconnecting rivers with their floodplains and supporting natural processes will hold water in the catchment and release it slowly[1]. Tree planting and reedbed creation will slow the passage of water into the channel whilst in channel features such as large woody debris, leaky dams and riffles will slow the flow of water during high flow events. Ponds and wetlands will retain water in the floodplain increasing the capacity of the landscape to hold water before it flows downstream to pinch points, overtopping the channel and causing localised flooding, often in urban areas.

2.5 Cultural Heritage

2.5.1 Newcastle-under-Lyme

Newcastle-under-Lyme was established as a Borough by the end of the 12th century, and maps from the mid- to late-18th century show Newcastle as the main urban centre within the Trent Headwaters landscape. The first part of the place name of Newcastle-under-Lyme refers to the 12th century castle, with the locational element ‘under Lyme’

referring either to its location on the Lyme Brook or to the wider Lyme Forest. There is no reference to the town in the Domesday Book, but it has been suggested that the area may have been a small trading or market settlement associated with the nearby royal manorial estate at Trentham[17].

Evidence for agriculture first dates to the medieval period, with surviving areas of ridge and furrow field systems, as well as mills and farm buildings. Urbanisation in this period was limited to Newcastle-under-Lyme, the construction of the Norman motte and bailey castle being the likely catalyst for this. It is not thought that the town expanded much beyond its medieval core until the late-18th century onwards.

The establishment of the potteries in the 19th century was a major development for the area which created widespread and irrevocable changes to the landscape. Newcastle-under-Lyme ceased to be the sole urban centre, and the growth of associated industries such as coal mining, crate production and improved transport led to inevitable urban sprawl[17].

2.5.2 Stoke-on-Trent

Stoke is mentioned in the Doomsday book along with ten other settlements which today form the city of Stoke-on-Trent. It is likely to have been a roadside ribbon development along the former Roman road to the west of the River Trent, something that is supported by post-medieval maps.

Pottery production in the area was known to be strong by the 17th century and the number of makers and the amount of pottery produced increased, shifting towards a manufacturing industry rather than the previous cottage-type industry. This resulted in a change towards the end of the 18th century as the pottery industry expanded and the associated settlements began to expand into rural areas. Expansion of pottery production was focused in and around the settlements of Stoke, Burslem, Hanley, Longton, Tunstall and Fenton becoming the six towns that would ultimately form the modern borough of Stoke-on-Trent in 1910. As a result of the urban expansion, the character of these areas is more urbanised in contrast to the more rural character of the surrounding regions.

As the pottery industry expanded, so did the need for better transport links and the development of turnpike roads led to more efficient trade and safer transport for the fragile product. Roads were soon overtaken by canals as a safer and more efficient option to transport porcelain and china[17].

Stoke-on-Trent was awarded city status in recognition for its considerable contributions to the pottery industry on the 5th of June 1925 following a direct approach to King George V. The Potteries, a defined region of Staffordshire, is centred on Stoke-on-Trent and is the only region in the country to be named after the product for which it is best known[18].

2.5.3 Biddulph

Biddulph was named as a settlement in the Domesday Book and was likely to be a hamlet rather than a village. This area of Staffordshire Moorlands was highly rural during the medieval and post-medieval era. There is evidence of the beginnings of collieries at this time and a silk mill located at Knypersley show a more varied industrial

landscape compared to the potteries at Stoke-on-Trent. Coal mining developed extensively in the 19th Century linked to iron works in the area with a record of a smithy in Knypersley, a nail maker's shop in Biddulph Moor, and a wheelwright's yard in Biddulph. At this time, there was significant urban expansion and industrial infilling of rural spaces close to the urban centres[17].

2.5.4 Trentham

Trentham was a royal manorial estate and listed in the Domesday Book. It is suggested that it was a village at this time, being one of the larger of the several settlements mentioned within the headwaters landscape and listed as having a priest, suggesting that a church was present.

Trentham was originally a priory site but moved into private ownership and a hall was built in 1599 on the priory ruins before being replaced in 1633 with an Elizabethan-style mansion. The English landscape architect Charles Bridgeman influenced the original layout of Trentham Estate and certain features can still be seen in the gardens today. Lancelot 'Capability' Brown, English landscape designer, was commissioned in 1759 to alter Trentham Park, which he did through the creation of the serpentine lake, tree planting and woodland walks[19]. The creation of the lake seems to have impacted the River Trent, with it having been diverted and dammed to the south. Today, whilst Trentham Hall has been demolished, Trentham Gardens is a Registered Park and Garden[17].

2.5.5 Canals

The Trent and Mersey Canal, engineered by James Brindley, was one of the earliest canals of the Industrial Revolution built in the UK, spanning 93 miles from the Bridgewater Canal at Preston Brook to Shardlow and the Trent Navigation. It was completed in 1777. The construction had support from the pottery manufacturers, and Josiah Wedgwood was one of the main promoters of the Trent and Mersey Canal[20].

The canal, along with its Caldon and Newcastle branches, were important for industry in the region transporting not only pottery but coal, iron, salt and textiles, and the canals helped to fuel the wider national industrial revolution by connecting the north and south of the country and the main river systems of the Trent, Severn, Mersey and Thames[17].

The Harecastle Tunnel, located to the north-west of the landscape close to Sandyford, was a major construction project that took 11 years to build[20]. This 2.6km tunnel carries the Trent and Mersey Canal and connects Stoke-on-Trent at Tunstall with Kidsgrove in the north.

2.6 Communities

2.6.1 Community Engagement Areas

The landscape is largely urban and contains large and diverse community groups, particularly across the City of Stoke-on-Trent and within the town of Newcastle-under-Lyme.

The area of the landscape (Figure 1) has been defined by using water body boundaries to determine the catchment of the headwaters. Whilst this is important from a

geographical and ecological perspective, it does result in the artificial bifurcation of communities. We have learned in previous schemes (most notably in the Landscape Partnership Scheme 'Transforming the Trent Valley' (2019-2024) upon which this scheme is modelled) that engaging with communities on the edge of a landscape is essential and so we have included communities that are outside the technical boundary of the headwaters. We have termed these areas 'engagement areas'.

The purpose of engagement areas is to allow the continued engagement with communities who closely associate with the wider landscape and would benefit from improved access, better information and the opportunity to influence the scheme. The two boundaries are retained to ensure that physical work on the watercourses and habitats are undertaken within the catchment to ensure effectiveness.

The communities that are within the engagement areas include:

- Biddulph (Staffordshire Moorlands)
- Biddulph Moor (Staffordshire Moorlands)
- Brown Edge (Staffordshire Moorlands)
- Werrington (Staffordshire Moorlands)
- Meir (Stoke-on-Trent)
- Meir Heath (Stoke-on-Trent)

View across the city © Staffordshire Wildlife Trust

2.6.2 Population Statistics

When looking at the socio-economic, health and wellbeing statistics for the Trent Headwaters, our primary focus is on Stoke-on-Trent as the city is contained almost entirely within the landscape (99.8%) and represents over half (52%) of the total area. Comparisons are made with Newcastle-under-Lyme and Staffordshire Moorlands for balance; however, it should be noted that only 22% of the borough is within the landscape, predominantly the town of Newcastle-under-Lyme. Similarly with Staffordshire Moorlands, only 4.5% of the district is within the landscape, including the

town of Biddulph and the villages of Biddulph Moor, Brown Edge, Stockton Brook and Werrington. The borough of Stafford has not been included in the population statistic comparisons as the area of intersection largely comprises the formal estate of Trentham Gardens.

Therefore, comparisons of the statistics with the surrounding boroughs and districts should be made with this context.

Employment and income

In Stoke-on-Trent, the employment rate for individuals aged 16 to 64 stands at 72.3% (January to December 2024), which is below the UK average of 75.5%. Newcastle-under-Lyme fares slightly better at 73.8% whilst Staffordshire Moorlands exceeds the national average at 80.7%.

Unemployment follows a similar pattern where Stoke-on-Trent reports unemployment levels for people aged 16 and above at 5% (January to December 2024), well above the national average of 3.8%. This can be compared with 3.3% for Newcastle-under-Lyme, and 2.3% for Staffordshire Moorlands[21].

Stoke-on-Trent also lags behind on gross disposable annual income, with residents averaging £15,900 annually in 2024[22], well below the UK average of £21,359. In Newcastle-under-Lyme and Staffordshire Moorlands, these totals were £19,836[23] and £20,962[24] respectively, although still slightly below the national figure.

The data highlights significant disparities in employment and income levels across Stoke-on-Trent, Newcastle-under-Lyme and Staffordshire Moorlands when compared with national averages. The figures point to the economic disadvantage in Stoke-on-Trent, characterised by higher unemployment and reduced household income, relative to neighbouring areas. There is a clear need for initiatives that are designed with sensitivity to the socio-economic challenges faced by communities.

By embedding social value and accessibility at the heart of environmental schemes, such projects can contribute meaningfully to levelling up and improving long-term wellbeing across the Trent Headwaters area.

Health and wellbeing

In Stoke-on-Trent, 53% of the population resides within the most deprived 20% of communities in England, in contrast to just 9% of the population in the rest of Staffordshire[25]. Residents lack the same access to community facilities, such as sport facilities, museums and libraries compared to neighbouring areas.

Self-reported anxiety for residents in Stoke-on-Trent (3.4 out of 10) is only slightly above the UK average (3.3 out of 10) and self-reported feeling that life is worthwhile follows a similar trend[22].

Obesity rates in the city significantly exceed the UK averages, with 38.7% of adults and 26.5% of children classified as obese, compared to national figures of 26.4% for adults and 21% for children[22].

Stoke-on-Trent also has a very low health index score compared with neighbouring areas. Newcastle-under-Lyme and Staffordshire Moorlands exceed the national

average score (which is always 100), with Staffordshire Moorlands in the top 20% for the UK with a score of 115.5, whilst Stoke-on-Trent tracks far behind with a score of only 88.2. A similar trend can be observed with mental health scores; whilst Staffordshire Moorlands is 3.1 points above the national average (which is always 100), Stoke-on-Trent is 10.7 points below the national average[26] [27].

Identity

In the 2021 Census, there were around 258,400 people living in Stoke-on-Trent of which 86.5% reported their country of birth as England. A further 2.3% reported their country of birth as Pakistan, 1.5% as Romania and 1.2% as Poland. The remainder come from the rest of the world.

Across Stoke-on-Trent, 83.5% of residents identified as White in the 2021 Census, whilst 9.9% of residents identified as Asian, 2.7% identified as Black and 2.3% identified as Mixed or Multiple ethnic groups. The remainder comprises other ethnic groups.

Residents describing themselves as Christian made up 45.8% of the population whilst 9.2% described themselves as Muslim. In 2021, 37.7% of residents reported as having no religion[28]. Other religions form the remaining 7.3%.

2.7 Access and Infrastructure

2.7.1 Greenways

One of the ways in which the Trent Headwaters project can address the issues of access is through the identification and enhancement of greenways[1].

Greenways are often found along watercourses due to the constraints they pose to urban development, thus providing space for nature. Canals also present a significant opportunity for the enhancement of greenways as they are often more easily accessed than natural watercourses due to the existence of towpaths.

Where greenways are connected to larger green spaces, this can encourage increased access to these sites via active means by providing a more appealing route with greater biodiversity. Another significant benefit of restoring greenways is that they can improve habitat connectivity, enabling species to move between larger sites.

Cycling sculpture © Tam Harrison, Support Staffordshire

The former routes of railway lines since closed also provide greenways. The former North Staffordshire Railway line is now a public footpath in sections between Newcastle-under-Lyme and Silverdale, and the Potteries Loop line is now partially a public footpath around Hanley.

Newcastle-under-Lyme Borough Council lists three greenways within the landscape: Newcastle Greenway, Three Parks and Lymebrook Greenway[29] and Staffordshire Moorlands District Council list Greenway Bank as a heritage trail[30].

2.7.2 Canals

There are two canals that run through the landscape, the Trent and Mersey Canal and the Caldon Canal. These can be seen in Figure 1.

The Trent and Mersey Canal runs south to north through the landscape, entering the area at Barlaston and running through the heart of Stoke-on-Trent for 19km before disappearing into the Harecastle Tunnel near Tunstall.

The Caldon Canal spurs from the Trent and Mersey Canal at Etruria Junction in the heart of the city and runs east for 15km into Staffordshire Moorlands before exiting the landscape at Stockton Brook

2.7.3 Trent Valley Way

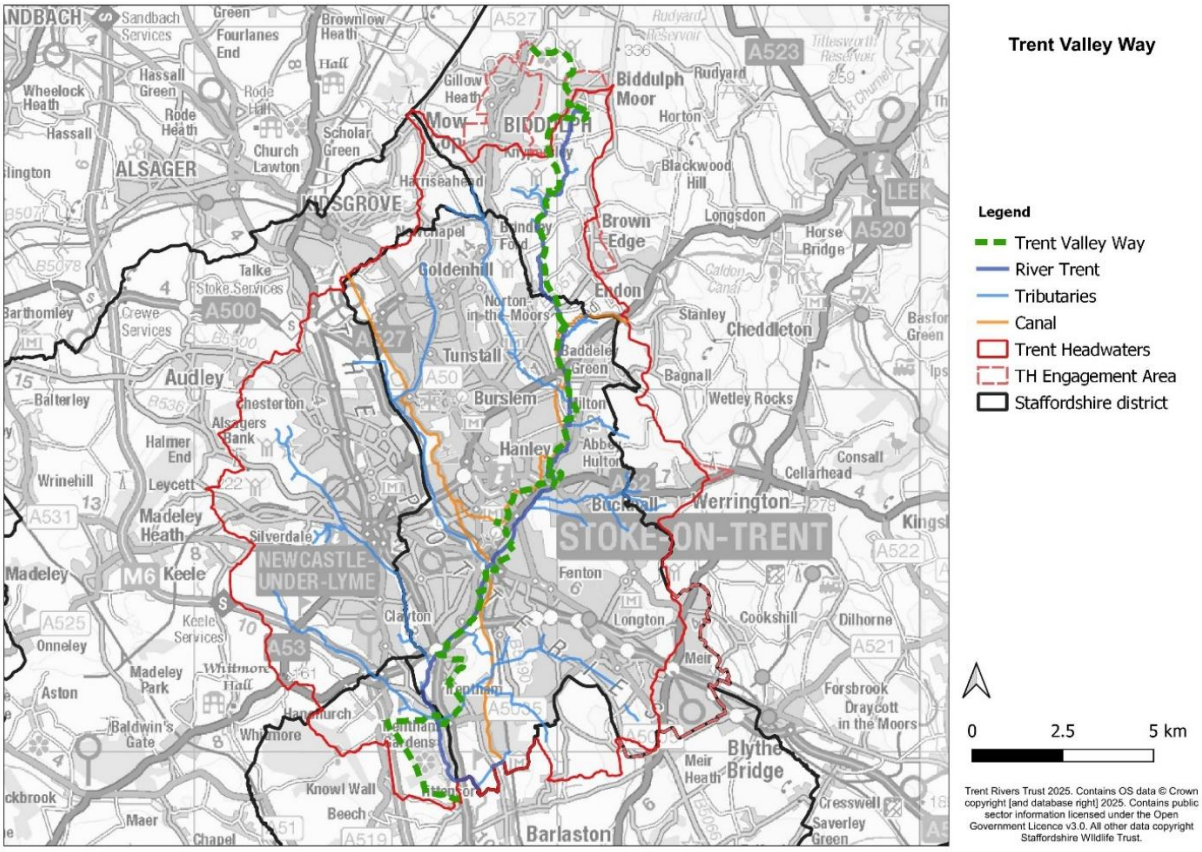


Figure 4. Route of the Trent Valley Way through the landscape.

The Trent Valley Way is a riverside walking route that runs from the source of the River Trent to the Humber estuary where the Trent enters the North Sea. Trent Rivers Trust have taken custodianship of this long-distance path, devising and mapping the route, undertaking infrastructure improvements and waymarking.

The route starts just outside the landscape area in Biddulph Grange Country Park and heads south, picking up the head of the Trent in Biddulph Moor. From here, the route deviates away from the main river, picking it up again at Greenway Bank Country Park and the Knypersley Reservoir.

The route then follows the river valley to Norton Green where it then utilises the towpath for the Caldon Canal. As the Trent Valley Way enters Stoke-on-Trent near Ford Green the route again follows the river before deviating back onto the towpath for a short way. It crosses the A52 and A500 to remain close to the river but then cuts away from the river around Hanford before rejoining the River Trent at Trentham via the Longton Brook. Here, the route skirts around the Trentham Estate before exiting the landscape to the south. Starting at an elevation of 162m, the route follows a gentle decline to 117m at Tittensor. The complete route of the Trent Valley Way can be accessed via an interactive map online[31].

2.7.4 Transport routes

Stoke-on-Trent is strategically located in the Midlands between the major cities of Manchester and Birmingham and, as such, is well connected by primary road networks and rail links.

The main primary routes in and around the Trent Headwaters landscape are[32]:

M6: This motorway north-south through the midlands passes through the south-west edge of the landscape. Access onto the motorway is at junction 15 via the A500 (Queensway).

A34: This is a north-south spanning road that connects Newcastle-under-Lyme with Stafford and Congleton.

A50: This east-west route connects with the M1 and links Stoke-on-Trent to Uttoxeter, Burton-upon-Trent, Derby and other towns.

A52: This east-west route is a minor route that connects Stoke-on-Trent to Derby via smaller towns and villages.

A53: This north-east to south-west route connects Newcastle-under-Lyme and Stoke-on-Trent with Leek and Buxton to the north-east and Shrewsbury to the south-west.

A500: This is a dual carriageway that bypasses the city centre and connects with the M6 motorway, providing a crucial north-south connection for traffic.

Rail: The landscape is served by trains between London Euston and Manchester Piccadilly via the Trent Valley line. There are two stations within the landscape: Stoke-on-Trent and Longport. There is no longer a line that connects to Newcastle-under-Lyme.

3. Community and Stakeholder Engagement

3.1 Communities

3.1.1 Our approach to engaging with diverse communities

Across the wider Trent Headwaters landscape, there are many well-established community organisations, led and supported by local people. These groups focus on a range of local priorities, including health, culture, social welfare, and special interests, and play an important role in meeting the needs of their communities.

Whilst most of the groups we engaged with do not focus primarily on nature conservation, it was found that almost all had some level of connection to the natural or historic environment, and many individuals expressed an interest in wildlife and local green spaces. It was important that communities within the landscape had the opportunity to identify and share their own priorities, providing insights that will support the future development and delivery of our scheme.

As part of our engagement within communities, our aim was to:

- Engage with communities whose work doesn't centre on nature or conservation.
- Reach groups that may have been overlooked by environmental projects in the past.

Between May 2024 and May 2025, two team members visited 44 community groups and attended 56 local events. A deliberate effort was made to meet people where they already gather – in familiar settings and at regular events – to connect with those who might not normally engage with an environmental project. It was recognised that people are often busy and may be unlikely to attend formal consultations, especially if it means rearranging their routines or meeting unfamiliar faces. This approach was taken to ensure a more inclusive representation of views, particularly from communities who may not traditionally participate in environmental initiatives[34].

Community groups were identified through local connectors, social prescribing networks, and Facebook searches. Most of the groups visited were focused on community support, offering things like social connection, advice services, or peer support. Whilst some groups had a specific interest in nature, these were in the minority.

At events, the approach taken was informal and friendly. The aim was to explain the project briefly, then spend time talking with people, often through stalls with children's activities to help start conversations. The topic of "green spaces and watery places" was introduced with open-ended questions, allowing discussions to develop naturally. Between May and December 2024, the summaries of 1,069 comments were recorded. A short questionnaire was offered for those who preferred to give written feedback, and 210 people completed some or all of it[34].

Engaging with communities at events and public spaces

In tandem with our efforts to directly reach into communities, extensive community engagement through community forums ("Community Conversations") were undertaken to ensure the scheme is informed by local voices and reflective of community needs. This engagement was led by Support Staffordshire and VAST, with the former focusing on the geographical areas of Newcastle-under-Lyme, Trentham, and Biddulph (including Biddulph Moor), and the latter covering Stoke-on-Trent.

The key aims of the community forums were:

- To reach a broad cross-section of communities within the landscape.
- To explore how local people perceive and interact with their green and watery spaces.
- To understand what residents value about their local environment and what improvements they would like to see.
- To gather community-driven project ideas that could shape future phases of the scheme.

In total, 256 individuals were engaged through this phase. Whilst age data was not formally collected, participating groups represented a wide age range (from 10 years upwards), and sessions involving minors were attended by responsible adults. For example, Biddulph Moor Girl Guides took part with the support of three registered adult volunteers[33].

"I want to be able to talk to my children about the wildlife and trees"

~ Community Conversations participant

The direct engagement within communities also included consultation with groups supporting people with additional needs. Project officers met with four such groups, which included individuals living with long-term health conditions, disabilities, communication needs, and members of the Deaf community. Whilst demographic

details such as sexual orientation and gender identity were not disclosed, inclusivity and safeguarding protocols were followed throughout.

Underpinning the consultation was a guiding principle of accessibility for all. It was recognised that accessible, inclusive spaces are essential to fostering greater community involvement and improving public wellbeing. Research continues to show that increased access to green and watery spaces has a positive impact on mental health, reinforcing the importance of environmental improvement projects such as this one.

"Health and Mental Wellbeing staff are always encouraging us to 'get outdoors and get some sunlight!'"

~ Community Conversations participant

3.1.2 Who we engaged with

The decision was taken not to collect demographic data during conversations, as asking for this information could act as a barrier to open and meaningful engagement. On the comment cards, demographic questions were kept to a minimum for the same reason.

Although this information was not formally recorded with the comments, the discussions and interactions with individuals and our proactive engagement with community-based groups has helped to identify broadly the diverse cross-section of the local population reached. This included:

- People of all ages, from pre-school children and their families to older, retired members of the community.
- Individuals with sensory needs, including those with sight or hearing loss, and people who are neurodivergent.
- People with learning disabilities.
- People with mental health needs or recovering from mental health challenges.
- People with physical disabilities or recovering from physical health conditions.
- Individuals recovering from substance addiction.
- People from a variety of ethnic and cultural backgrounds.
- Members of the LGBTQ+ community.
- Asylum seekers and individuals with refugee backgrounds.
- Individuals with diverse experiences in income, education, and employment.
- Those who live, work, or visit the area regularly.

- Long-term residents as well as those who had recently moved into the area.

This broad engagement reflects our commitment to inclusive community involvement and ensures a wide range of perspectives are shaping the direction of the scheme.

Engaging families and young people © Surrey Hills Photographs

3.2 Stakeholders

Together with the communities who live and work within the Trent Headwaters, we have connected with a range of stakeholders and will continue to engage with various groups, organisations, and businesses as we evolve our vision into a programme of work to be delivered over the coming decade. In general, we have reached the following stakeholders:

- Local people
- Community arts projects
- Community support groups
- Community trusts and Community Interest Companies (CICs)
- Community health and welfare groups
- Community faith groups
- Cultural heritage groups
- Heritage and history groups
- Sports groups
- Youth groups
- Special interest groups
- Landowners and farmers

As the programme progresses, it remains essential that we sustain engagement with both current and emerging groups, identifying additional stakeholders to consult, collaborate with, and deliver alongside, whilst also nurturing the valuable relationships that have been built with those who have supported our efforts so far. Broadly, these additional stakeholders will include:

- Community groups and organisations
- Landowners
- Heritage groups
- Schools
- Local businesses

Collectively, our communities and stakeholders constitute our core audience.

3.3 Using what we have learned

This initial phase of engagement has provided valuable insights into the local context, highlighting both the pride communities feel for their environment and their aspirations for enhancement. Moving forward, it will be essential to continue building on these relationships, ensuring that future project development remains collaborative, inclusive, and reflective of community priorities[33].

An important learning from the community consultations is the value of using accessible language to ensure inclusive participation. Terms like '*blue spaces'*, whilst common in professional and environmental contexts, may be unfamiliar or unclear to many community members. Instead, using plain English, such as referring to '*watery places*' or '*local streams and rivers'*, helps make the conversation more relatable and ensures that people of all backgrounds and literacy levels can understand and contribute meaningfully. Clear, inclusive language is essential to breaking down barriers to engagement and creating a project that reflects the voices of the whole community.

Feedback from various community consultation events and activities © Support Staffordshire

4. Needs, priorities and opportunities

4.1 Cultural Heritage

4.1.1 Heritage themes

The Cultural Heritage Audit explores the natural and human impacts to the landscape, and the development and impact of industry, to see how we can improve access, awareness and interest in the heritage whilst working to improve both the historic and the natural environments. A number of key sites have also been identified.

The audit organises the heritage of the Trent Headwaters chronologically, examining each era from the Palaeolithic to the present. From this, seven cultural heritage themes have emerged:

- The evolution of the landscape through time.
- Designed landscapes.
- Industrial and post-industrial heritage.
- Ritual and religion.
- Conflict.
- Roads, rivers and routes (including lost waterways and watery landscapes).
- Heritage at Risk.

Evolution of the landscape through time

The landscape of the Trent Headwaters has been shaped over thousands of years by both natural forces and human activity. Initially formed by dramatic climatic changes, including glaciation, the area saw rivers like the Trent change course over time. Post-glacial people lived as hunter-gatherers, using river valleys as routes and resources, but left little trace due to the powerful natural forces at play.

As human influence grew, farming and settlement began to reshape the land. Rivers remained central to life, used for transport, trade, and as focal points for early ritual activity. Over time, infrastructure like roads, forts, and villages developed along the Trent Valley, signalling more permanent land use and management.

In the medieval period, agriculture and religious institutions played a key role in shaping the landscape, with monasteries such as Hulton Abbey managing large areas of land. From the post-medieval period onwards, industrialisation accelerated change. Pottery manufacture, mining, and infrastructure, especially canals and railways, transformed both land use and river courses.

Today, traces of this layered history remain, from ancient water meadows to post-industrial parks. The Trent Headwaters landscape continues to evolve, reflecting changing social, economic, and environmental relationships between people and place.

Through community consultation, some broad project ideas have emerged that would help to capture the evolution of our landscape through time. Some of these project ideas connect across multiple themes and are dealt with in each section. These broad project ideas include:

- Oral Histories.
- Heritage trails, walks and information boards.
- Walks through time.
- Communications including social media, lectures or webinars and events, bringing in specialists to explain and inform.
- Making the locality and the cultural historic importance of the Trent more visible.
- History of the pottery manufactories.
- Ancient woodlands.
- History of Stoke-on-Trent and the wider area.
- Roman history, including the known sites and roads.

Designed landscapes

The Trent Headwaters landscape has long reflected the changing relationship between people and their environment. Evidence of early designed landscapes appears in prehistory, with funerary monuments deliberately placed on high ground overlooking rivers. These placements, likely involving woodland clearance, suggest a desire to create meaningful views and sacred spaces.

During the medieval period, designed landscapes became more tangible with the emergence of moated sites and deer parks. Moats may have served various purposes, such as defensive, ornamental, or symbolic, whilst medieval parks blended social status, economic utility, and aesthetic intent. Though often lost or redeveloped, some of these sites laid the foundation for later estate landscapes.

In the post-medieval period, the classic country house estate emerged, with parks and gardens carefully planned to frame the house and views beyond. At Trentham Hall, shifting garden styles reflect broader changes, from formal designs to Capability Brown's naturalistic parkland, and later to Italianate gardens by Sir Charles Barry.

Industrialisation brought new layers to designed landscapes. Estates were developed by industrialists imitating aristocratic models, whilst urban expansion led to the creation of public parks and cemeteries to address health and social concerns. These parks became vital green spaces, reflecting both civic pride and a response to urban pressures.

The broad project ideas that have emerged to help explain and engage with our designed landscapes include:

- Heritage trails, walks and information boards.
- Walks through time.
- Communications including social media, lectures or webinars and events, bringing in specialists to explain and inform.
- History of Stoke-on-Trent and the wider area.

Industrial and post-industrial heritage

The Trent Headwaters area reflects a long history of industry, from early activity such as Roman kilns and medieval pottery production to the rise of a global ceramics centre. Whilst early examples were small-scale, their significance lies in foreshadowing the intensive industrialisation that would later transform the region. Monastic sites like

Hulton Abbey also played a major economic role, functioning as early industrial hubs with mills and land management systems.

The post-medieval period marked a dramatic shift as pottery production grew from cottage industry to factory-scale manufacture. This led to rapid urbanisation, particularly around The Potteries towns, supported by coal mining, crate-making, and expanding transport networks. Turnpike roads, canals, and later railways reshaped the landscape and enabled industrial growth.

Chatterley Whitfield colliery © Louise Morris, Staffordshire Wildlife Trust

As towns expanded, the need for housing, civic buildings, and public parks grew. Workers' terraces, middle-class suburbs, and institutions like libraries and chapels reflect a socially diverse, industrial society. Industrial unrest, like the Chartist Riot, also left a mark, with associated sites adding to the historical narrative.

In the modern era, industry declined, and post-industrial landscapes emerged. Canals fell out of use, older homes were demolished or redeveloped, and former industrial centres evolved, leaving a rich but often overlooked legacy woven into today's urban fabric.

The broad project ideas that have emerged to help explain and engage with our industrial and post-industrial heritage include:

- Oral Histories.
- Heritage trails, walks and information boards.
- Walks through time.
- Communications including social media, lectures or webinars and events, bringing in specialists to explain and inform.
- History of the Canals and their accessibility.
- History of the pottery manufactories.
- History of Stoke-on-Trent and the wider area.
- Roman history, including the known sites and roads.

Ritual and religion

The Trent Headwaters landscape reveals a rich and evolving story of religious belief, remembrance, and ritual, beginning with prehistoric burial mounds located on high ground, designed to be seen and remembered. These early monuments set the tone for a long tradition of commemorative landscapes, continuing through medieval tombs and post-medieval mausoleums, right up to 19th- and 20th-century war memorials and municipal cemeteries.

The region reflects a long history of religious diversity. Ritual prehistoric landscapes slowly gave way to Christian ones, and following the medieval dominance of Catholicism, the Reformation brought conflict and change, as seen in the dissolution of monastic sites like Hulton Abbey. By the 19th century, Nonconformist and Catholic worship grew alongside Anglican expansion, creating a varied religious built heritage. Later, synagogues and mosques emerged, often repurposing earlier buildings, showcasing a modern multi-faith society.

Religion shaped wider society, influencing education, healthcare, and economy. Monasteries were early economic centres, and religious institutions supported schools, hospitals, and charitable services.

Though limited, evidence of ritual and watery deposits, such as the aurochs skull and Bronze Age metal finds, hint at a deeper spiritual connection with rivers and wet places. Together, these elements demonstrate the lasting role of faith, memory, and spiritual practice in shaping the landscape across millennia.

The broad project ideas that have emerged to help explain and engage communities with the local ritual and religious landscapes include:

- Oral Histories.
- Heritage trails, walks and information boards.
- Walks through time.
- Communications including social media, lectures or webinars and events, bringing in specialists to explain and inform.
- History of Stoke-on-Trent and the wider area.

Conflict

The Trent Headwaters landscape holds a rich and varied legacy of conflict, spanning from prehistoric tensions through to modern global warfare. Early signs of military activity appear in Roman forts at Chesterton and Trent Vale, which suggest that early settlement in the region was shaped by conquest. The motte and bailey castle at Newcastle-under-Lyme reinforced Norman control, whilst medieval moated sites reflect social hierarchy and localised defence.

Religious conflict also left its mark, notably in the dissolution of monastic houses like Hulton Abbey during the Reformation. Civil unrest surfaced during the 19th century, most notably in the 1842 Burslem Pottery Riot, prompting the establishment of barracks at Newcastle-under-Lyme and repurposing of buildings like the Burslem Workhouse for military use.

In the 20th century, the World Wars brought new layers of conflict heritage. Local factories were converted for munitions production, hospitals received military

casualties, and Keele Hall became a wartime base. Air raid shelters and crash sites further reflect the impact of aerial warfare. Commemorative war memorials, meanwhile, stand as enduring symbols of collective sacrifice.

Together, these sites show how conflict has continuously reshaped the physical and social landscape, leaving a complex and layered heritage across time.

The broad project ideas that have emerged to help explain and engage with the assets of historical conflict include:

- Oral Histories.
- Heritage trails, walks and information boards.
- Walks through time.
- Communications including social media, lectures or webinars and events, bringing in specialists to explain and inform.
- History of Stoke-on-Trent and the wider area.
- Roman history, including the known sites and roads.

Roads, rivers and routes

The development of routes, both natural and engineered, has profoundly shaped the cultural and economic landscape of the Trent Headwaters. Early prehistoric populations likely followed rivers such as the Trent for resources and movement. Although there were likely earlier trade and drove routes, Roman conquest introduced formal road networks, connecting military and civil sites to the broader Roman world. These routes became enduring features of the landscape, unlike their less tangible medieval successors.

By the post-medieval period, infrastructure dramatically expanded due to the rise of the pottery industry. Investment by local industrialists led to the construction of turnpike roads and, crucially, the Trent and Mersey Canal and its sub-branches, linking regional industries to national and international trade. The engineering of Harecastle Tunnel exemplifies this innovation. Though potters initially resisted the railways due to prior canal investments, rail eventually became vital, prompting urban growth and further infrastructural heritage.

In the modern period, canals declined but have seen recent conservation efforts as green corridors. The M6 motorway now continues the lineage of major transport routes. The theme of lost waterways reflects past landscape transformations, through canalisation, culverting, and development, revealing industrial priorities. Despite their loss or repurposing, these routes remain critical in understanding the evolution and industrial heritage of the region.

The broad project ideas that have emerged to help explain and engage with our historical routes include:

- Heritage trails, walks and information boards.
- Walks through time.
- Communications including social media, lectures or webinars and events, bringing in specialists to explain and inform.
- Making the locality and the cultural historic importance of the Trent more visible.

- History of Stoke-on-Trent and the wider area.
- Roman history, including the known sites and roads.

Heritage at Risk

The Heritage at Risk (HAR) process by Historic England annually assesses historic assets vulnerable to neglect, decay, or inappropriate development. This includes Conservation Areas (COAs), Listed Buildings, Scheduled Monuments, and Registered Parks and Gardens within the Trent Headwaters landscape.

Five COAs are currently listed as “At Risk”, mostly suffering poor condition but with some showing signs of improvement, whilst eight others are deemed “Vulnerable” due to medium to high risks from neglect or development pressures. Efforts to enhance natural heritage within COAs could also improve their cultural and economic value.

Eleven Listed Buildings are “At Risk,” including industrial and religious structures from the 19th and modern periods, many facing decline. Two additional buildings are classed as “Vulnerable,” highlighting opportunities for community-led repurposing and conservation.

One Scheduled Monument, Chatterley Whitfield Colliery, is “At Risk,” with seven more listed as “Vulnerable,” often impacted by erosion, vegetation overgrowth, and human activities. Restoration and community engagement projects, alongside necessary consents, offer potential for preservation and increased public awareness.

Three Registered Parks and Gardens are also “Vulnerable.” Raising their profile through community involvement may help reverse decline and support both cultural and natural heritage appreciation.

The broad project ideas that have emerged to help conserve and engage with our heritage at risk include:

- Heritage trails, walks and information boards.
- Walks through time.
- Communications including social media, lectures or webinars and events, bringing in specialists to explain and inform.
- History of Stoke-on-Trent and the wider area.

4.1.2 Heritage projects

The Cultural Heritage Audit catalogues a large number of broad projects ideas as well as site specific or theme specific projects that have emerged from the community consultation. Further to this, a number of project ideas have emerged from the data and broad community themes. Projects that have emerged from both the audit data and the community consultation are selectively explored below.

- The establishment of a Heritage Trail where the River Trent is accessible with information about the pre-industrial landscape, emphasising the human connection with the river as a ritual or sacred landscape over thousands of years. This could interconnect with the Trent Valley Way.

- Locating and concentrating Prehistoric and heritage finds as part of a centralised display/focus. This project would interconnect with the geological and natural heritage and could form part of a museum display.
- General walkover surveys on remaining available arable land for systematic finds collection – an attempt to increase the number of medieval and earlier finds. This would create an interesting volunteer or community citizen science project.
- Digital recreations and the use of artificial intelligence, including:
    - The conjectural prehistoric landscape showing the burial mounds and other assets and linking to wider Trent Valley ceremonial landscape.
    - The Roman landscape - Holditch detailed and Holditch with the Forts and Roads.
    - Recreation of the Medieval Newcastle Castle; the recreation of Hulton Abbey including the wider landscape of mills and granges.
    - Use of AI for identifying historic habitats for restoration.
- Link to community art or community events and offer activities that relate to local habitation or industry, such as crate making, flint knapping.

Example of a digital recreation elsewhere in the Trent Valley (TTTV); Roman pottery finds © Mark Knight

There are opportunities relating to the interpretation or digital recreation of built heritage, including an opportunity to scan HAR buildings and other features to monitor the current states of preservation. This activity will provide a reference point or current baseline of condition. The physical restoration or preservation of industrial or historical buildings, however, will not form part of the Transforming the Trent Headwaters project. It is clear through engagement with communities and external stakeholders that this is beyond the scope of this scheme and is being undertaken by others.

4.2 Natural Heritage

4.2.1 Priority sites

The audit of our terrestrial and fluvial habitats has identified 38 sites across Stoke-on-Trent, Newcastle-under-Lyme and Staffordshire Moorlands that offer opportunities for habitat restoration, watercourse restoration and reconnection, improved habitat connectivity and potential for species reintroduction. These sites, along with their individual restoration measure proposals, constraints and other information are described in more detail in the Natural Heritage Audits.

The following sites have been identified as 'high priority' and will form the basis for early project development and design:

- Apedale
- Berryhill Fields
- Cockster Brook
- Fenton Road/Causley Brook
- Ford Green Brook (including Chatterley Whitfield, Whitfield Valley Local Nature Reserve and Holden Lane Pools)
- Knypersley Reservoir (including feeder)
- Lyme Brook
- Pooldam Marsh
- The Canal network
- Trent Mill water meadow
- Victoria Ground (Boothen Old Road to Hanford)

4.2.2 Watercourses

The watercourses within the catchment have been analysed based on their ecological status as defined by the Water Framework Directive (WFD) and none of the waterbodies meet *Good Ecological Status*. Seven waterbodies achieved *Moderate Ecological Status* whilst three achieved *Poor* and one, the River Trent from source to Ford Green Brook, has achieved *Bad Ecological Status*. Waterbody status classification is based on three parameters: ecology, physico-chemical quality and hydro-morphology[3].

4.2.3 Watercourse and Habitat Restoration

The site plans highlight common restoration measures, allowing us not only to identify flagship or priority sites that contribute to better-connected habitat corridors across the headwaters catchment, but also to focus on specific actions for restoring or enhancing key habitats. This dual approach supports priority habitats, especially those important for species reintroduction, whilst also improving cost-effectiveness by applying similar interventions across multiple sites.

A key consideration for restoration proposals is ensuring *the right habitat in the right location*. This concept emphasises the importance of strategically selecting locations for habitat creation or restoration work to maximise ecological, environmental and socio-economic benefits. This recognises the unique characteristics of location, including biodiversity, land use, hydrology and climate pressures, to determine what habitats are appropriate and where they will thrive.

The habitat restoration measures that have been proposed in the Natural Heritage Audits are summarised below.

Grassland

Restoration measures include promoting floristic diversity through the introduction of flowering plants (for example through reseeding or green hay spreading) and establishing appropriate management through complementary cutting regimes to maintain the diversity and improve the structure of the sward[1].

Green hay strewing © Christine Novelli Harding

Heathland

Heathland habitats would benefit from targeted scrub clearance and management to promote structural diversity and maintain a varied age range of vegetation. As a UK Priority Habitat, heathlands play a vital role in conserving a variety of invertebrate species. Introducing bare earth scrapes within heathland and adjacent grassland areas can further enhance conditions for invertebrate communities by creating microhabitats essential for their survival[1].

Woodland

Additional tree planting can be targeted, for example within the Whitfield Valley Nature Reserve. Other areas would benefit from thinning, such as the woodland at Lyme Valley Parkway. Woodland should be managed to create a varied structure through restocking and coppicing to encourage a diverse age range and height of the trees. Spatial diversity should be encouraged through the creation of glades, allowing different light levels to support different ground flora.

Woody material from woodland thinning can be used to create hibernacula for small mammals and invertebrates and can also be a source of large woody material for river channel enhancements.

Dutch elm resistant Elm trees could be planted in strategic locations to benefit white letter hairstreak butterflies, the adults feed on honeydew secreted by aphids which feed on the leaves of the Elm[1].

Selected tree planting for the benefit of flood management should also be considered. Trees can intercept rainfall and slow down runoff, reducing peak flows in rivers; they also increase the infiltration of water into the soil and roots stabilise riverbanks, helping to prevent erosion. Wet woodland creation is therefore an opportunity to hold water in the catchment for longer, provide resilience during drought conditions and create a buffer during heavy rainfall events[3].

Hedgerows

To improve woody plant species connection along field boundaries, new hedgerows could be planted with a mixture of native deciduous species. Hedge laying can be employed to restore historical field boundaries, creating better connectivity between wooded areas and providing valuable habitat corridors[1].

Ponds

Creating ponds and scrapes within woodland and grassland habitats can enhance biodiversity by maintaining a wetland mosaic that supports a wider range of floodplain species. Areas of open water also improve climate resilience by providing vital refuges for wildlife during drought conditions.

Varying the depth of ponds and scrapes offers the opportunity to boost water availability within the floodplain, whilst features such as hollows, wildlife ditches, or strategically blocked ditches contribute to the development of a more complex grassland mosaic, supporting a richer diversity of wetland habitats.

Positioning ponds along palaeochannels, or reconnecting these historic channels with the river, can further strengthen floodplain resilience. This approach improves river-floodplain connectivity and increases water retention capacity during dry periods.

Existing ponds located within woodland may be shaded by riparian trees. Managing this tree cover to create varied light conditions will support the growth of macrophyte vegetation around pond edges. Enhancing plant diversity in the littoral zone through targeted riparian planting, such as the use of coir mats, can also help reduce the impact of grazing by wildfowl, as demonstrated at Central Forest Park. Conversely, selective vegetation removal is sometimes necessary to maintain areas of open water, such as those at Holden Lane Pools[1].

Pond creation © Catchment Designs Ltd

Wetlands and reedbed

In areas prone to waterlogging, enhancing wetland communities through the creation of scrapes and pools, alongside the management of wet grassland, would increase plant diversity. Controlling scrub encroachment is essential for preserving the mosaic structure of floodplain wetland habitats.

Installing leaky dams along minor watercourses would enable water to spill onto the surrounding floodplain, improving both hydrological connectivity and water availability. Pollution entering brooks and smaller streams could be mitigated by establishing reedbeds to act as natural filtration systems.

There is potential to expand reedbed areas through transplanting from donor sites, lowering water levels, and protecting vulnerable sections from grazing by geese and ducks. Additional measures, such as thinning trees in riparian zones or introducing floating reedbed islands in larger waterbodies, like those at Westport Lake, can also contribute to habitat enhancement[1]. Re-wetting of wetlands would aid in expanding the wetland habitat to historic extents and providing a carbon sink through the sequestration of organic matter and carbon within the wetlands. Resilient wetlands also provide a buffer for storing water within the catchment, which can help in maintaining adequate base-flows in the Trent catchment during prolonged dry periods[3].

Littoral and marginal habitats

Waterbodies, such as at Knypersley Reservoir, present valuable opportunities for the establishment of diverse shallow water, littoral habitats with rich assemblages of submerged and emergent vegetation which would provide habitat for a wide range of fish, invertebrates, birds and bats. Improvements through the strategic placement of gravels ('gravel seeding') to supplement gravel and bed substrate by seeding the site with gravel obtained from a donor site would help to create shallows and diversity of depth. Whilst not a permanent solution, this restoration measure would create beneficial gravel bars and improve spawning beds quickly[3].

River channel re-naturalisation

There are a variety of opportunities that can be considered to support the re-naturalisation of the watercourses. These include the removal of riverbank and toe protection, which have historically been installed to limit bank erosion, such as along the Lyme Brook; installation of flow deflectors, such as tree root boles; the dispersal of boulders through the channel to provide in-river and flow complexity. Historically straightened watercourses would benefit from increased structural complexity, such as the inclusion of boulders or large woody debris. This has the effect of altering processes such as erosion and deposition and leads to a more diverse range of habitats.

These works will help to restore natural hydro-geomorphological processes and will encourage erosion of the banks, creating a localised supply of gravel to aid in restoring natural riverbed morphology and benefitting aquatic invertebrates and fish that utilise this habitat[3].

Culverts and weirs

Culverts can obstruct fish and eel migration and should be removed or replaced where feasible. Oversized, fish friendly culverts or clear span bridges should be considered.

Removing weirs should also be considered where possible. This will have the impact of lowering the bed to near natural levels and restore a more resilient flow regime.

Removal of culverts and weirs may not always be feasibly in locations where these structures are close to houses, roads and other infrastructure and their removal present complex constraints and risks. In these locations, 'daylighting' culverts or constructing fish and eel passes, in tandem with in-channel improvements, present alternative opportunities[3].

Riparian buffer zones

Many of the watercourses would benefit from the creation of riparian buffer strips which would act as sediment sinks, intercepting silt laden run-off from adjacent fields and polluted runoff from urban areas. Riparian canopy from trees within the buffer strips would provide shade to the watercourse, maintaining low water temperatures during periods of hot, dry weather. Overhanging vegetation would provide refuge for fish and input woody material and leaves into the channel, which can benefit aquatic invertebrate populations. In areas where the adjacent land is grazed, installation of alternative drinking solutions (for example solar powered pumps from the river or shallow boreholes) would eliminate the need for livestock to access the riverbanks, reducing poaching and bank slumping[3].

Springs

In Crowborough Wood, there are existing tufa petrifying springs, and restoration plans should factor in their preservation. This will involve minimal disturbance to the underlying geology, minimising pollution inputs, establishing buffer zones and minimising access[1].

Water meadow

There are opportunities to restore water meadows across the landscape. Restoring these historic features offers significant benefits for wildlife by supporting a variety of habitat niches. By managing water levels and promoting the growth of species-rich vegetation, restored water meadows can significantly enhance biodiversity and contribute to a healthier environment[1].

Species opportunities

The targeted introduction of native freshwater mussels would help conserve reedbed habitats. As filter feeders, freshwater mussels play an important role in maintaining water clarity in ponds and lakes. Their long lifespan and filtration ability make them a valuable component of healthy aquatic ecosystems.

White-clawed Crayfish could be reintroduced into tributaries that are hydrologically isolated from the main river. These smaller watercourses are less likely to support the invasive American Signal Crayfish, a key factor in the decline of native populations, making them more suitable for reintroduction.

White-clawed crayfish © Nick Mott, Staffordshire Wildlife Trust

Osprey nesting platforms could be installed on poles above or adjacent to large waterbodies. Ospreys typically nest within two miles of open water that supports good fish populations in shallow areas. Platforms placed in marshes or on isolated points over water are more likely to be used and should be located away from areas with high levels of human disturbance.

There is potential within the catchment to install artificial otter holts. Although otters are present along the River Trent, suitable riparian habitat is limited in some stretches. Installing holts would improve habitat availability and support the local otter population.

The potential for wild beaver release should be explored in areas with extensive open water. The many tributaries of the River Trent and their associated wetland habitats create a landscape well-suited for beavers. As ecosystem engineers, beavers reshape their environment by cutting trees and building dams to raise water levels, which helps them travel safely and avoid predators. These actions also benefit the wider ecosystem by maintaining wetland mosaics and slowing water flow, reducing downstream flood risk[1].

In-channel aquatic macrophytes are scarce across a number of sites, possibly due to limited availability of suitable areas of bed substrate in watercourses. A reintroduction programme in conjunction with gravel seeding would create a diverse habitat within this stretch of the river in a short space of time[3].

At Tank Field, the local community has proposed the creation of a butterfly bank and a viewing platform to enhance biodiversity and engagement.

All species reintroductions should be guided by a thorough feasibility study to ensure the proposal's viability and be integrated with wider habitat improvement efforts. Certain species may also require a translocation licence from Natural England before release[1].

Invasive non-native species (INNS)

Invasive non-native species typically outcompete other native flora and are considered invasive as they expand their territory rapidly. Control of invasive non-native species (INNS) should include long-term treatment and management strategies, as complete eradication may not be feasible when external sources of reinfestation exist[1]. Local,

strategic eradication could be achieved on a site-by-site basis with ongoing volunteer effort, or more novel techniques such as intensive grazing of the riparian strip by goats[3].

Control of Japanese knotweed and Himalayan balsam has been identified across a number of sites in the catchment, and the control of rhododendron has been identified for Knypersley Reservoir[1].

Himalayan balsam © Amy Lewis

Pollution management

There are a number of pollution pathways into the landscape including agriculture and roads.

Runoff from roads introduces chemicals, oils and sediments into watercourses and contributes significantly to watercourse pollution. Introducing nature based solutions adjacent to roads can tackle runoff and reduce the amount of pollution reaching main waterchannels.

Working with farmers to support catchment sensitive farming is an opportunity as well as supporting farmers financially to undertake agreed improvements to help with legal compliance issues, reduce pollution pathways, reduce soil compaction, buffer watercourses and increase farm profits.

Working with communities to establish a citizen science programme for the monitoring of the water quality within the watercourse would be beneficial and could identify actions to minimise inputs from pollution pathways[1]. Initiatives such as the Riverfly programme can encourage community participation in monitoring and addressing river pollution.

Watercourse pollution © Tam Harrison, Support Staffordshire

Communities

Many of the sites identified for habitat restoration across the landscape are public open greenspace or have established rights of way. It is important that residents retain their

access to nature and that this is encouraged and supported. At the same time, it is important that this is balanced with the protection of fragile habitats and sensitive sites. Antisocial behaviour is a common constraint for sites, however there are initiatives to reduce the prevalence of antisocial behaviour across the city and wider area.

Engaging communities early in the design phase of proposals is important and involving them throughout implementation is essential. Consistent and effective communication helps ensure that communities feel included in the process, rather than perceiving it as something imposed upon them. For this reason, nature recovery projects should be delivered alongside dedicated community engagement efforts, with a clear communications plan established from the outset through to project completion. This may include community events, volunteering opportunities, and guided walks, in addition to more traditional forms of consultation and information sharing[1].

4.2.4 Citizen Science

Ongoing monitoring is essential for establishing baseline data and assessing the effectiveness of habitat and watercourse interventions, ensuring that restoration efforts achieve their intended outcomes.

Engaging local communities in monitoring change, known as citizen science, is a powerful way to collect valuable data whilst fostering public involvement in environmental custodianship. It offers a cost-effective approach to data collection and helps build public awareness, encouraging a sense of ownership and responsibility for local natural sites. Seeing the direct impact of their efforts, citizen scientists often become advocates for positive environmental change, contributing to a society better informed about the natural world.

Citizen science monitoring © Sarah Davison, Staffordshire Wildlife Trust

Citizen science supports large-scale, long-term monitoring by harnessing the efforts of volunteers to track biodiversity and environmental changes. Participants can contribute at multiple stages, from initial data collection to analysis and interpretation. Data can be gathered using various methods, such as species observations, habitat assessments, or analysis of camera trap images. For results to be reliable, citizen scientists should follow repeatable, standardised methodologies to produce statistically comparable datasets, ideally developed in collaboration with experts within the partnership.

Whilst some data can be analysed by volunteers, other findings may require professional validation. Sharing outcomes and identifying trends with relevant organisations and stakeholders not only supports evidence-based decision-making but also gives local groups a clear sense of purpose and impact.

Successful citizen science initiatives depend on strong collaboration between researchers, organisations, and volunteers. Ensuring data quality through clear protocols, training, and validation is critical.

Looking ahead, technological advancements are increasingly integrated into monitoring efforts. Tools such as artificial intelligence, passive acoustic monitoring, drones, and environmental DNA (eDNA) sampling are enhancing the accuracy and scope of citizen science. When used effectively, these innovations can significantly improve data collection and analysis, making monitoring efforts more robust and impactful.

In addition to the collection of valuable data, there are also several social and societal benefits to citizen science. It can be used not only to engage people with their local environment, but also to connect them with others, potentially from different backgrounds or cultures. Citizen Science is also flexible and, with technological advances, can be carried out by people across different physical ability levels. When people participate in citizen science, they have the opportunity to develop new skills and knowledge, both from training and undertaking practical tasks, which can help with career development.

4.3 Engaging Communities

4.3.1 Emerging priorities

Our community engagement work has highlighted the emerging priorities through identification of needs and opportunities that should be addressed through future projects.

To better understand the general feedback we have received from our engagement and consultation activities, comments have been grouped into key themes. This helps us to understand the overarching issues that are being mentioned along with how frequently that issue is being raised. The key themes have been chosen to best reflect the overarching idea taken from the comments, with sufficient nuance included to enable us to gather insights.

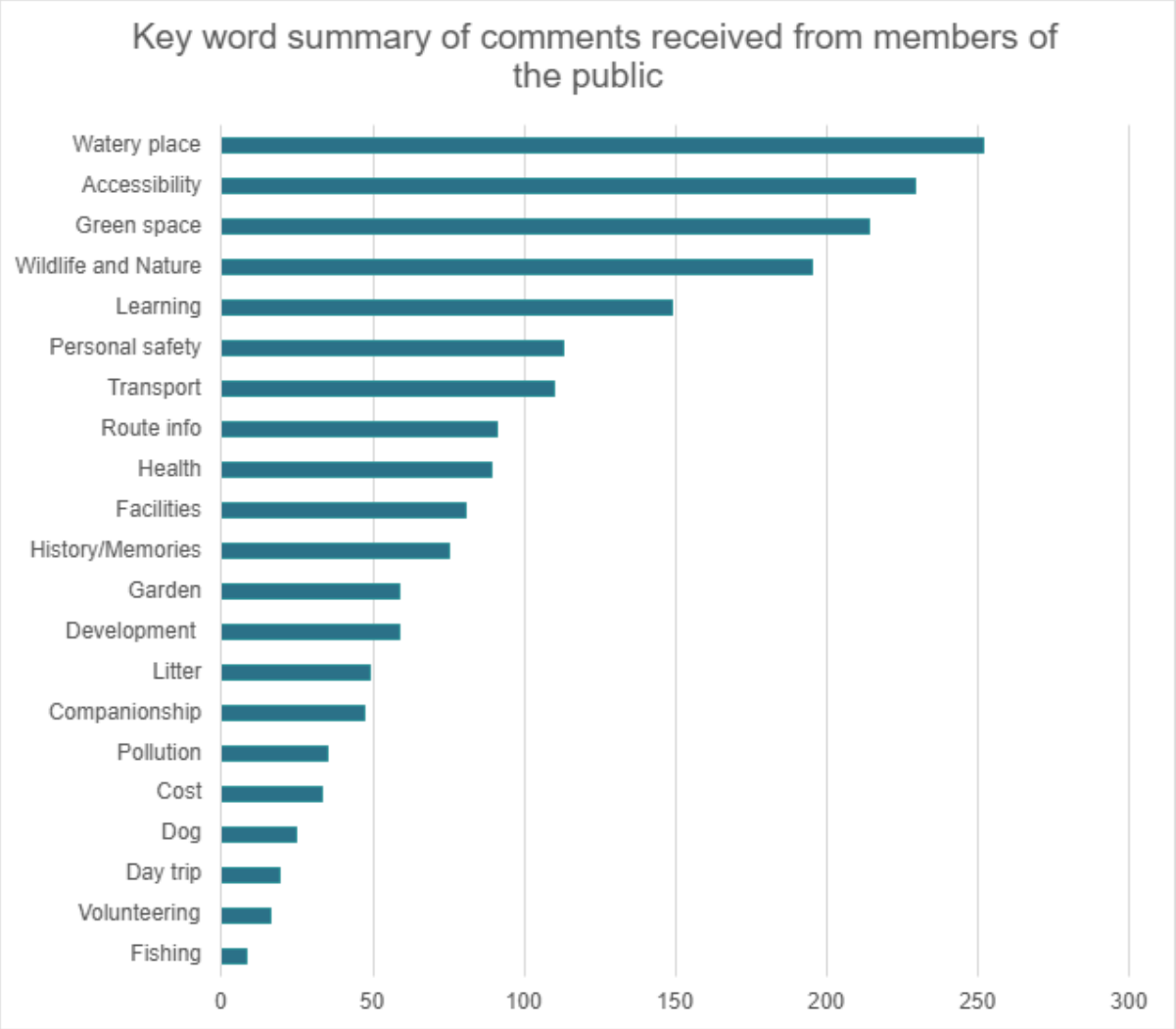


Figure 5. Summary of the varied comments received from the community grouped by keyword. Comments relating to watery places were the most frequent.

Barriers to accessibility

Although our conversations primarily focused on green spaces and watery places, reflected in the high volume of comments within those themes, accessibility emerged as the second largest group of comments (21.4%). This includes issues related to active travel (such as walking and cycling) and physical access.

It is important to note that the overall rankings are influenced by how we chose to group comments, so the frequency of themes should be interpreted as indicative rather than definitive. Nonetheless, the prevalence of accessibility-related feedback clearly highlights it as a shared concern across our communities.

Whilst many comments referenced active travel and physical access, what is not captured in the graph is whether the issue was about ease of access or barriers to access. It also does not express the nature of the individual comment. The following issues and considerations were given that can shed light on some of the barriers to accessibility[34]:

- **Active travel**, mainly through walking and cycling, was noted but people also mentioned playing and swimming.
- **Physical access** barriers were mainly noted as barriers for people with pushchairs, wheelchairs and low mobility.
- **Sensory access** was raised for people with limited or no vision, particularly around the availability of route information, poor lighting and uneven surfaces.
- **Knowledge and information on routes** is needed for accessibility and empowerment. It has been acknowledged that people's need for information changes as their life circumstances change (e.g. moving home, retiring, having children)
- **Knowledge of locations and facilities** helps people to know what to expect when they arrive (e.g. toilets, café, what to do on arrival) and a lack of information is a barrier.
- **Health**, whether declining health or long-term health issues has been cited as a barrier to getting outdoors. This includes both physical and mental health.
- **Transport**, both the distance and ease of access to transport (mainly buses but also other forms of transport) were seen as barriers including the time it takes to walk to and from bus stops.
- **Cost** was mentioned a few times, mostly in relation to buying food or drinks.
- **Time** was a big factor seen as a barrier to accessibility with bus travel time arising most frequently.
- **Companionship and support** is also seen as a barrier with not having someone to go with being a problem for some people.
- **Personal safety** gets mentioned across all groups, with issues ranging from trips and falls to verbal abuse and physical threats to inconsiderate behaviour creating barriers.

Accessibility is often thought of in relation to physical access, but it also applies to language and information, physical and psychological comfort and safety, and applies to activities and events as much as locations.

Any project wanting to engage meaningfully with people will need to consider these accessibility issues and to what extent they can be facilitated, managed or creatively addressed. Whilst certain accommodations may be beyond the scope of our scheme, letting people know what is available may help them to plan whether, if and how they take part. It may also influence strategies to overcome these problems.

Watery places

Almost everyone we spoke to had a positive view of nature, whether for delight in spotting wildlife, enjoyment from being out in the fresh air, for mental relaxation or physical activity.

Watery places, whether rivers, canals, pools, ponds or lakes, were mentioned most often in conversation (24%) and valued for the opportunity to spot wildlife and bringing a sense of calm and peacefulness. There was curiosity about the River Trent, its route, history and what wildlife was living in and along it. The loss of connection with the river was also evident in questions and comments about its route and access to it[34].

"Where is the Trent? I've lived here all my life, and I don't know. I have seen it at Trentham but where does it come from and where does it go afterwards?"

~ Walk Talk Action, Meir Heath

Green spaces

Green spaces achieved the third largest groups of comments (20%) and were valued as a place to be in nature, connected with walking, wildlife and being with family. A further 5% of comments were about gardens (private gardens and allotments, distinct from public green space). Within the green spaces category, 76% of people appreciated these outdoor spaces for wildlife and 76% enjoyed them for being nice to look at/listen to. Other comments included the benefits from green spaces for improving health and well-being (74%), feeling happy and connected (73%) and a place to walk or cycle through (73%)[34].

View from behind Wolstanton retail park overlooking Stoke-on-Trent (Support Staffordshire)

Wildlife and nature were mentioned in conversations 18% of the time with people expressing immense pride in spotting birds, mammals, insects and amphibians. Larger creatures were mentioned more often, possibly because they are easier to see, identify and photograph. Trees, flowers and other plants were mentioned much less often. Changes in the landscape and the impact on wildlife was noted, particularly by older people who could make comparisons over decades[34].

"Wildlife talks for people with learning disabilities,"

~ Project Indi (request from a person with a learning disability)

Learning

Learning came up in 14% of comments and in many different forms. People asked questions about routes, locations, facilities, wildlife and plant identification; they shared tips on recording wildlife (usually through photographs), made suggestions for interpretation boards and suggested ways of passing knowledge on to younger generations[34].

"I'm not sure about the local wildlife but I would like to learn"

~ Community Conversations participant

4.3.2 Education and public awareness

Raising public awareness of the River Trent and its watercourses, nature, and heritage is essential to cultivating long-term custodianship and stewardship. We recognise that engaging people with the landscape not only strengthens their connection to it but also inspires action that benefits both nature and local communities.

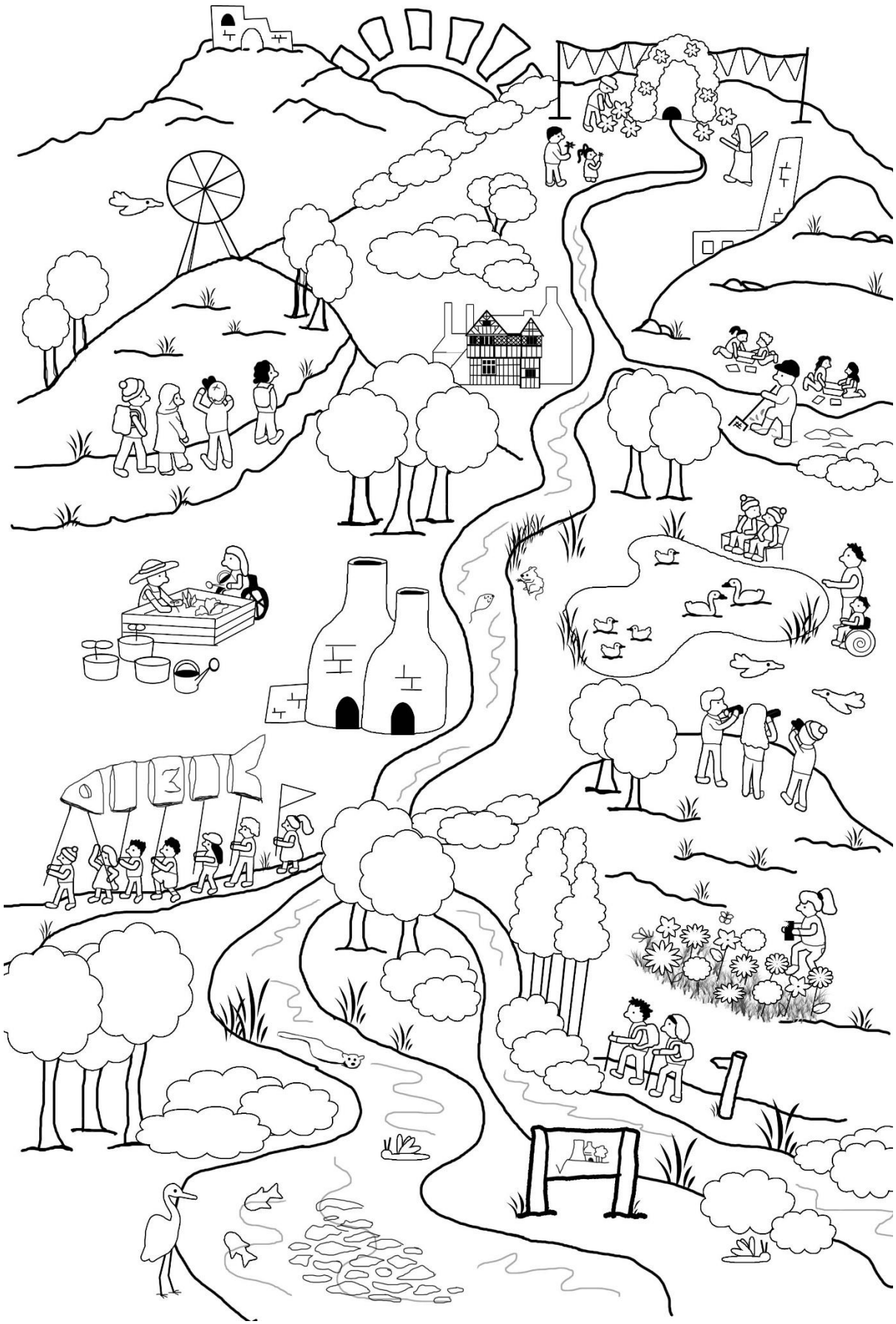
Consultation with community groups, schools, and individuals highlighted a strong desire to improve the local environment and to create more opportunities for children and young people to experience nature first-hand. Many also expressed a wish to learn more about the natural and cultural heritage of the area, underlining the importance of addressing gaps in local knowledge[34].

Education and awareness efforts should therefore be designed to build confidence and equip people with the skills needed to take an active role in environmental initiatives. These could include training sessions, nature-based learning activities, and opportunities to lead or co-design local projects. Supporting both self-reliance and interdependence will enable groups to grow sustainably, even as longstanding members step back or roles evolve.


Exploring nature, Support Staffordshire; Sharing stories © Jo Wheeler and Rebecca Lee

Public engagement activities should be inclusive, accessible, and tailored to reflect the diversity of local communities. Schools and youth groups in particular offer a valuable route to long-term cultural change, with nature connection shown to improve not only ecological awareness but also mental health and academic performance.

By sharing knowledge, fostering leadership, and building networks of support, the project can empower more people to take action for nature. In doing so, it will strengthen the social fabric of local communities, enhance wellbeing, and help safeguard the heritage of the Trent Headwaters for generations to come.



Explore the Trent Headwaters colouring-in sheet

4.3.3 Volunteering

Volunteers play a vital role in the success and sustainability of schemes such as Transforming the Trent Headwaters. Their contributions extend far beyond the completion of tasks; they donate their time, expertise, and skills and are essential to a project's impact and longevity. They are also a connection to the community, bringing a useful perspective when designing and implementing a project.

Volunteers offer a wide range of support, from practical tasks such as habitat restoration, species monitoring, and conservation maintenance to public engagement, education, and administrative assistance. Many bring valuable local knowledge or professional skills, enhancing the effectiveness of project delivery. Working with volunteers means our partners can extend the reach and depth of their work in ways that would otherwise be financially or logistically unfeasible.

Nature volunteers © Sarah Davison, Staffordshire Wildlife Trust

Equally important is what volunteers gain from the experience. There is a broad range of opportunities offered by the scheme and the individual partners, and participation in our projects offers meaningful personal development opportunities, including the acquisition of new skills, improved physical and mental wellbeing, and a stronger connection to nature and community. Many volunteers report a sense of pride and purpose from contributing to causes they care about. For younger or early-career individuals, volunteering can provide valuable work experience and pathways into environmental or heritage sectors.

Our consultation has shown there is interest in volunteering opportunities[34]. It is clear that there is a need to offer roles that cater to a range of skills and interests. There is also value in offering both unskilled roles, such as path clearance, and more specialised opportunities that allow volunteers to apply existing knowledge or develop new skills.

Citizen science has been discussed, although it is not usually mentioned using that term, with many people expressing a desire to engage more actively with nature and heritage. Opportunities that offer progression or learning are particularly valued.

Flexibility in time commitment is also important. While some individuals may be keen to volunteer regularly, others would prefer occasional or seasonal involvement. Offering a range of options will help ensure volunteering is accessible and appealing to a broader audience.

Volunteering is important because it fosters civic engagement and strengthens community resilience. By actively involving people in the care of their local environments and heritage, projects build a sense of ownership and shared responsibility that can drive long-term support and advocacy.

Volunteers are not only a practical resource but a core asset to environmental, nature, and heritage initiatives. They bring time, skills, and passion to projects, while also gaining personal, social, physical and mental wellbeing benefits that reinforce the value of their contribution. Investing in volunteer engagement is therefore essential to the long-term success of these initiatives.

Fostering civic pride through engaging volunteers © Penny Dixie 2017

Given the wide range of opportunities available across the scheme, it is important that volunteers understand their role within the broader context and feel that their contribution is valued. A consistent approach across the partnership will be key, with clear communication, access to training and information, and opportunities for volunteers to connect and share experiences.

4.4 Access and Accessibility

Accessibility can mean different things depending on the context. It may relate to *physical access*, including the ability to reach places through active travel and access once at a location. It can also refer to *informational access*, such as understanding bus routes, opening times, and the availability of facilities, all of which help remove barriers to participation. Additionally, it encompasses *equity of access*, including the use of plain English, compliance with the Disability Discrimination Act (DDA), and ensuring access via digital and online platforms.

As highlighted in section 4.3.1, accessibility emerged as one of the most frequently discussed topics during consultation. However, it covers a wide spectrum of issues, which are outlined in more detail below:

- **Accessible information**: This includes the use of plain English, considerations around language and literacy, multiple formats and sensory access, and knowledge about places, plants, and animals.
- **Route information**: Guidance on how to reach a place or enjoy the journey, whether walking, cycling, or using public transport.
- **Facilities**: Practical details such as opening times, what amenities are available at the site or event (e.g. toilets, rest areas, refreshments).
- **Personal safety**: Concerns around potential accidents or the risk of hostility from others.
- **Health**: The impact of physical and mental health, including long-term conditions and recovery.
- **Companionship**: The importance of social support, motivation, and the protective aspects of experiencing nature with others.

- **Cost**: Primarily raised in the context of affordability for families, especially when paying for multiple people.

Consultation activities also offered some valuable anecdotal insights. In one case, a member of the public said he didn't like "wildlife," yet he enthusiastically described feeding birds in his garden. This suggests that the language we use to describe nature or heritage may unintentionally alienate those who don't identify with those specific terms, even if they engage in meaningful ways. Careful consideration is needed in both spoken and written communication to ensure the scheme is inclusive and accessible to all. Using images to convey ideas can make information more accessible. It is important to be clear on who the target audience is so as to ensure language is suited to the situation and does not come across as patronising or overly simplistic.

Plain English also supports effective translation, as rare or technical terms may be difficult to translate accurately. In another anecdote, a British Sign Language (BSL) interpreter had difficulty conveying the word 'larvae' during a discussion about dragonflies, illustrating the importance of choosing language that can be easily understood and interpreted across different language and communication needs.

"We need less language so meanings are clear in any language."

~ Appetite, Project partner and community organisation, Newcastle-under-Lyme

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Comments from the consultation highlight the need for information about facilities such as car parking, bus stops, toilets, refreshments and seating. Those with small children and those with limited mobility expressed a need to know in advance if there would be the facilities they needed to ensure a comfortable visit. Uncertainty means that they would be less likely to visit a site or engage with an activity.

Personal safety was also a concern for many people as this changed whether an activity or outdoor space is considered to be accessible or not. Antisocial behaviour and inconsiderate behaviour have emerged as a frequent cause for concern for many people and so should be strongly considered when planning events and activities. Those with frailties due to age or health also cited concerns about having accidents when out. Others felt access was impeded due to a lack of companionship, not wanting to walk or visit places alone.

4.4.1 Physical Access

Physical access has emerged through the community engagement as an important aspect of work and is something the scheme can explore and support. Active travel, through walking and cycling, is an important way to connect communities with the landscape and has strong advantages for health and wellbeing. Improving physical access to the landscape is something that should be taken forward.

Addressing barriers to access (Support Staffordshire)

Physical access can be addressed in a number of ways that will support active travel and encourage increased uptake. These include:

Physical improvements: Several greenways have been identified in the Natural Heritage Audit as having potential for enhancement, including Longton Brook Greenway, Scotia Valley, and Fenton Road/Causley Brook. Additional routes that may offer further opportunities include the Trent Valley Way, a long-distance footpath following the route of the River Trent; the feeder channel from Knypersley Reservoir to the Caldon Canal, a well-used walking path that follows the Trent Valley Way; and the greenway along Longton Brook at Trentham Fields, which could be suitable for community-led restoration. These corridors can be explored for physical improvements aimed at encouraging and supporting walking.

"The footpaths along the river need cutting back or it will get overgrown and stop people using the paths."

~ Closer To Home, Stoke South

Waymarking and signage: Clear waymarking and signage play a vital role in supporting physical access by helping people navigate routes with confidence and reducing the fear of getting lost. Improved on-the-ground signage, combined with detailed information available online or in printed leaflets, can give individuals the reassurance they need to explore more widely and independently.

Benches: The provision of regular resting points that cater to a range of needs allows walking routes to be broken into shorter, more manageable sections. It is recommended that benches or resting spots be placed at intervals of less than 50 metres along a route to support accessibility for all users[35].

4.4.2 Inclusive access

It is essential that the scheme is accessible and inclusive to the communities and groups we aim to engage. Accessibility and inclusivity can take many forms, and a number of these are outlined below:

Communications: Sharing information online, via websites, social media platforms, and mobile apps, enables people to make informed decisions about the landscape and how they wish to engage with it. Providing clear and consistent messaging, along with channels for feedback or questions, helps reduce barriers to participation and increases public confidence.

Digital accessibility: Online resources offer valuable access to those who may experience difficulty with physical mobility. Digital tools such as 3D reconstructions, virtual walks, and interactive maps allow users to explore places they may be unable to visit in person. These tools not only extend the reach of the scheme but also foster a deeper understanding and emotional connection to the landscape. Consideration should also be given to audio-described content or BSL-interpreted videos to further improve digital inclusivity.

Art: Incorporating public art, such as sculptures, murals, or curated art trails, can enhance enjoyment of public spaces whilst also promoting awareness of wildlife, history, and cultural heritage. Involving local communities in the creation of artworks provides a new and creative way for people to connect with their environment, fostering a sense of ownership and place. Engaging typically underrepresented groups, such as young people, through eco-art, storytelling, or collaborative installations offers meaningful routes into the scheme and helps deepen their relationship with the landscape[33]. It is also important to explore working in partnership with local schools, youth groups and local artists to co-develop these opportunities.

Sensory and cognitive accessibility: Designing experiences that are inclusive of people with sensory sensitivities (e.g. those with autism, sensory processing disorders, or anxiety) and those with learning disabilities or other cognitive needs. This could include the provision of sensory maps, and alternative formats for information, for example tactile elements or audio content. The inclusion of visual elements may guide understanding.

Social access and inclusivity: Creating opportunities for people to feel part of a group or community encourages sustained engagement. Some individuals may feel intimidated, unwelcome, or unsure of how to participate, especially if they have had negative past experiences in public or outdoor spaces. It is important that the scheme fosters a welcoming environment.

Economic access: The cost of participation, for example travel, childcare, clothing and equipment, can be a major barrier. Offering low-cost and no-cost opportunities, taking care and consideration about where and when opportunities are offered, can help to remove economic barriers.

5. Transforming the Trent Headwaters Scheme

5.1 Overview

Transforming the Trent Headwaters is a proposed landscape-scale scheme to be delivered within the headwaters landscape of the River Trent.

Staffordshire Wildlife Trust is the lead partner for this scheme, having received a Resilience and Recovery Fund grant from The National Lottery Heritage Fund to undertake a feasibility exercise for establishing an ambitious partnership scheme.

Over 18-months, between April 2024 and September 2025, Staffordshire Wildlife Trust, supported by Support Staffordshire and Staffordshire County Council, set out to achieve the following four aims:

1. Develop the Partnership in Stoke-on-Trent and the wider area (including Newcastle-under-Lyme and Staffordshire Moorlands).
2. Engage communities and partners to better understand the needs, opportunities and priorities of the area.
3. Establish the geographical and thematic focus for future projects based on the identified priorities.
4. Create an outline of projects for development that respond to these priorities.

This masterplan represents the culmination of this period of research and feasibility testing.

5.2 About the Partnership

5.2.1 Lead partner

Staffordshire Wildlife Trust has assumed the role of lead partner and accountable body due to its experience in successfully delivering major projects. In recent years, the Trust has led two landscape-scale partnership schemes. The Churnet Valley Living Landscape Partnership Scheme was delivered between 2012 and 2016. The Transforming the Trent Valley Landscape Partnership Scheme (TTTV) was delivered between 2019 and 2024.

Staffordshire Wildlife Trust recognises the value of working in partnership with external organisations and the benefits of uniting diverse skills and expertise across the sector to extend our reach and enable a bigger, better and more joined up approach. Together, we can accomplish more than any single organisation can accomplish alone, building better networks and delivering stronger, more holistic projects.

The Trust also recognises the value we bring to the sector by using our skills and experience to unite a partnership, manage a complex scheme and raise significant funding. We therefore see our role as building, not only our own capacity, but that of our partners.

5.2.2 Member partners

Developing the partnership was the first challenge and involved identifying who should be invited. A call out was made to local authorities, statutory bodies, academic institutions, Voluntary, Community and Social Enterprise (VCSE) organisations

(including wildlife and environmental bodies, health, wellbeing and sporting bodies, heritage groups and creative organisations) and business representatives in April 2024. Subsequent meetings and individual conversations determined the level of interest in the partnership.

During the establishment of the partnership, over 30 organisations have been approached and continued engagement through our partnership newsletter has been maintained with 29 organisations.

By April 2025, the current partners were in a position to formalise, and a Terms of Reference were agreed and signed. All partners willing to participate in the development of the scheme were asked to sign, whether they would directly lead a project or be part of the project steering.

In this initial phase, 18 partners have signed up to the Terms of Reference with Staffordshire Wildlife Trust.

There are gaps in the membership of our partnership that have been identified and we are actively working to fill these with appropriate partner organisations. We will continue to network and liaise with external organisations in the next stage.

These gaps include health partners, farmer and landowner representatives, and local businesses.

5.2.3 Partnership representatives

The following organisations have joined the partnership:

- ✓ Appetite
- ✓ Buddulph Town Council
- ✓ Canal and River Trust
- ✓ Environment Agency
- ✓ GeoConvervation Staffordshire
- ✓ Groundwork West Midlands
- ✓ Keele University
- ✓ Newcastle-under-Lyme Borough Council
- ✓ OUTSIDE Arts
- ✓ Stafford Borough Council
- ✓ Staffordshire County Council
- ✓ Staffordshire Moorlands District Council
- ✓ Staffordshire Wildlife Trust
- ✓ Stoke-on-Trent City Council
- ✓ Support Staffordshire
- ✓ Together Active
- ✓ Trent Rivers Trust
- ✓ VAST
- ✓ Wild Trout Trust

5.2.4 Responsibilities

The following roles and responsibilities have been outlined. Whilst all partners hold Board Partner status, only some have committed to leading the delivery of specific projects.

- **Lead Partner** – This is Staffordshire Wildlife Trust. This partner will act as accountable body for the legal agreements and main applicant for The National Lottery Heritage Fund grant. The lead partner will oversee the development of the scheme and the application for a major grant from The National Lottery Heritage Fund.

- **Board Partner** – These are the partners who have signed the Terms of Reference and together form the Partnership Board. Board Partners will oversee the delivery of the Development Phase and Delivery Phase of the scheme and provide professional support and advice to the lead partner.

- **Delivery Partner** – These are Board Partners who will also be in receipt of grant income during either or both the Development Phase and Delivery Phase. The Delivery Partner will deliver their project as set out in the project plan.

- **Project steer partner** – These are partners who may be a Board Partner, but this is not a requirement. Project steer partners provide specific technical or professional advice and support to the Delivery Partners and the scheme.

5.3 Themes

Establishing the geographical and thematic focus of the new scheme has been an important element. The geographical focus of the landscape has been discussed in section 2.1. Whilst we had a clear idea of what the themes may be from the outset, the audits and consultation set out to test these assumptions and refine their definition and extent.

As a result of this work, we have settled on the following four themes:

Nature Recovery

Habitat restoration and species recovery; monitoring and citizen science.

Cultural Heritage

Protecting heritage at risk; conserving tangible heritage features as well as intangible heritage including oral histories, stories, tales and traditions.

Physical Access

Accessing the landscape through walking, cycling and improved signage.

Community Engagement

Engaging communities through events, activities and volunteering; supporting informed independent action and championing inclusivity.

5.4 Principles

5.4.1 Our guiding principles

Through ongoing community engagement, a set of guiding principles has emerged that should inform the design and delivery of all projects within the scheme. These

principles will help ensure that our approach remains fair, thoughtful, and consistently applied.

Nature and heritage are for everyone

Nature and heritage are here for everyone, and everyone should be able to benefit from it. We all rely on the services our ecosystems provide including food, water and clean air, but being close to nature and connected to our natural and historic environment can have direct and positive impacts on physical and mental health as well as our overall wellbeing.

We know that more people are becoming disconnected from nature and their heritage and that poverty of resources (such as a lack of experience, opportunity, time, transport, knowledge, health and wealth) can have a direct and adverse effect on people's physical and mental health and well-being. Limited access to nature, particularly local green and watery spaces can also affect people's understanding of the benefits nature brings to their lives and their own impact on the natural world. Poor access or understanding of our shared heritage leaves people disconnected from their past and their culture.

Our projects will:

- reach out to a wide audience of people and communities.
- give communities a chance to shape the types of activities and opportunities they want and bring those activities to people rather than expecting people to come to events.
- make use of a wide range of outdoor parks and spaces, including those that are closer to communities.
- encourage and enable people to take more notice of and value nature, wildlife and heritage close to their own home.

Build in sustainability

Our work should leave behind a sustainable legacy. Sustainability is built on three pillars: environmental, social, and economic[36]. The environmental legacy will include the improvements to the habitats within the Trent Headwaters area and raising people's awareness of nature and the environment across the urban, sub-urban and rural areas.

The social legacy will involve reaching more communities and supporting people from a wider range of backgrounds to engage with nature close to home. We will link in with local groups and organisations that promote social cohesion through their work in their own local communities. We will facilitate skills and knowledge sharing with community groups and community leaders so they can continue to offer nature and heritage connection within their communities in the future.

The economic legacy will be reflected in commissioning local businesses, practitioners and consultants to help support and deliver our work and to source local and sustainable materials or resources where possible. Investment in the Trent Headwaters landscape should, as far as possible, benefit the local economy. Based on the Local Multiplier Effect, initial investment in the local economy is circulated and re-spent amplifying the overall economic impact. This is of particular importance in this region which has numerous areas of multiple deprivation[37].

Our projects will:

- Leave behind an environmental legacy of physical improvements and raised awareness.
- Leave behind a social legacy of empowered communities with shared skills and knowledge.
- Support the local economy by sourcing work and materials locally where possible.

Be collaborative, accessible and inclusive

Our scheme relies on collaboration between partners and projects must be connected and work together to ensure the scheme delivers our overall aims and objectives. We will also work collaboratively with external partners, similar projects and community groups to ensure our work complements wider initiatives and avoids duplication and contradiction.

All our work should be accessible and inclusive. Consideration should be given to our broad audience base, and the individual accessibility needs they represent. Whilst it will not be possible to cater for every need, all reasonable efforts must be made to ensure our projects are accessible and inclusive.

This must include the use of simple language and plain English. Where translations or an interpreter may be required, these should be built into projects. Where accessibility modification can be incorporated, these should be included. Where different approaches are required to reach different audiences, these should be explored.

Our projects will:

- Be collaborative within the partnership and externally.
- Be accessible.
- Use plain English and be inclusive.

5.4.2 The National Lottery Heritage Fund investment principles

The National Lottery Heritage Fund operates under a set of four investment principles that guide all grant decision-making[38]. It is important that our future projects reflect the funder's ambitions for heritage and demonstrate how our work helps to achieve these goals. A summary of how our work will achieve each of the investment principles is given below:

Saving heritage

- Our projects will improve the condition, viability and public understanding of our important habitats, species and cultural heritage in the Trent Headwaters. Focussed on the watercourses, our work will tackle the issues presented by this heavily urbanised landscape.
- Our projects will measurably reduce the number of habitats that are in poor or unfavourable condition, improve the quality of watercourses and support the reintroduction of locally endangered species.
- Our projects will measurably restore heritage features in the landscape and conserve heritage at risk of being forgotten.

- We will deliver long-term projects to transform an important headwaters landscape, taking a targeted approach to improve the local environment and build community pride.
- We will showcase our heritage digitally, ensuring our resources are open, accessible, and discoverable by future generations.

Protecting the environment

- We will protect the environment at a landscape-scale, focusing on priority urban areas as well as rural spaces. Our work will support habitats and species to thrive, mitigate the effects of climate change and help people to connect to this unique environment.
- We will work in partnership with local organisations, communities and groups to deliver priority initiatives that are locally championed and bring tangible change, increasing local people's understanding and connection to the Trent Headwaters.
- We will consider our impact on the environment, championing local businesses and suppliers where possible and supporting ourselves and others to adapt to our changing climate.

Inclusion, access and participation

- Through our work, we will address the barriers to access for our diverse and often underrepresented audience. We will provide more equitable opportunities for active involvement, with many of our initiatives being community driven.
- We will provide opportunities for volunteering, training and upskilling, we will empower communities and encourage leadership through grassroots and co-creation projects, and we will support participation and engagement.
- We have identified core priorities through assessing the need and opportunities specific to our landscape and will direct investment to ensure it is used to enrich the lives of our communities.

Organisational sustainability

- By working in partnership, we build resilience in the sector and support our peers to embark on large, more ambitious collaborative schemes. Financing to support collaboration means the sharing of knowledge, skills and expertise, expanding the reach of individual partners.
- Secure funding and investment means partners can identify opportunities to build capacity, skills and expertise in heritage. Investment at a local level means we can invest in local businesses, suppliers and specialists, creating a local project supporting local people.
- Funding to invest in our communities, through community grants, empowers local communities to champion their own priorities whilst benefitting from shared knowledge, experience and mentoring.

5.5 Risks

High level risks to the scheme have been identified and explored to understand their impact on the scheme.

- **Risk 1. Large number of partners.**

Description: There are 19 partners directly involved in the delivery and steer of the scheme. This is many partners for any scheme and presents challenges in managing expectations, involvement and long-term investment.

Mitigation: Staffordshire Wildlife Trust has the experience of managing large partnership schemes and the mechanisms to work with external organisations. All the partners involved have been intentionally selected due to their experience, expertise and connection to the landscape and the creation of this large partnership has been intentional to provide support and collaboration within the sector. The partnership has been formally structured through a Terms of Reference and will have a legal partnership agreement once funding has been secured.

- **Risk 2. Complex scheme.**

Description: The proposed scheme, modelled on a Landscape Partnership Scheme, involves the delivery of themed projects that interconnect to form a single vision to deliver transformative change at a landscape level. The approach, which involves the arrangement of a large programme of work delivered by multiple partners, is complicated and has multiple failure points including funding, ability to deliver and outside influences.

Mitigation: Staffordshire Wildlife Trust and many of its partners are familiar with managing and delivering complex projects that create landscape-scale change for communities, nature and heritage. The Trust has the skills, experience and internal mechanisms to manage multiple projects with differing timelines, budgets and funding, helping to keep work on track and ensure a collaborative and cohesive approach to delivering an overarching vision and achieving overall aims and outcomes. The partnership is involved in overseeing delivery and is remitted to provide advice and support to minimise risk.

- **Risk 3. Lack of funding.**

Description: An ambitious scheme involving many partners and aiming to undertake transformative change over several years requires significant funding. We intend to approach The National Lottery Heritage Fund for a large grant and need to approach other grant providers for match funding. There is a risk that funders are unwilling to invest in our proposals.

Mitigation: We are working closely with The National Lottery Heritage Fund to explore our approach and ensure we have a well-considered and justified scheme. We are working to ensure our proposal is clear and well-defined, articulating the skills and experience that Staffordshire Wildlife Trust and its partners bring to the scheme. We are working to ensure we meet the Investment Principles of the funder and represent value for money. The match funding obligation is spread across the partnership, reducing the risk to any one partner.

- **Risk 4. Lack of community interest.**

Description: Communities are at the heart of our scheme and working with them from the outset through to completion is essential to ensure the successful delivery of our aims and vision. Without our communities working with and through us, our work will not achieve its aims and will lack context and legacy.

Mitigation: All partners involved with the scheme have long experience of working with, engaging and co-creating with communities. All partners involved in the scheme are locally based and embedded in the communities in which we are working. Furthermore, community engagement has already commenced and demonstrated a keen interest in our proposals and being involved in the future.

- **Risk 5. Partners fail to deliver their obligations.**

Description: This is a partnership programme, and all partners have a role to play to ensure the scheme is successful and achieves its aims. Underperformance by any single partner, or a failure to meet their obligations could jeopardise the scheme.

Mitigation: The partnership represents a broad base of skills and expertise meaning there is no reliance on a single partner for their skillset. Not all partners are directly involved in delivery, some partners offer their support and project steer, meaning there are many partners involved in problem solving. Staffordshire Wildlife Trust has experience of managing large partnerships and has overcome the challenge of partners failing to deliver their obligations previously. The Trust has developed strong mechanisms for monitoring progress, identifying issues early, supporting partners and overcoming challenges.

5.6 Next steps

We have completed an 18-month feasibility phase where we have audited our natural and cultural heritage, consulted with communities, engaged local groups and established a new partnership with the ambition to collaborate on transformative projects within the landscape of the Trent Headwaters. This work has culminated in the creation of a 10-year vision and the development of this masterplan.

It is now the responsibility of the partnership to secure funding to realise our vision.

5.6.1 Developing scheme

The partnership must now build on the findings summarised in this masterplan to develop a series of interlinked projects that collectively deliver our shared vision. These work packages will form the Transforming the Trent Headwaters scheme and must demonstrate clear alignment with one another. Each project should fulfil the overarching aims of the scheme, reflect the priorities of our funders, and deliver measurable outputs and outcomes that clearly show how the vision will be achieved.

5.6.2 Fundraising

We have identified The National Lottery Heritage Fund as the principal funder for the Transforming the Trent Headwaters scheme. It is therefore essential that the scheme aligns with the Fund's investment principles, as outlined in Section 5.6.2, and clearly demonstrates why this work is a priority. Securing a major grant from The National

Lottery Heritage Fund involves a multi-stage application process, often taking several years, with rigorous assessment at each phase before progression is permitted.

While The National Lottery Heritage Fund will be a key partner, we will also seek support from a range of other grant providers and investors. These may choose to invest in the overarching scheme or in specific projects or themes. Securing funding from multiple sources, including local contributors, will not only help deliver the scheme but also demonstrate the value placed on this work by the wider community.

5.6.3 How to get involved

To realise our ambitions and achieve our vision, we need the backing of local communities, businesses, leaders, and decision-makers. There are many ways to get involved and show your support:

Investing

We are actively seeking partnerships with grant providers and local investors to help finance the scheme. By matching a grant from The National Lottery Heritage Fund, your contribution can demonstrate a powerful multiplier effect, increasing the impact of every pound invested.

In-Kind Support

Not all support needs to be financial. Donating your time, skills, or resources can add significant value to the scheme. This might include offering professional services pro bono, providing materials or equipment, or making community spaces available for events and activities. These non-monetary contributions can unlock new possibilities and often deliver benefits beyond what funding alone can achieve.

Volunteering

Volunteers play a crucial role in the success of any scheme. The time and effort you contribute have measurable value and lasting impact. We will offer a range of volunteer opportunities—welcoming everything from occasional, unskilled help to ongoing, skilled involvement.

Showing Your Support

Letters of support are an important way to demonstrate to funders and investors that our work is valued. If you are delivering similar or complementary projects in the landscape, we encourage you to get in touch. Funders value collaboration, and working together can strengthen all our efforts. We're not in competition—we share a common goal. Let’s explore how we can align our work for greater impact.

6. Monitoring and Evaluation

6.1 Overview

6.1.1 Evaluation

Evaluation is an essential part of the project delivery process. Its purpose is to systematically assess a project's design, implementation and outcomes to determine its effectiveness, value and impact. When considering complex projects that aim to support nature's recovery, protect cultural heritage, improve accessibility and benefit local communities, it is important to consider the following questions:

- Is the project achieving its goals?
- What is working well, and what could be improved?
- Are resources being used effectively and efficiently?
- What difference is the project making to its target areas or communities?

Evaluation helps ensure that project activities remain aligned with shared goals, and provides a structured approach to learning, adaptation, and accountability throughout delivery.

Ultimately, evaluation is not just a reporting tool, it is a critical part of delivering meaningful, lasting change for people, nature, and heritage. When embedded throughout the project lifecycle, it enhances learning, deepens engagement, and ensures the project adapts and responds effectively to challenges and opportunities.

6.1.2 Monitoring

Monitoring is an important part of the evaluation process and measuring the right outputs can contribute towards our understanding of the outcomes achieved.

Monitoring helps us ensure that a project stays on track, adapts effectively to emerging challenges, and achieves its intended goals. It provides real-time insights into progress against key milestones, highlights what is working (or not), and supports informed decision-making. Regular monitoring also helps maintain accountability to funders and stakeholders, promotes continuous learning, and ensures the scheme remains responsive, efficient, and aligned with its overall vision.

6.2 Our approach

In collaboration with external consultants, we have created a monitoring and evaluation (M&E) framework designed to identify and demonstrate our intended outputs, outcomes, and other key information. This has been a collaborative and creative process, involving our partners and stakeholders, and guided by best practice standards.

As we develop and implement our scheme, we will identify the most effective ways to collect relevant evaluation data. Our focus will be on key milestones and core targets, whilst also capturing stories, feedback, and other qualitative evidence that illustrate the impact of our work.

Evaluation will take place in multiple stages, each providing opportunities to reflect, adapt, and improve our approach. Each phase of the scheme will be individually

assessed, with interim evaluations allowing the partnership to adjust direction as needed. At each stage, we will consider the most appropriate monitoring and evaluation methods to ensure we gather meaningful data that reflects our progress and alignment with goals.

Our approach will be tailored to the specific nature of our scheme and the distinct needs of our partners, enabling us to:

1. **Support learning** – Help partners understand what is working and why, enabling adaptive management and continuous improvement.

2. **Ensure accountability** – Provide clear evidence to funders, stakeholders, and communities that the scheme is delivering on its commitments.

3. **Measure impact** – Demonstrate concrete changes in areas such as biodiversity, heritage preservation, accessibility and community wellbeing.

4. **Guide strategic planning** – Inform future decisions, policies, and project phases through evidence-based insights.

5. **Assess partnership effectiveness** – Evaluate how well organisations are working together and identify opportunities to strengthen collaboration.

Ultimately, ongoing monitoring and evaluation will help us keep the scheme focused, adaptable, and impactful, whilst also building a strong foundation for long-term legacy and future support.

Our scheme has been modelled on a style of project known as a Landscape Partnership Scheme. Formerly an approach to secure landscape-scale funding through The National Lottery Heritage Fund, this funding stream no longer exists and has been simplified into a single Large Grants Programme. Staffordshire Wildlife Trust was the lead partner for a Landscape Partnership Scheme which focused on the middle-reaches of the River Trent in Staffordshire and Derbyshire. This successful scheme, known as Transforming the Trent Valley (TTTV) ran from 2019 to 2024 and included some of the partners in our current scheme.

As a partnership, there were many learning outcomes from delivering TTTV. We have a clear view of what worked well and what could have been done differently. We also have a view of missed opportunities and ways in which we could have operated more effectively. The TTTV scheme has a detailed evaluation report and we also created a video outlining our 10 biggest lessons, which can be viewed here[i]

The learning outcomes from TTTV, as well as other recent successful projects delivered in and around the Trent Headwaters by Staffordshire Wildlife Trust and our partners are helping to guide the design and development of our new landscape-scale scheme.

[i] www.thetrentvalley.org.uk/previous-work/evaluation

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