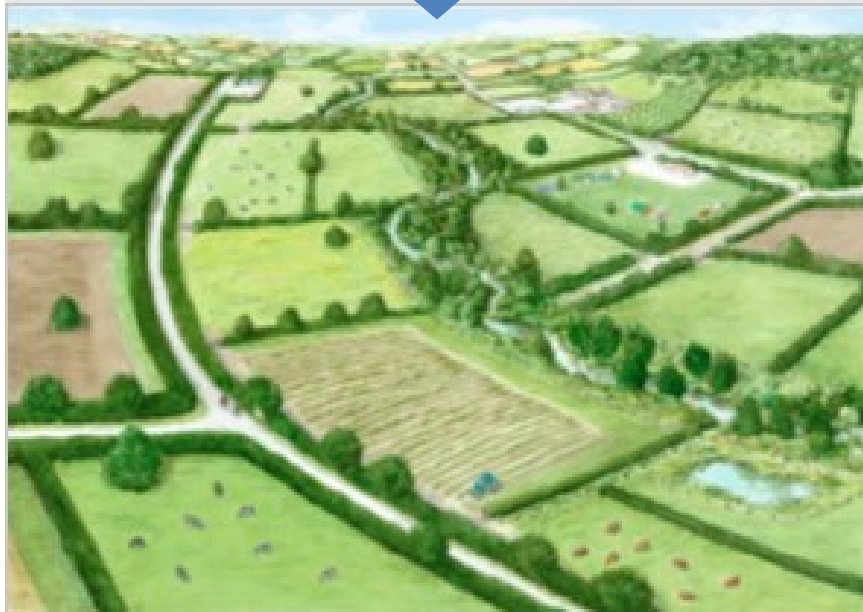
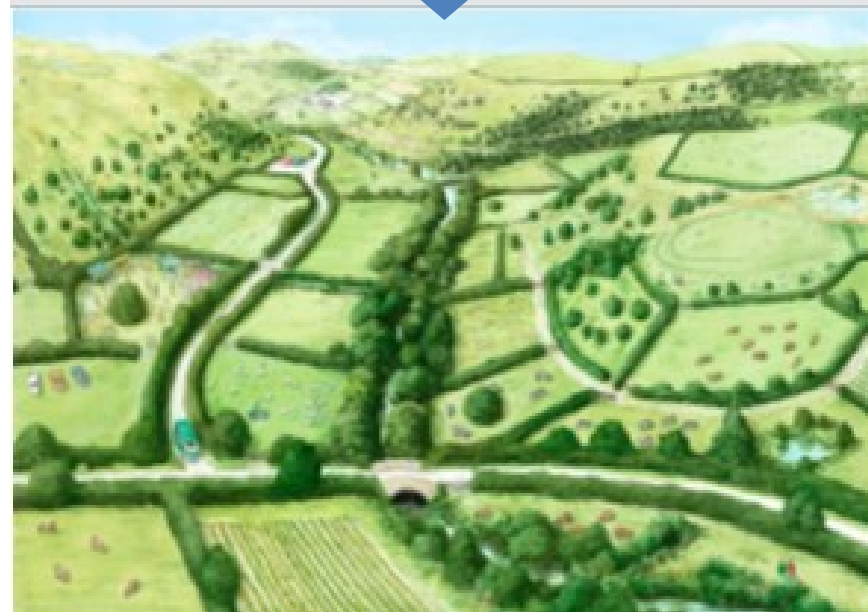


What might this look like? In the lowlands:



In the uplands:



These drawings are intended to be broadly illustrative of the kinds of changes which would help to deliver nature recovery

Condition of existing sites

Condition of SSSIs (Sites of Special Scientific Interest)

This is now measured by each SSSI 'feature' rather than by area compartment, so the newer data is not directly comparable with older data. The previous trend was of gradual improvement.

There are 48 designated SSSIs covering a total of 4,626ha in the Shropshire Hills National Landscape, making up 5.7% of its area.

The Targets & Outcomes Framework sets a target to bring 80% of SSSI features within Protected Landscapes into favourable condition by 2042 (Target 2). Currently 59.3% of the SSSI features in the Shropshire Hills are in a favourable condition. This may rise once the status of the features not currently recorded is known. This is above the National Landscapes average of 42.3%, and the England level of 40.5%.

The Targets & Outcomes Framework Target 3 is by 2028 for 60% of SSSI features within Protected Landscapes to have 'actions on track' to achieve favourable condition. The Shropshire Hills current level for this target is 16.1% (19 out of 118 features). This is behind the National Landscapes average 20.7%, and all England 20.9%, indicating some of the remaining issues are quite intractable.

Local Wildlife Sites are an important second tier of nature conservation sites, but these do not have much protection and there is unfortunately little professional capacity available to advise owners of these how best to manage them. There are 214 of these non-statutory sites in the National Landscape, making up 6% of its area. Detailed data on their condition in the Shropshire Hills is not available.



Case study - Stiperstones Landscape National Nature Reserve (NNR)

Landscape NNRs are an initiative of Natural England, expanding existing NNRs by adding new land where partners share similar objectives. The Stiperstones Landscape National Nature Reserve (NNR) was declared in August 2025. Covering 1,562 ha, it has absorbed the existing NNR designated in 1982, and added more than 300% of additional land. The result is an expansive area along the spine of the Stiperstones ridge, representing a step change in the scale, biodiversity and community value of the reserve. The new NNR includes land owned by Natural England, Shropshire Wildlife Trust, Linley Estate, Forestry England, Middle Marches Community Land Trust and Shropshire Council. As well as the previous NNR, the new reserve includes 5 Sites of Special Scientific Interest (SSSIs) and 1 Special Area of Conservation (SAC)).

The land has important habitats including heathland, upland oak woodland, acid grassland, hay meadow, mire and swamp which provide home for species such as red grouse, curlew, small pearl-bordered fritillary, pied flycatcher, dormouse and the bilberry bumblebee. The new NNR will help consistency and collaboration between partners on objectives such as conservation grazing, bracken control, recreation management and headwater management, and will enable sharing of resources and expertise. This next generation of partnership NNRs aim to tackle the climate, nature and wellbeing crises at a landscape-level, as well as helping create wonderful places for visitors and residents.



Habitat creation and restoration

Target 1 in the Targets & Outcomes Framework is to restore or create nationally 250,000ha of wildlife-rich habitats by 2042. The basic apportionment for the Shropshire Hills by area of all National Landscapes is 6,383.6ha by 2042, or 319.2ha/year. This would be very difficult since most of the potential land is currently farmland. A challenging but potentially feasible target for the Shropshire Hills is proposed as follows:

Potential habitats for creation/restoration	20 years (ha)	5 years (ha)
Lowland mixed deciduous woodland	480	120
Mixed woodland (minimum 70% native broadleaves)	480	120
Upland oakwood	90	22.5
Wood pasture and parkland	90	22.5
Ancient woodland restoration	200	50
Arable field margins	18	4.5
Scrub - blackthorn, gorse, hawthorn, etc	16	4
Upland heathland	18	4.5
Hedgerows	14.4	3.6
Lowland meadows	14.4	3.6
Purple moor grass and rush pasture	10.8	2.7
Wet woodland	10	2.5
Neutral grassland	14.4	3.6
Traditional orchards	6	1.5
Mesotrophic lakes	4	1
Acid grassland	3.6	0.9
Blanket bog restoration	10	2.5
Wet heathland restoration	20	5
Rivers and streams	4	1
Floodplain wetland mosaic	2	0.5
Lowland calcareous grassland	2.4	0.6
Upland hay meadows	2.4	0.6
Upland flushes, fen and swamp	1.2	0.3
Ponds	1.5	0.38
Line of trees	4	1
Inland rock and scree	0.8	0.2
Totals (in hectares)	1,517.9	379

Woodland creation

Target 8 in the Targets & Outcomes Framework is also set nationally “to increase tree canopy and woodland cover (combined) by 3% of total land area in Protected Landscapes by 2050 (from a 2022 baseline)”. A basic apportionment of this target by area of all National Landscapes arrives at a figure for the Shropshire Hills of 2,424.7ha by 2050, equivalent to 86.6 ha per year. A more detailed consideration of potential and recent experience of tree and woodland planting in the Shropshire Hills has been carried out for the Plan preparation. Based on this, a **target for woodland creation in the Shropshire Hills of 58ha per year is suggested (= 1,680ha 2022 - 2050).**

The total of the estimated target figures for categories of woodland classed as ‘wildlife-rich habitat’ in the Target 1 breakdown above is 41ha/year. Woodland creation will count for Target 8 as well as Target 1. Target 8 also includes other woodland, e.g. mixed woodland of less than 70% broadleaves, and conifer woodland. There is less congruence of these woodland types to the aims of the Management Plan, so a lower amount is allowed for of these in the local target proposed.

With woodland creation a numerical target is insufficient since the way it is done makes a big difference to the potential environmental benefits or indeed disbenefits if done in the wrong ways. Further guidance is set out in the Policies and Recommendations in this Plan and in [woodland creation guidance](#). It is notable that the target includes tree canopy i.e. trees outside woods.



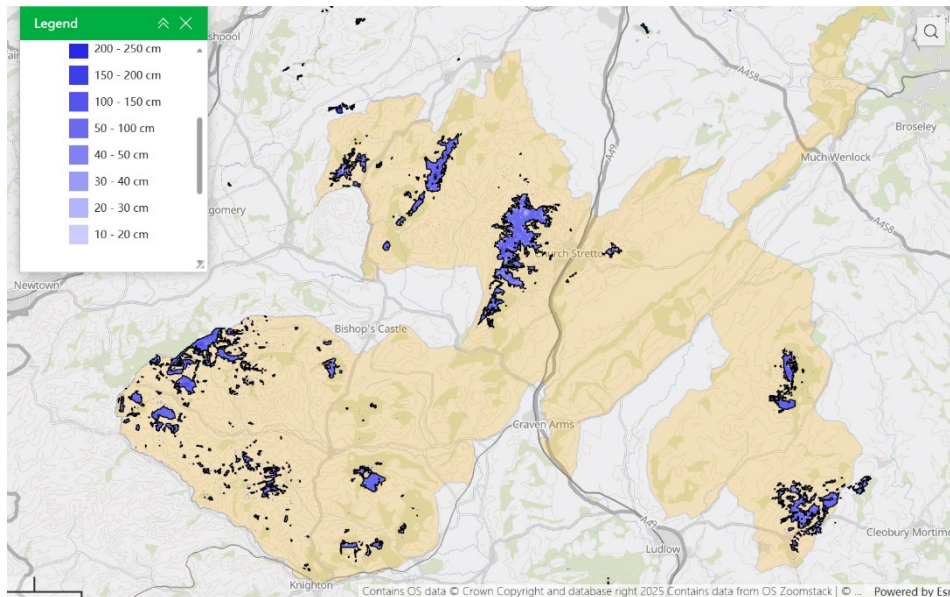
Peat restoration

Targets & Outcomes Framework Target 7 is a national figure, to “restore 130,000 hectares of peat in Protected Landscapes by 2050”.

New data in Natural England's England Peat Map (May 2025) indicates 3,519.8ha of peaty soils in the Shropshire Hills. The majority of this is classified as over 40cm in depth, though the mapping is largely based on modelling and indicates low confidence on depth of peat, and local knowledge suggests deep peat is much more restricted. The area of deep peat in the Shropshire Hills in previous national data was 42 ha.

Most deep peat is in poor condition as habitat, and is also a significant source of carbon emissions, so restoration is a high priority, mainly by restoring natural hydrology (rewetting) in headwater areas.

A target for deep peat restoration for the Shropshire Hills of 2ha per year is suggested (= 56ha 2022 - 2050). Since the area of deep peat in the Shropshire Hills is thought to be relatively small and this is such a high priority, this target equates to trying to restore all of our deep peat by 2050, and there seems no good reason to aim lower than this.



Distribution of peaty soils in the Shropshire Hills
(England Peat Map, Natural England 2025)



Peat with Sphagnum mosses on
the flanks of the Stiperstones

Species – mammals, birds, invertebrates, fish, plants, fungi, micro-organisms, invasive non-native species

The Shropshire Hills spans upland and lowland and includes a mix of species of northern Britain and those more associated with the south. 41% of species have declined in the UK since 1970, and unfortunately the situation in the Shropshire Hills reflects national trends. Some of the threatened species are obscure, but these are nevertheless important parts of ecosystems.

Mammals

11 of the 47 mammals native to Britain are classified as being at risk of extinction, a further five are classified as 'near threatened' and since 1970 the average distribution of mammals has declined by 26%.

Biodiversity Action Plan (BAP) Priority Species in the Shropshire Hills are: Lesser horseshoe bat, Noctule bat, Polecat, Eurasian Otter, Hazel dormouse, European Hare, Harvest Mouse, Hedgehog, Pine marten.



Dormouse

Birds

The Shropshire Hills is important in a regional context for upland and farmland birds, including Curlew, Lapwing, Dipper, and Snipe, but the breeding populations of all these species except Dipper have fallen to critically low levels. As elsewhere, these long-term declines are linked principally to loss of habitat, with predation becoming significant when numbers reach low levels.

Priority bird Species in the Shropshire Hills are:

Dipper, Grey Wagtail, Meadow Pipit, Common Cuckoo, Common Sandpiper, Curlew, Grasshopper Warbler, Kestrel, Nightjar, Pied

Flycatcher, Red Grouse, Snipe, Tree Pipit, Wheatear, Whinchat, Willow Tit, Wood Warbler, Lesser Redpoll, Redstart.

Those from the Farmland Bird Assemblage such as Cuckoo, Curlew and Kestrel would benefit to a greater or lesser extent from:

- uncultivated field margins, rich in invertebrates
- more hedgerows, and increasing the width, height and species diversity of those that remain.

Curlew are arguably a special case, as it is regionally and nationally important. Nationally curlew has declined by 65% since 1970. In Shropshire, the population declined by an estimated 77% between 1990 and 2010, down to 160 pairs, with a further decline since. The Shropshire Hills holds around 60 pairs, over 12% of the population south of a line from the Dee to the Wash. Curlew is "the most important bird conservation priority in the UK" (Brown et al, 2015). Predator pressure is known to be a factor, and there is strong evidence from the Shropshire Ornithological Society's Save our Curlews project work that the high level of gamebird releases in contribute to this. Up to 2/3 of released gamebirds may not be shot, and so are available as supplementary food for predators and scavengers including those which take Curlew eggs and chicks (and other ground-nesting birds).



Curlew (Leo Smith)

The Long Mynd is the only site where Whinchat now breed regularly, and it holds the large majority of the Red grouse population (the only other, smaller, population is on The Stiperstones). Whinchat nest primarily in bilberry heath mosaic, and Grouse are totally dependent on heather.

Case study - Pine marten monitoring in the Shropshire Hills

Pine martens are England's rarest mammals and were thought to be extinct in Shropshire for over 100 years. They have been found again recently in the Shropshire Hills and are now being monitored. In 2024, the Shropshire Hills Landscape Trust supported three pine marten projects through the Conservation Fund, aiming to empower communities to get involved with surveying for the presence of this mammal in key areas, using camera trapping and den box surveys.

These projects have trained volunteers to use camera traps in woodlands near the Stiperstones, Snailbeach, Poles Coppice, as well as near to Church Stretton and Wenlock Edge. Monitoring by volunteers is also taking place in Wheathill Parish and on Pontesford Hill, with camera traps here helping to confirm whether pine marten are present. At Wheathill, a three mile stretch of Cold Green Dingle is now monitored, informing where to locate den boxes to encourage resting and breeding places for pine marten. The Friends of Pontesford Hill group now has a dedicated volunteer team of 15 people monitoring the site, which will help to inform better management for pine marten here.

A number of public events and talks have also been held, to continue awareness-raising in local communities on the importance of not only pine martens, but the overall need to improve and connect existing habitats and to create better quality habitats to support nature recovery.



Pine marten on camera



Installing cameras at Nipstone

Butterflies, Bees and Beetles

Invertebrates are the very heart of our natural systems but are suffering the greatest declines. As Buglife puts it - "it is the small things that run the planet". Many of our bugs are specialists with specific habitat requirements and therefore at greatest risk from rapid environmental change. There are thousands of UK invertebrate species and two out of three UK bug species are in decline.

BAP Priority Species in the Shropshire Hills: Grayling, Small Pearl-bordered Fritillary, Wood White, White Letter Hairstreak, Drab Looper, Bilberry bumblebee



Grayling

Molluscs

The Shropshire Hills used to be a stronghold for the freshwater pearl mussel. 16th Century accounts affirm that the River Clun was once carpeted with mussels, perhaps in the hundreds of thousands. These populations were sustained by our unpolluted rivers, but in recent decades populations from the Rivers Teme and Onny have been lost, and the Clun population is now limited to less than one thousand individuals, is contracting in range, and restricted to waters outside the National Landscape. Influenced by unsustainable practices in the Shropshire Hills, recruitment of juveniles is thought to be zero and the Clun population is considered functionally extinct. Critically endangered, the freshwater pearl mussel is at risk of global extinction.

BAP Priority Species: Freshwater pearl mussel - critically endangered and decreasing (occurs just outside the National Landscape)



Freshwater Pearl Mussel

Crustaceans

The Clun, Redlake and Onny catchments support populations of White-clawed crayfish (our only native crayfish).

BAP Priority Species in the Shropshire Hills: White-clawed crayfish



White-clawed crayfish

Reptiles & Amphibians

BAP Priority Species in the Shropshire Hills:

Adder, Grass Snake, Common Lizard, Slow Worm, Great Crested Newt, Common Toad



Adder

Fish

BAP Priority Species in the Shropshire Hills:

European Eel, Atlantic salmon, Brown Trout, Grayling, Bullhead, Brook Lamprey, Nine-spine Stickleback, Three-spine Stickleback

Vascular plants

BAP Priority Species in the Shropshire Hills:

Green winged orchid, Marsh Gentian, Lesser Butterfly-orchid, Floating Water Plantain, Annual Knawel, Basil Thyme, Yellow Bird`s-nest, Spreading Bellflower, Mountain Pansy, Black poplar



Green-winged orchid

Non-Vascular plants

The Shropshire Hills has one of only 11 sites known in the UK for Marsh Flapwort (*Biantheridium undulifolium*), an endangered species found in hillside wet flushes.

BAP Priority Species in the Shropshire Hills: Marsh flapwort



Marsh Flapwort

Des Callaghan, British Bryological Society

Micro-organisms

There is greater understanding of the role of beneficial micro-organisms e.g. in soil and animal health. This can help at a cultural level us to see that we are highly connected to and dependent upon other living things, which is the basis of a healthy and sustainable relationship with nature.

Invasive Non-Native Species (INNS)

There were 2,000 invasive non-native species in Great Britain in 2021, with 10-12 new ones becoming established every year, mirroring the global trend. They threaten biodiversity and ecosystems and have significant economic impacts. Climate change is expected to increase the risk from invasives, through more frost-free winters and increased flooding events, and stress on habitats causing more vulnerability.

The most prevalent invasive species in the Shropshire Hills are those that are common across the country, in terrestrial and freshwater habitats. Along riparian corridors, Himalayan balsam is widespread, causing erosion to river banks, forming dense stands that suppress native plants and reduce biodiversity. Management and eradication of this rigorous plant is challenging and most effective if carried out at a catchment-scale as the plant uses watercourses for seed dispersal .

Populations of the native white-clawed crayfish are under increasing threat from the widespread North American signal crayfish, which out compete our native crayfish and act as a vector the fungal disease 'crayfish plague'. The signal crayfish are also known to modify aquatic habitats, through extensive bank burrowing, causing erosion and sediment release.

Natural processes, biosphere integrity

Nature is not just species and habitats, but natural processes and natural systems which shape and support our everyday lives, such as the water cycle, carbon and nutrient cycles, soil formation and climate regulation.

The biosphere is the whole living system on which we depend. We can't just keep a few pieces of it as protected bits of biodiversity. We need to maintain the integrity of the biosphere which includes bio-abundance (retaining large number of any species) and healthy natural processes.

Dynamic habitats and processes

What habitat classifications can overlook is that what is best for nature is habitat mosaics and dynamism. Our birds, invertebrates, etc all evolved in a dynamic environment, with both dense and more broken wooded areas through to open heath and grassland, across a spectrum of wet to drier ground. We no longer have the bison, woolly rhinos, wild boars, etc which maintained this dynamic landscape and we tend now to manage land in neat parcels – fields, woods, ponds, hedges, etc. Where possible we should look to allow space for nature to be dynamic, and make our interventions mimic the effects of the large wild herbivores and carnivores which are no longer here.

Living systems

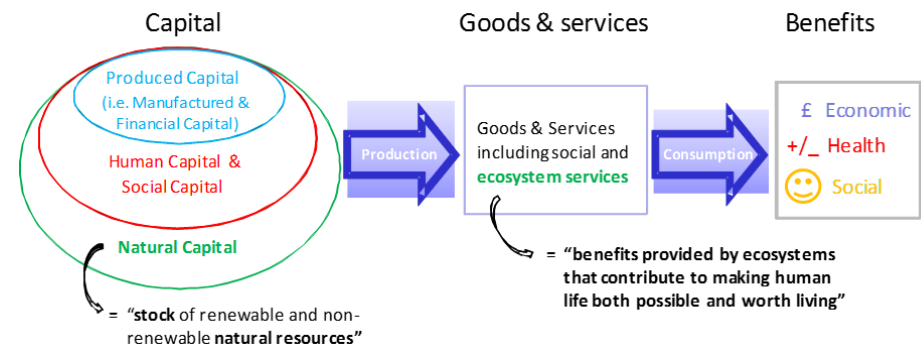
The growing understanding of living systems has great relevance to the Plan. This approach recognises their complexity, but also acknowledges that living systems have ability to regenerate themselves. They are not machine systems that we need to control, initiate or apply force to change. Living systems understanding recognises interconnectedness and that interdependent systems are nested at different scales. They tend to create conditions conducive to life, and we can nurture these conditions to allow living systems to regenerate. They are dynamic and adapt, they change and evolve, but can be destabilised. These principles apply to 'natural' ecosystems, but we can apply them also to what we see as 'human' systems, which are also living and inter-connected with natural ones.

The ecosystem approach recognises that:

- Natural systems are complex and dynamic, and their healthy functioning should not be taken for granted.
- People benefit from services provided by the natural environment. These services underpin social and economic wellbeing and have a value – both monetary and non-monetary.
- Those that benefit from these services and those who are involved in managing them should play a central role in making decisions about them.

Natural capital and ecosystem services are ways to think about the value which nature has to humans, though are sometimes criticised for encouraging an overly utilitarian and human-centric view.

Natural capital is the stock of natural assets that provide free goods and services, often called ecosystem services, that benefit wider society as a whole. Natural capital stock includes renewable and non-renewable natural resources e.g. geology, minerals, soils, water, air, plants, animals, habitats, ecosystem. Some ecosystem services are well known e.g. food, fibre and fuel provision and cultural services supporting wellbeing through recreation. Others less obvious include regulation of climate and water quality.



Pests, diseases and biosecurity

Since everything in living systems is connected, with climate and ecosystem change these are increasingly an issue - with new diseases such as Ash Dieback affecting trees, bird flu affecting poultry and wild birds, and through threats or potential threats to livestock from diseases such as Bluetongue and Foot & Mouth. Most biosecurity measures are taken by those working within the relevant industries, though with some pathogens and at times of heightened threat, biosecurity measures by members of the public can become very important too. There are sometimes cross-overs to risk to human health too, further raising the importance of upstream preventative work where at all possible.

Air quality

Air in the National Landscape is relatively clean regarding human health, but ammonia and aerial nitrogen deposition are significantly affecting habitats. There are examples of wildlife sites already at c200% to 600% of their Critical Levels or Loads of nitrogen (i.e. levels above which species will be lost and habitats damaged). The cumulative impacts of intensive poultry units is a factor in levels of ammonia.

Biodiversity Net Gain associated with new development has potential to contribute positively to the landscape's natural beauty, biodiversity, and community value. It offers an avenue to support landscape character and enhance the natural environment alongside new development, for example by linking and strengthening environmental networks or supporting landscape character by integrating nature-based solutions that reflect local distinctiveness. The Shropshire Hills has relatively low levels of development and the hierarchy in the system requires that on or near-site BNG measures be used wherever possible. The scale of BNG as a mechanism for the Shropshire Hills is therefore likely to be relatively low, but it could nevertheless be a useful tool in places. The BNG system is expected to continue to evolve, with changes expected especially for smaller developments.

Key link to other Plan themes - Nature connection for people

"Nature connection is about our sense of relationship with the rest of nature – how we think about, feel towards and engage with the natural world."

Nature Connected Communities Handbook, University of Derby

People more connected to nature so that they care about it and see the benefits to their wellbeing, quality of life and prosperity.

Nature connection is not just about knowledge, but about emotional connection. It is associated with greater wellbeing for individuals, and pro-environmental behaviours including active participation in caring for nature. It is a route to us establishing a new and harmonious relationship in which we are a part of nature and can influence it positively rather than just reducing the harm we do.

Five pathways to nature connection have been defined:

Senses - Exploring and experiencing nature through all the senses

Beauty - Seeking and appreciating the beauty of the natural world

Emotion – Noticing and welcoming the feelings nature inspires

Meaning – Celebrating and sharing nature's events and stories

Compassion – helping and caring for nature

If you pause for a moment and think about a favourite place that you associate with nature, you probably feel a sense of calm, just in a few moments. It's a known thing that nature makes us feel better. We as humans evolved in nature, as part of it, those connections are deep rooted within all of us. People in hospital recover more quickly if they have a view of trees or nature, or even a picture of it on the wall. You felt calmer just by thinking about it, in a few seconds. So we know from our own experience that nature is good for us. Of course we need natural resources and processes actually to survive and live – clean air, water, growing food, but nature is also good for our wellbeing. Even the health value of physical exercise has been shown to be greater when it's done in a natural setting compared to indoors.

Summary of statutory requirements and duties – Nature

(not exhaustive)

Strengthened duty to seek to further the purpose of the National Landscape to conserve and enhance natural beauty

Strengthened 'biodiversity duty' on public bodies

Biodiversity net gain from new development

SSSI duties for public bodies and other occupiers

Protected species legislation

Environmental Impact Assessment requirements e.g. for ploughing up semi-natural grasslands

Controls on tree felling - Tree Preservation Orders and trees in Conservation Areas, felling licence requirements

Regulations relating to pests and diseases



Nature connection is not just about knowledge,
but about emotional connection

PLAN POLICIES - NATURE

(See the explanation of what the Policies are)

3. Existing assets

i) Further harm to nature should be prevented, and opportunities sought to enhance the status or condition of current nature assets. Designated sites such as Sites of Special Scientific Interest (SSSIs) should be protected, maintained and enhanced.

ii) Appropriate use should be made of regulatory mechanisms to protect nature, e.g. protected species.

iii) Irreplaceable habitats should be protected (as defined at <https://www.gov.uk/guidance/irreplaceable-habitats>).

iv) Habitats and species of principal importance for nature conservation should be maintained and enhanced.

v) Natural capital should be protected and enhanced.

4. Nature Recovery

i) The recovery of nature should be encouraged through all opportunities, especially through public support for farmers and connected with built development and land use change.

ii) The nature recovery network of good quality habitats should be enhanced, as set out in maps and priorities of the Shropshire and Telford & Wrekin Local Nature Recovery Strategy.

iii) Ecological networks and green infrastructure should be maintained, and their connectivity enhanced through targeted habitat creation and restoration.

iv) The area's contribution to the 30 by 30 target should be maximised, and to the wider Convention on Biological Diversity goal of a world living in harmony with nature by 2050.

5. Development

i) Development under the planning system should have regard to the biodiversity duty, make use of wildlife surveys where necessary, and use the mitigation hierarchy: Avoid – Minimise – Mitigate – Offset.

6. Woodland and Trees

i) Ancient woodlands should be protected and managed, and Plantations on Ancient Woodland sites restored, according to good practice. All existing woodlands should be sustainably managed, for environmental, social and economic factors.

ii) The cover of native broadleaved woodland should be expanded with appropriate species in suitable locations, as set out in guidance within and referenced by this Plan.

iii) New planting of woodland should follow the highest standards of design to support landscape, nature, heritage and amenity. The proportion of native broadleaved trees should be as high as possible in commercial woods, and planting projects should be encouraged to deliver a higher proportion of broadleaves than conifers. The design of new woodland should take into consideration long term management and access requirements for harvesting and extraction.

iv) Trees outside woodlands should be cared for and retained where possible, and planting of trees outside woodlands should be increased – including hedgerow trees, wood pasture and agro-forestry. Opportunities should be sought to integrate trees and woodland more with farming, and to raise awareness of their agricultural benefits.

v) Where felling is to take place, high standards of resource protection (soils, water, etc) should be adopted, and opportunities should be taken to improve woodland design for landscape and to facilitate nature recovery.

vi) Where justified by a site's importance for open habitats, the on-site reduction in woodland footprint to enable the creation or restoration of open habitats should be allowed.

7. Other habitats

i) Where possible space should be allowed for dynamic evolution of habitats, and human interventions adjusted to mimic the more natural past disturbances of large wild animals.

ii) Hedgerows and hedge banks and should be maintained and managed for optimum wildlife value. Management using traditional methods such as hedge laying is encouraged.

iii) Creation of new hedgerows is encouraged. Planting should follow best practice, using a mix of native species characteristic of the local landscape.

iv) Areas of deep peat within the Shropshire Hills should be protected, and efforts made to improve their management and condition, especially by restoring more natural hydrology.

v) Wetland areas such as ponds, lakes, mires, flushes and wet woodland should be protected and restored where necessary. Creation of new wetland habitats in suitable locations is encouraged, avoiding harm to any existing features of value.

vi) Species-rich meadows, unimproved grassland and higher quality road verges should be managed for their biodiversity value.

8. People's connection to nature

i) Opportunities should be taken to support greater connection to nature across all of society, including emotional connection, public engagement, education programmes and interpretation.

Plan Recommendations - Nature

(See the [explanation](#) of what the Recommendations are)

N 1. Support implementation of priorities and actions set out in the Shropshire & Telford & Wrekin Local Nature Recovery Strategy, by farmers and landowners as well as smaller scale action by smallholders, community groups and individuals.

N 2. Support Parish scale action for nature, including local nature recovery strategies, management of public land, and support for action by farmers, smallholders and for wildlife gardening.

N 3. Influence national policy relating to nature, especially to emphasise the benefits of nature, to ensure consistency with other policy areas and to avoid portraying nature as a constraint.

N 4. Support strong delivery of new farm incentives for nature through Environmental Land Management (ELM).

N 5. Follow the Plan's guidance below about favoured locations for appropriate tree planting, focused as far as possible on native species:

- i. In field corners and hedgerows where individual trees and small groups of trees will enhance the landscape
- ii. Along watercourses and in upland dingles, and where planting will buffer, extend or link woods, especially ancient woodland
- iii. Replacement planting where mature trees may have to be removed
- iv. Avoiding land take of higher agricultural value land
- v. Avoiding sites of archaeological interest
- vi. Avoiding land which is valuable open habitat, e.g. species-rich grasslands, meadows, heathlands or wetlands, except in character with mosaic habitats
- vii. Avoiding locations within 1km of nest sites of ground-nesting birds, to avoid improving conditions for predators. Every effort should be made to check local and national records of such birds.

N 6. Optimise delivery of Biodiversity Net Gain in the Shropshire Hills.

N 7. Maximise benefits of the new Stiperstones Landscape National Nature Reserve (incorporating land of a number of partners).

N 8. Support management of deer populations in a careful and sustainable way to enable natural regeneration in woodlands and enable planted trees to grow.

N 9. Raise awareness of ffridd and scrub habitats which are undervalued.

N 10. Improve the resilience of all woodlands and plantations to the effects of climate change.

N 11. Seek to minimise the harm from pests and diseases affecting wild populations by raising awareness and following best practice including biosecurity.

N 12. Control invasive non-native species where needed, according to best practice guidelines.

N 13. Support provision of adequate advisory capacity on nature for different types of people – including farmers, smallholders and community groups, consulting them on their needs.

N 14. Continue to develop the network of community wildlife groups.

N 15. Continue networking organisation for small meadow owners (Marches Meadows Group).

N 16. Rewilding initiatives should take account of the current nature value of land, and any nature conservation value which derives from a long history of sensitive management, which may be best to continue. Any species reintroduction should be done through official mechanisms.

N 17. Improve data and knowledge regarding key evidence gaps on nature, and share more nature recovery case studies. Continue to gather and make available data on nature, including through expansion of citizen science approaches.

Plan Aspirations - Nature

(See the [explanation](#) of what the Aspirations are)

N(a). Secure funding from National Lottery Heritage Fund for a Shropshire Hills Landscape Connections project delivering at a large scale for nature recovery (along with other project elements).

N(b). Explore opportunities for Green Finance and seek to develop some demonstration projects to help people understand the opportunities and potential pitfalls.

N(c). Expand conservation ownership of key sites which come on the market by suitable community or conservation organisations where appropriate.

N(d). Connect organisations who are active on nature – to share knowledge and ideas.

N(e). Develop area and theme-based projects for nature, e.g. rivers, grassland, wetlands, etc. linking with other objectives.

N(f). Create new habitat to meet the Targets & Outcomes Framework target 1.

N(g). Targeted work on priority species, e.g. curlew, butterflies, including through local species action plans.

N(h). Ancient and veteran trees should be recorded and have appropriate management plans to retain their landscape and biodiversity benefits.

N(i). Reinstate advisory capacity for owners of Local Wildlife Sites.

N(j). Encourage skills development for relevant people to support nature recovery.

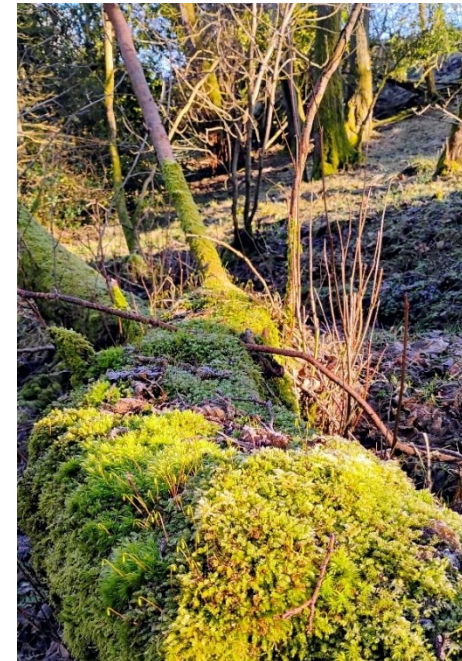
N(k). Expand community initiatives to grow and plant trees.

N(l). Support people to take inspiration from their experiences of nature in the Shropshire Hills to become more sustainable and pro-environmental in their behaviours and choices.

N(m). Increase the proportion of people who spend time in nature, especially creating opportunities for those who currently do not participate.

N(n). Include regular content on the theme of nature in public communication and engagement.

N(o). Use themes from the [People's Plan for Nature](#) to support engagement: Vision & Leadership, Regulation & Implementation, Nature-friendly Farming, Food Production and Consumption, Waterway & Catchment Management, Local Access to Nature, Using Evidence Effectively.



Extracts from Vision:

Climate

is stabilised through decarbonising, and we are resilient to change

- Greenhouse gas emissions are reduced to net zero in all areas - energy and buildings, transport, land use, etc
- Nature-based solutions are deployed at scale
- Adaptation is active for nature, infrastructure and the economy and society

Subsections in this 'Climate' section of the Plan:

Reducing greenhouse gas emissions – pathway to net zero, in all sectors

Carbon storage and sequestration in land and soil

Adaptation, including risk assessment and reporting

Renewable energy

Attitudes and behaviour change

Just transition

*Key link to other Plan themes - **Nature-based solutions***

“We are the first generation to feel the effect of climate change and the last generation who can do something about it.”

Barack Obama, Former US President, 2015



Climate Change has become a central issue for protected landscapes as the urgency of the climate crisis has ramped up. 2024 was the hottest year on record and records continue to be broken. As shown below, the sharp increase in global atmospheric CO2 levels within the lifespan of the Shropshire Hills AONB due to fossil fuel use is greater than the range of natural fluctuations over the previous 800,000 years. Globally, despite all our efforts, greenhouse gas emissions are still rising.



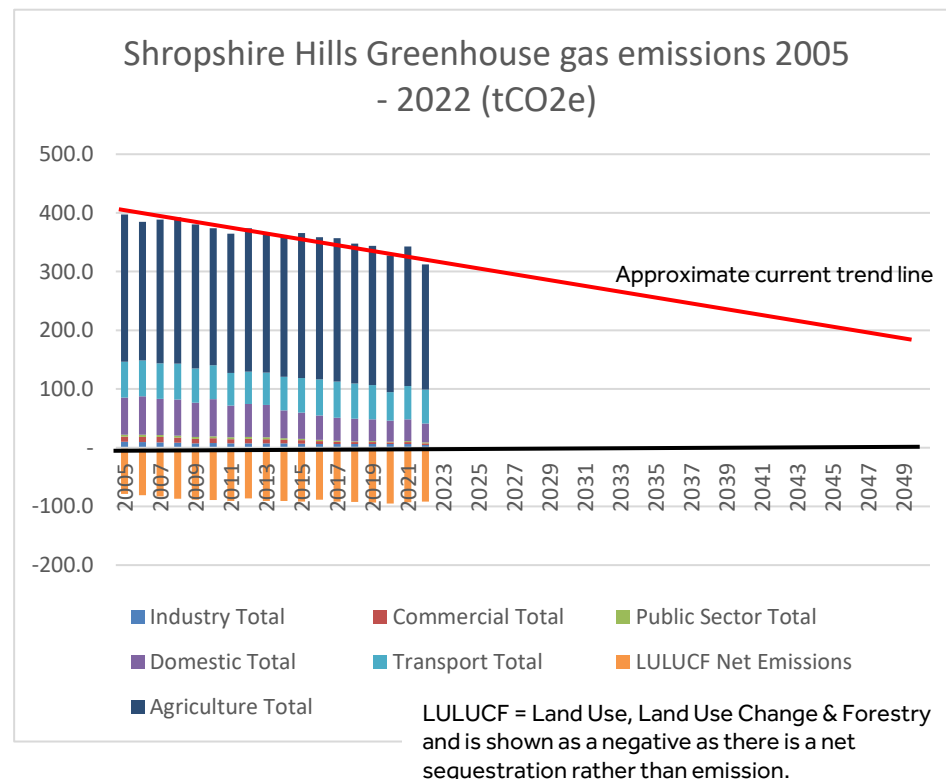
The relatively stable period of climate through the Holocene era which has enabled humans to thrive is coming to an end, unless we act faster. As in other topics of this Plan, there is a lot of good activity locally, but not at sufficient scale and pace, and too many factors and activities are still pushing the wrong way. This plan covers the second half of the decade to 2030, a period described as critical to achieving the Paris Agreement target of holding global heating to 1.5 degrees above pre-industrial levels, and to avoid levels of climate change which threaten the future of humanity.

Global commitments of Protected Areas on climate change are set out in the Protected and Conserved Areas Joint Statement.

The national statement of commitment from AONB Chairs on Climate Action of April 2022 states that “[National Landscape] teams and partnerships must now more than ever confirm their leading role and ambition in addressing this challenge.” The Chairs pledged to “Empower our partnerships to explore their full potential in terms of climate action: what they can deliver directly and what they can influence.”

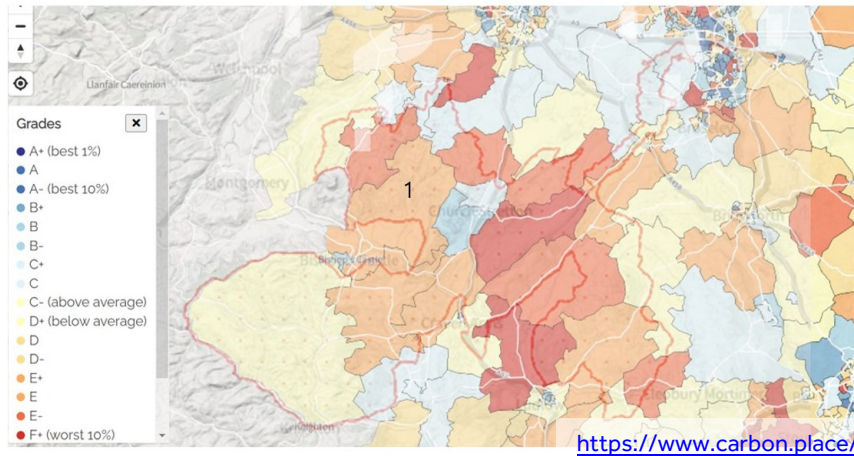
Reducing greenhouse gas emissions – a pathway to net zero, in all sectors

The government data for greenhouse gas emissions (which exclude consumption-based emissions and so are not a complete picture) show a noticeable reduction over the last 20 years, as below. However the rate of reduction is only about half what is required to reach net zero by 2050.



Evidence shows that per capita emissions in the Shropshire Hills are higher than the national average. This is partly a consequence of the rural nature of the area leading to higher emissions from domestic energy and transport, but is also linked to high levels of consumption.

Carbon emissions by super-output area in the Shropshire Hills

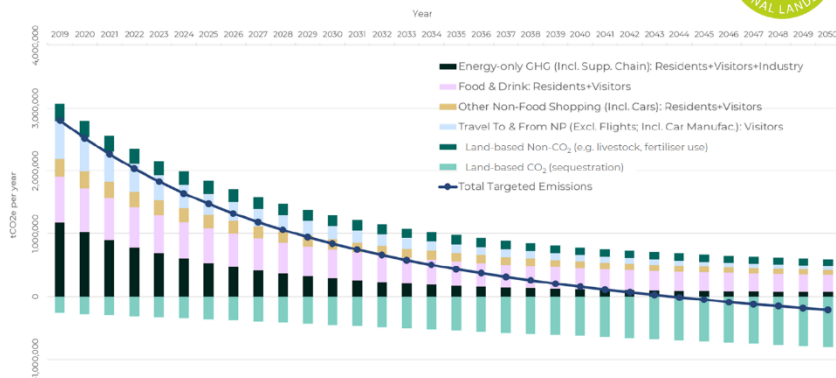


<https://www.carbon.place/>

Red shows highest emissions through yellow to blue showing lowest emissions

We need to promote an ‘emissions descent’ pathway as below from the Cotswolds. This will require energy transition, demand reduction, behavioural as well as technological change, and action in all sectors.

Pathway to Net Zero



The National Landscapes Association collaborative work on climate change identified priorities in relation to five headings – agriculture, sustainable tourism and transport, buildings and energy efficiency, renewable energy, and nature-based solutions. These form the basis of this Plan’s approach.

Agriculture - Overall goal: Reduce greenhouse gas emissions from farming (including CO₂, methane and N₂O) while continuing to produce healthy and nutritious food, improving long and short-term food security and enabling nature recovery.

Greenhouse gas emissions from land and farming need to be reduced while continuing to produce food. We need farming systems which improve soil condition and integrate with nature (such as regenerative/ agro-ecological), plus changes to the food system and diets.

Sustainable transport and tourism - Overall goal: Reduce greenhouse gas emissions from transport and tourism, continuing to meet people’s needs but challenging hypermobile trends of travel and reducing demand, at the same time improving health and wellbeing.

We need to adapt tourism infrastructure and influence visitor behaviours, connect people better to nature, support active travel, and access for all.

Buildings and energy efficiency - Overall goal: Reduce greenhouse gas emissions from domestic and commercial buildings, new and existing.

We need better resilience and sustainability in new buildings, retrofit for large numbers of older existing houses, and to take account of landscape sensitivity.

The content for renewable energy and nature-based solutions is included within the headings later in this section.

Carbon storage and sequestration in land and soil

The National Landscapes Association worked with Cranfield University in 2022 and gained a lot of knowledge of carbon in land in our landscapes. Key learning points included:

- A variety of habitats and land cover types within National Landscapes are valuable carbon stores with good potential for carbon sequestration.
- Soil carbon stock (carbon per ha) is generally higher in priority habitats than other land types .
- Peat soils have the highest soil carbon stocks .
- The bulk of carbon is stored within the soil rather than biomass.
- Emissions are associated mainly with arable land (and peatlands which are not wet enough).
- The first priorities are about holding on to important carbon stores and reducing/stopping emissions from land.

Types of land which are important because they are carbon-rich:

- Extensive areas of high organic content soil in upland grassland.
- Woodlands – strongly sequestering Carbon.
- Peatlands (these are not well represented by the habitat/ land use classes used) - hold a big Carbon store for their size (related to depth), but lots are in poor condition and still emitting Carbon.



Shallow peat soils in the headwaters of the Clun catchment

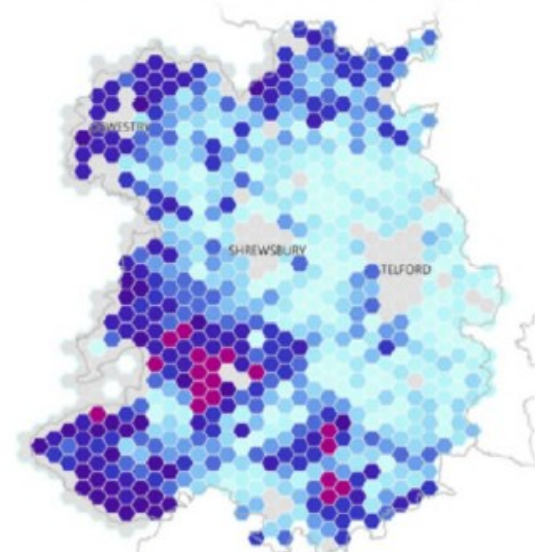
Types of land which are important because large areas are present:

- Big carbon stores in arable land but these are generally emitting.
- Big carbon stores in grassland - these are generally holding it or emitting very slowly (carbon balance of grasslands is variable).

Generic actions which will optimise carbon storage and sequestration in land and soil in the Shropshire Hills:

- Support agricultural practices which raise soil organic carbon in grassland and arable land.
- Reduce carbon loss in arable land by reducing tillage where possible.
- Expand tree and woodland cover in ways sympathetic to nature, farming and landscape.
- Increase trees outside woods and grow hedges to larger volume.
- Rewet peat areas to reduce and then halt emissions.
- Protect heathland and manage sensitively.
- Stabilise the large areas of high organic content soil by reducing intensity of land management.

WMHC Soil Carbon/Organic Matter (ID: 59)
Mean estimates of carbon density in topsoil (0-15cm depth) – tonnes per hectare, mapped using data produced from Natural England and CEH's 'Mapping Natural Capital' project: Soil carbon (Henrys et al., 2012). N.b. This dataset is statistically extrapolated to a national level from CEH Countryside Survey data 2007.



The soils of the Shropshire Hills are significantly high in carbon/organic matter in the context of the county (Natural England)
(pale blue lowest through dark blue then red to highest)

Adaptation, including risk assessment and reporting

Global heating is already having a clear impact in the UK through warmer wetter winters, hotter drier summers, and more frequent extreme weather events – including heatwaves, intense rainfall events, and storms with high winds. Projections indicate that these trends will continue and grow. Even in the best scenarios of emissions reductions and climate stabilisation, the changes in climate already ‘locked in’ are likely to create significant impacts which will affect all aspects of the economy, society, infrastructure and the natural environment. Climate justice requires us to acknowledge that the vulnerability of different people to the effects of climate change is very unequal, and globally those most at risk have contributed least to causing the problem.

The effects of climate change include interacting risks, in-combination effects, thresholds and tipping points. The severity of impacts from greater levels of warming such as 3 or 4 degrees which we are still headed for, would exceed the capacity of adaptation responses and are existential for human civilisation and the ecosystems in which we live. This is the reality of the Climate and Ecological Emergency and the evidence is strong that collectively we are not doing nearly enough.

The indirect effects of climate change in other parts of the world will affect geopolitics and our economy, and these influences are likely to prove at least as significant for the Shropshire Hills as any direct bioclimatic effects. Continued integration of adaptation with reducing emissions and with nature recovery and action to stay within other planetary boundaries remains vitally important. This requires international collaboration and overcoming barriers to action including fear, apathy, misinformation and vested interests.

National Landscapes have contributed collectively to the current round of Government reporting in the National Adaptation Programme (NAP4). There is a requirement for each protected landscape to have a Climate Change Adaptation plan by 2028. The information here is a preliminary risk assessment and identification of actions, which will be elaborated through a fuller process by 2028. Work on this topic for the National Landscape needs to be a guide, and to link to activity of the local authorities and other partners, since the management of infrastructure and property does not rest with the National Landscape team.

The [UN Environment Programme’s global foresight report ‘Navigating New Horizons’](#) identifies that **climate change is part of the ‘polycrisis’ of interconnected environmental and societal challenges facing the world**. These have implications for global security, conflict and forced displacement of people. The study identifies that these systemic problems require systemic solutions based on values – a new social contract, engaging a more diverse range of stakeholders, giving young people a voice and rethinking measures of progress to go beyond GDP. The report also identifies that communities and local level networks and initiatives play a major role in coping with short-term shocks and building long-term resilience and adaptive capacities. It highlights the importance of robust local government leadership to provide the necessary governance and structural arrangements, and links with national authorities. Within protected landscapes we need to do all of our local work in the context of global challenges, since the scale of these means that we just can’t succeed in maintaining our landscapes as ‘islands’ of sustainability. The approaches recommended in this Plan fit well with the solutions identified in the UNEP report, if they can be implemented.

The UK Climate Change Risk Assessment CRA3 (2021) by the Climate Change Committee identified the following 8 top risks:

1. Risks to the viability and diversity of terrestrial and freshwater **habitats and species** from multiple hazards
2. Risks to **soil health** from increased flooding and drought
3. Risks to **natural carbon stores** and sequestration from multiple hazards leading to increased emissions
4. Risks to **crops, livestock and commercial trees** from multiple hazards
5. Risks to **supply of food, goods and vital services** due to climate-related collapse of supply chains and distribution networks
6. Risks to people and the economy from climate-related failure of the **power system**
7. Risks to human health, wellbeing and productivity from increased **exposure to heat** in homes and other buildings
8. Multiple risks to the UK from climate change **impacts overseas**

An outline assessment of risks relative to features of the Shropshire Hills is below:

Feature/characteristic of the Shropshire Hills	Headline risks and implications of climate change <i>(to be set out more fully in Adaptation Plan)</i>
Varied geology and topography	The landscape provides a big variety of conditions, which may help species to adapt.
Soils	<u>Vulnerability to soil erosion. Surface water flooding.</u>
Relatively fragmented habitats	Less connectivity for species to move through the landscape.
Upland habitats	Heath and moorlands at greater risk of <u>wildfire</u> . <u>Drought</u> , including in-combination effects e.g. greater susceptibility to heather beetle.
Woodlands	Change in growing conditions for trees. <u>Drought</u> affecting new planting. <u>More tree diseases</u> as a result of warming and loss of cold winter periods.
Veteran trees	Risk of <u>loss of trees</u> in storm events.
Hedgerows	Potential pressure on land use affecting hedges.
Grasslands	Extremes of <u>water availability</u> .
Rivers and streams	Greater risk of <u>drying up</u> in drought periods. Increased flooding especially where very modified. <u>Declines in water quality</u> due to storm run-off.
Wetlands	Risk of <u>drying out</u> . But of importance in retaining water and reducing wildfire risk.
Farming	Changes in crop suitability. Availability of grazing. Differing value and responses of land for water retention. <u>Waterlogging of land</u> in winter and flood periods. Risk of <u>loss of income or livelihoods</u> .
Archaeological sites	Risk of <u>fire and land disturbance</u> .
Heritage buildings	Greater risk of <u>damage from extreme weather</u> . Older buildings are often better at remaining cool in hot weather.
Road infrastructure	Large network of minor lanes. <u>Damage to road surfaces</u> due to extreme weather – storms and heat
Rural power grid	Potential extra pressure on grid and more outages.
Private water supplies	Potential for groundwater supplies to be depleted.
Path network	Path surfaces and small bridges especially vulnerable to <u>flood damage</u> .
Scenic quality	Changes to landscape and views.
Environmental quality	Threats to water and air quality from increased flooding and fires.
Towns and villages	Vulnerability to flooding, and potentially wildfire.
Older population	Increased likelihood of higher deaths due to extreme weather especially <u>heat related illness</u> .

Potential actions in response to climate risks for the Shropshire Hills

(these overlap with actions for other goals)

Land and water

Build a connected nature recovery network of habitats.

Rewet catchment headwaters.

Water storage and infrastructure for farms e.g. solar pumps, distributed stock watering, restructuring of field boundaries.

Regenerative methods for pastures such as rotational grazing can be more robust to drought.

Infrastructure

Build resilience in Infrastructure – transport, etc.

Adapt design e.g. shade in public spaces.

Building and property adaptation for extreme weather.

Increase rainwater storage.

Prevent ‘maladaptive’ actions e.g. increasing reliance on private cars, building on flood-prone land.

Society

Localise to enhance resilience but remain interdependent and collaborative – e.g. food systems, local energy.

Strengthen community resilience and maintain social cohesion. Shared public spaces (built or green spaces) have an important role to bring people together. Community groups and local governance structures are vital.

Give priority to values, truth and justice, and to necessary skills of thinking, relating, collaborating and acting.

Strengthen nature connection – to realise that we are part of with nature and need to nurture the conditions for life.

Reduce inequality – focus on meeting people’s needs and avoiding excess consumption. Use better measures of progress.

Encourage responsible recreation – including avoiding wildfire risk, reducing water consumption, using active travel, and avoiding damage to sensitive sites.

Encourage citizen science.

Renewable energy

Previous Shropshire Hills AONB Management Plans have since 2009 championed the necessary shift to low carbon, and supported approaches to renewable energy which are compatible with the special qualities and other key characteristics of the Shropshire Hills. Approaches are also favoured which support a transition to more decentralised zero carbon energy systems that empower and benefit local communities, with broader sustainability benefits.

Wind generation has been effectively prevented by national planning policy over recent years, since it had to be supported by a Neighbourhood Plan, and these are so limited in coverage. There is also no policy to guide planning applications for wind microgeneration in the National Landscape. It could be argued that the relative lack of action to expand sensitive small scale renewable generation in the area increases the likelihood of large development proposals which could be harmful to the National Landscape.

The National Association collaborative climate change work defined the **overall goal for renewable energy as: Facilitate an increase in generation of renewable energy in National Landscapes which does not harm their special qualities.** We need a better national strategy and local planning for renewables.

It should be possible to achieve a very substantial increase in renewable energy generation in Shropshire without harm to the Shropshire Hills National Landscape, but achieving the balance is more likely to be achieved by having a clear strategy and policy for renewables in the county, drawing on best practice from other areas and utilising tools such as landscape character and capacity assessment. Raising community engagement on the topic of renewable energy through the development of policy and consultation will help to advance much needed renewable generation, and to close the gap between general high levels of public support in principle and the frequently observed resistance to particular local proposals.

Attitudes and behaviour change

Action on climate change needs to be done at all levels – government, businesses, communities, individuals, etc, and these levels can all help to reinforce each other. The responsibility for climate action should not be all loaded onto individuals, but individual change is integrally linked with system change – in driving societal change and influencing governments. Households and people in the top percentages of income have disproportionately large emissions, and have the greatest responsibility to reduce these.

The social behavioural model describes how people are influenced by those around them, and how there are ‘social tipping points’. Small scale changes can lead to more, and can change the way people perceive themselves – action can influence attitudes as well as the other way round.

Climate Outreach specialise in social science insights and have looked at the difference of attitudes and behaviours in rural communities, which is relevant to our area. They find that climate change is of high concern to rural citizens (87%) across the political spectrum. 60% of rural citizens think that we are already feeling the effects of climate change (c.f. 56% urban), and rural citizens have high civic and political participation. Compared to those in urban areas, rural citizens are more likely to engage certain actions to reduce their climate impact:

- Recycle, re-use plastic
- Reduce electricity use
- Buy local food
- Improve home insulation
- Switch to renewable energy
- Holiday near home

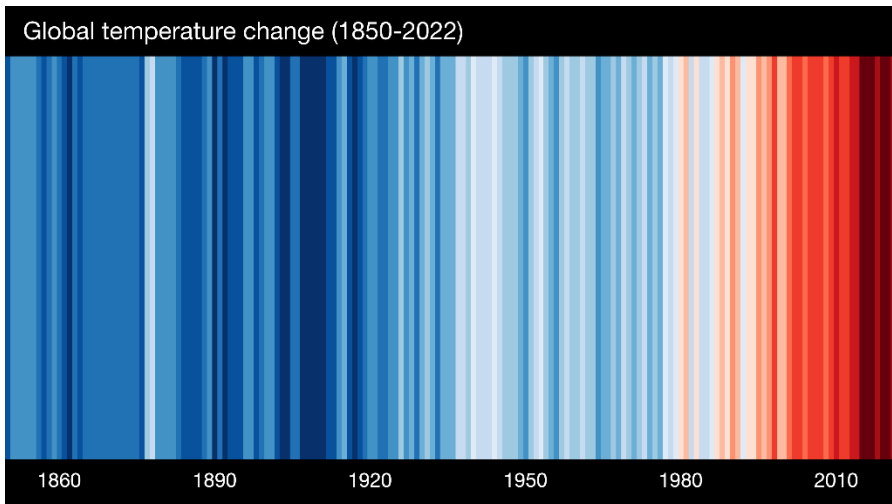
Rural citizens are less likely to:

- Walk, cycle, and use public transport
- Vote for a political party based on their climate policies
- Attend a climate change protest

Just transition

The impacts of climate change on people are uneven and so too are the impacts of attempts to mitigate carbon emissions. For many climate impacts it is the most vulnerable in society that will be most impacted and who also have the least ability to adapt. Adaptation actions to address these risks will also themselves have unequal impacts, and these may be different to those arising from the climate risks that they are seeking to avoid. There is potential for some adaptation actions to have unintended negative effects, increasing exposure of others to climate risks.

Action to enable a 'just' transition tries to combat this inequality to bring about fairer outcomes as the world transitions to decarbonisation, maximising the benefits of climate action and minimising the negative impacts for workers and their communities. The climate change transition process should be fair and involve all communities, ensuring that no communities are unduly impacted. The importance of the just transition is recognised at the international level through its inclusion in the 2015 Paris Agreement.



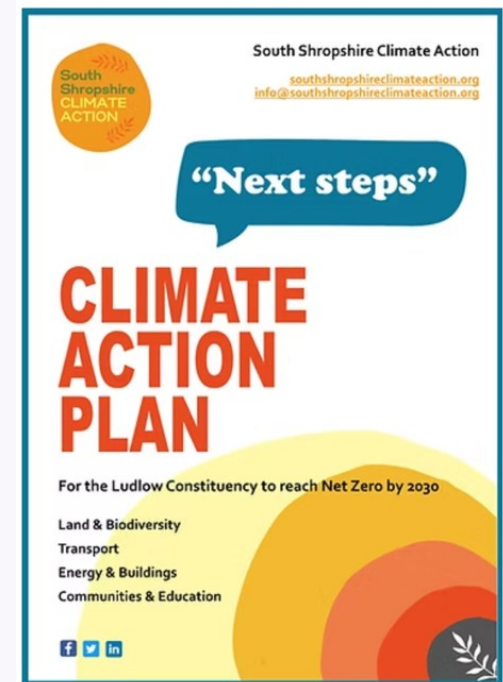
Professor Ed Hawkins (University of Reading) <https://showyourstripes.info/>

Case study – South Shropshire Climate Action Plan

South Shropshire Climate Action produced in 2021 the 'Next Steps' Climate Action Plan for the Ludlow constituency to reach Net Zero by 2030. This was accompanied by two major local conferences which generated a lot of engagement, and was a big achievement for a community group

The Plan makes recommendations across headings of Land and Biodiversity, Energy and Buildings, Transport, Communities and Education. The group has now merged into the county level group of Shropshire Climate Action.

"In telling the truth about the Climate Emergency, we acknowledge that the future is uncertain, difficult and dangerous, but also full of opportunity and hope. In our choices we can improve life, creating an inclusive and fair society for all, sharing resources equally and respecting differences."



Key link to other Plan themes - Nature-based solutions

The National Association collaborative climate change work defined the **overall goal for nature-based solutions as: Safeguard the carbon stores in our landscape, reduce emissions from land and increase carbon sequestration, in ways which are compatible with nature.** Halt and reverse the loss of good quality habitats and restore and recreate habitat networks across the landscape.

The integration of nature-based climate solutions with actions for nature recovery is vital. We must be “nature positive and carbon negative” at the same time. Measures adopted will often have other ecosystem benefits such as flood attenuation and also climate change adaptation benefits to improve resilience. They also connect with climate change mitigation and adaptation through agriculture and forestry – we must look at nature-based solutions holistically. Land (and water) delivers many benefits and services and must not be thought of just in terms of carbon. Nature-based solutions have an important role for tackling climate change, but Carbon offsetting mustn't harm nature or be used as an easy way of avoiding the necessary deep cuts in emissions in all sectors.

The most relevant nature-based solutions for the Shropshire Hills are:

- Peatland restoration
- Woodland creation and management
- Water, wetlands and natural flood management
- Grassland and heath – creation and management



Summary of statutory requirements and duties - Climate (not exhaustive)

Legally binding government targets for reductions in greenhouse gas emissions - halve emissions by 2030, net zero by 2050

Climate change risk assessment and adaptation reporting duty on public bodies

Planning requirements for energy efficiency in new development (imminent implementation of Future Homes Standard)



PLAN POLICIES - CLIMATE

(See the explanation of what the Policies are)

9. Integrated action

i) Action needs to be taken at the Shropshire Hills level on both climate change mitigation and adaptation, and these aspects should be linked and integrated as far as possible.

10. Mitigation

i) Measures to mitigate climate change should remain integrated with and not harm action for nature recovery.

ii) Greenhouse gas emissions linked to the Shropshire Hills should be reduced in all sectors on a clear pathway to reach net zero by 2050 at the latest.

iii) Developments, activities and trends which increase greenhouse gas emissions should be resisted.

iv) The large existing carbon store in land should be safeguarded by halting losses, and sequestration in land increased.

v) Demand should be reduced in energy use and transport, as well as changing energy sources to renewable technologies. Insulation and retrofit of energy saving measures should be accelerated in existing and especially older buildings.

11. Adaptation

i) Action for climate change adaptation and to increase resilience in all ways should be supported. All development should support adaptation of the landscape, infrastructure and society to the significant risks and impacts of climate change.

ii) Nature-based solutions should be applied at scale to increase carbon storage and for climate resilience.

12. Renewable and Low Carbon Energy

i) Small scale and community-led renewable energy installations should be encouraged. Community low-carbon initiatives in keeping with the Plan's priorities should be supported, and renewable energy proposals should be assessed on a range of sustainability criteria.

ii) Ground-mounted solar installations in the National Landscape should be at appropriate scales and locations and should:

- be out of prominent view from key publicly accessible vantage points;
- maintain, protect, and enhance existing landscape features and heritage assets;
- include appropriate planting to screen site infrastructure, such as fencing, substations and buildings;
- erect the minimum of external artificial lighting, and where necessary design lighting to be in accordance with the Bat Conservation Trust - Guidance Note GN08/23 Bats and Artificial Lighting at Night; and
- prioritise brownfield land over greenfield sites (and if a greenfield site is selected, justification of site selection process and reasoning of selection should be presented).

iii) Biomass installations in the National Landscape should be at appropriate scales and locations.

iv) Developments for wind energy and associated infrastructure should:

- be generally of smaller scale;

- **not take place on prominent hills (within the High Open Moorland and High Volcanic Hills and Slopes landscape types);**
- **minimise impacts on landscape, nature, heritage, recreation, scenic beauty, and tranquillity; and**
- **evidence community engagement and local support.**

v) Renewable energy developments outside the designated area boundary should take account of the special qualities and other key characteristics of the National Landscape.

vi) Renewable energy proposals should be assessed in conjunction with neighbouring local authorities where appropriate.



Plan Recommendations – Climate

(See the [explanation](#) of what the Recommendations are)

- C 1. Increase the pace and scale of response to climate change.
- C 2. Support mutually reinforcing actions at all levels: e.g. government – business – community - individual.
- C 3. Support dissemination of accurate information and encourage climate conversations at all levels.
- C 4. Encourage behavioural change using understanding from social science, as well as technical solutions.
- C 5. Support action by local/parish level climate groups.
- C 6. Support wide roll-out of [Climate Fresk](#) and Carbon Literacy training.
- C 7. Promote the concept and practices of just transition as part of climate policies to ensure that no-one is unfairly disadvantaged.
- C 8. Undertake more detailed adaptation planning and reporting for the Shropshire Hills, linked to wider local authority work on this.
- C 9. Raise understanding by publishing more case studies on low carbon initiatives and adaptation.
- C 10. Improve resilience of infrastructure to climate impacts where possible, including rights of way, e.g. path drainage, bridges.
- C 11. Encourage further Carbon footprinting on farms and action to reduce emissions and increase carbon storage through farming.
- C 12. Improve local planning policy and guidance on renewables, including a strategy for increasing renewable generation capacity in the county while protecting the National Landscape.
- C 13. Encourage more woodland and trees of appropriate kinds in suitable places (in line with policies and recommendations in the [Nature](#) section of the Plan), and allow hedges to grow to larger volume with hedgerow trees.
- C 14. Set a high aspiration on low carbon travel, applying the transport hierarchy (Avoid - Shift – Improve), seeking to lower car use and encourage active travel – walking, cycling, etc

Plan Aspirations – Climate

(See the [explanation](#) of what the Aspirations are)

- C(a) Connect organisations who are active on climate – to share knowledge and ideas, and promote engagement, communication and collaboration.
- C(b) Explore and promote economic models which work in harmony with climate and natural systems and promote opportunities of a positive low carbon economy.
- C(c) Highlight the health and quality of life benefits of low carbon lifestyles, e.g. more active travel, healthier food, reduced stress.
- C(d) Raise understanding of carbon storage in soils, land and vegetation, and steps to improve sequestration and storage.
- C(e) Expand use of biochar from waste biomass to store carbon and improve soils.
- C(f) Explore wider use of carbon markets, taking into account nature and social implications and ethical considerations.
- C(g) Seek to minimise air travel connected with people visiting the Shropshire Hills, e.g. tourism marketing focused on domestic markets.
- C(h) Integrate Nature-Based Solutions for greenhouse gas emissions with benefits for nature, water management, climate change adaptation, etc.
- C(i) Cease all horticultural use of peat.
- C(j) Highlight good examples of renewable energy generation within protected landscapes.
- C(k) Champion visits to and within the area by public transport, where possible highlighting specific services that facilitate and support this e.g. by providing discount to those arriving not by car.



Extracts from Vision:

Land

is nurtured, so it can sustain us

- Farming produces good food sustainably while supporting nature
- Soils are healthy

Subsections in this 'Land' section of the Plan:

Geology

Soil health

Land use

Farming – transition to new government support regime

Agricultural development and diversification

Sources of practical **guidance**

Forestry and woodlands

Key link to other Plan themes - ***Local food and food systems***

“Anything I do now will probably be for good for nature, you know, and farming at the same time. You mustn’t forget that. It’s got to be farming and nature. It’s got to be in combination.”

Matt Betton, Shropshire Hills farmer



Geology

The Shropshire Hills contain a great variety of geological features from across a very wide range of geological eras or time periods. This has given rise to a diversity of landscapes with hills, crags, scarps and valleys, as well as different building styles, generating the varied character that is so distinctive. The geology that underpins the whole landscape is the basis for understanding the soils, ecology and land use which overlays it.

Due to the robustness of the basic geological resource, earth science conservation is focussed on conserving particular 'exposures' which are significant to the understanding of certain stages, groups or processes. Key geological sites are protected as SSSIs and Locally Important Geological and Geomorphological Sites (LGS), with the very best listed in the Geological Conservation Review. Some sites are known to be deteriorating through growth of vegetation including trees and scrub, and through scree accumulation masking vertical faces, such as in former quarries.

Some geological sites are used for interpretation and education, and here priority action relates often to the accessibility and visibility of sites. Capacity for maintenance and monitoring is however very limited. Ideally geology needs to be integrated along with other themes.



Soil health

There has been significant activity by farmers through various projects related to soil health and conservation, which can be developed further. Catchment Sensitive Farming has supported this, and other changes in agricultural practice have also had positive impacts. Vulnerability to erosion depends on soil type, slope, aspect and land use, and digital mapping is now a valuable tool. There is now greater understanding of the importance of the soil microbiome, and soil health is a key principle of regenerative farming which is gaining in popularity.

Loamy and clayey soils with impeded drainage often supporting pasture are easily compacted when wet, and are prone to capping and slaking, increasing the risks of erosion, especially on steeper slopes. When wet, these soils are easily poached by livestock and compacted by machinery, and the risks of diffuse pollution and flooding are increased. More freely draining, loamy soils typically in arable cultivation are at risk of erosion on slopes where exposed or compacted. The sources of erosion should be tackled, along with slowing pathways and protecting watercourse receptors.



Land use

Finding a balance of land use is one of the most important challenges facing the Shropshire Hills – a balance where farming produces healthy food while sustaining the land and allowing nature recovery and other public benefits. This is not an either/or, and it needs integrated solutions.

This is quite a fast moving policy environment, with recent consultation on the [National Land Use Framework](#) and the final Framework expected soon. The [Food, Farming & Countryside Commission](#) have undertaken a number of useful county-level land use frameworks. The long term of food security requires the environment which sustains it to be looked after. An integrated approach breaking down silos is likely to help – land uses which are harmful for the environment are often driven by single issue decision-making. Land serves multiple uses and purposes, and some land is more suitable for some functions than others.

A greater diversity of land ownership is gradually happening in the Shropshire Hills, with some sites being bought by Community Land Trusts (especially the [Middle Marches CLT](#)). Other new owners of land as individuals or for investment sometimes bring different objectives, which can offer opportunities and occasionally threats to the special qualities or features of the National Landscape.



Farming – transition to new government support regime

The continuation of farming in ways that produces food while being sensitive and sympathetic to the landscape is vital to conserving the qualities that are valued in the National Landscape. Much good work is being done, but there is further to go, to address returns to farmers for nature-friendly business and to reverse declines in biodiversity and the water environment. Working with the natural characteristics and processes of the area offers a sustainable model. We need our farming to be good for people and for nature – providing a supply of good food, respecting and protecting the environment and natural resources, and providing a fair income for farmers.

Farming and land management remains key to the economy of the Shropshire Hills, employing more than a quarter of its residents, and providing a higher proportion of the jobs actually located within the National Landscape. Grass-fed livestock is the main activity, with arable and dairying especially in the lower lying fringes of the area. Food production will remain an important objective in the Shropshire Hills, but the many other public benefits from land management also need to influence how this is carried out. The long-term capacity to continue producing food depends on looking after natural capital (such as soils, clean water and pollinators) as well as social capital (e.g. by promoting farm support networks, encouraging succession, and retaining and developing skills).

The transition for upland farming is a key issue for the area, and solutions enabling farm businesses to be environmentally, economically and socially sustainable are supported.



Much of the Shropshire Hills is used for raising grass-fed livestock which is relatively low intensity farming, but some of the land is



worked quite hard and has become ecologically simplified. There are directions within the industry towards regenerative and agroecological farming, and lower input grazing systems where reducing stocking rates can increase profitability by reducing costs. These approaches could be very beneficial to nature recovery.

The benefits to nature from farming can come not just from looking after habitats at the fringes – the fields themselves matter too. This is recognised in High Nature Value (HNV) farming where relatively low-intensity farming systems maintain large areas of semi-natural habitat in high quality countryside. Apart from conserving wildlife, these types of farming provide ecosystem services such as carbon storage, clean water and fire prevention, and much of the rich social fabric and character of landscape.

Maintaining these kinds of farming system and preventing abandonment or wholesale intensification is therefore a priority. The social and economic realities of farming systems are important to conservation strategies. Across the larger areas outside nature reserves, conservation of semi-natural habitats is more likely to be effective and meaningful if embedded in the cultural and socio-economic activity of the communities which created them and now maintains them.

Case study – Upper Onny Farmers Group

The Upper Onny Farmers Group was formed in 2018 initially with 8 farmers, now 32 members. The group has the aim to ‘share views about the main issues affecting the future of farming and the environment in the upper Onny valley, and to explore ways for improving the environment, the landscape and its wildlife in ways that are integral to profitable farm businesses’. It has been supported in its development over several years by staff from the Shropshire Hills National Landscape Team and the National Trust, the latter providing significant funding for staff time by both organisations, as part of the Stepping Stones project. The Group has recently formed as an independent organisation.



Members of the Upper Onny Farmers group on a visit to Cumbria

Case study - Clee View Farmers Group

With 3 years of support from the Countryside Stewardship Facilitation Fund a significant group of over 60 farmers has formed on the Clee Hills, covering over 15,000ha. A wide variety of events have been organised including on herbal leys, soils, carbon accounting, water, and natural capital assessment.

Agricultural development and diversification

Diversification activities involving new development should work with the qualities of the National Landscape rather than against them, and respect the quality of the landscape, which is the basis also of many other businesses in the area. If the designation is perceived as a limitation to a certain kind of development, this is an indication that the development is not adopting an approach working in harmony with the high quality landscape. Many types of developments of farm enterprises and diversification can be done without harm to the National Landscape, including:

- Adding value to agricultural products
- Alternative livestock
- Sustainable tourism, including accommodation and sensitively planned events
- Care farming and social forestry
- Crafts and training
- Woodlands and agro-forestry
- Alternative uses of buildings

A simple Sustainability checklist for diversification would include looking at:

- Where possible using previously developed land and re-using existing buildings.
- Using locally sourced materials and minimising waste.
- High quality and sustainable design and construction methods.
- Energy efficiency, renewable energy and recycling.
- Minimising the need for travel and transport.
- Protecting and enhancing landscape, heritage and biodiversity.

Sources of practical guidance

Shropshire Hills National Landscape website. Includes: Conservation and Land Management – Water Friendly Farming, Planting and Caring for Trees, Black Poplar management, alder coppicing, conserving curlews, hedgerow birds, lapwings. Good practice guide to geological conservation.
<https://www.shropshirehills-nl.org.uk/help-to-look-after/resources/guidance-and-grants#wood>

Farm Wildlife is a partnership of 8 leading wildlife organisations, brought together to provide a single source of best-practice management advice for wildlife on farmland.
<https://farmwildlife.info/>

Practical Guidance for Farmers – Natural Flood Management – Catchment Based Approach

Upland Farmer Toolkit <https://uplandfarmertoolkit.org.uk/>

Nature Friendly Farming Network <https://www.nffn.org.uk/>

Linking Environment & Farming (LEAF) <https://leaf.eco/>

Farming Advice Service (Defra funded)
<https://www.farmingadvice.service.org.uk/>

Catchment Sensitive Farming
<https://www.gov.uk/guidance/catchment-sensitive-farming-reduce-agricultural-water-pollution>

Regenerative Food & Farming CIC
<https://regenerativefoodandfarming.co.uk/>

Forestry and woodlands

Woodlands and trees are important features in the Shropshire Hills National Landscape and are recognised as one of the special qualities of the area. The area has higher than the national average of woodland overall (13%) and of ancient and semi-natural woodland. 4.95% of the area is covered by ancient woodlands but approximately two thirds of that area are sites classed as Plantation on Ancient Woodland Sites (PAWS).

The Shropshire Hills are important for commercial forestry due to their position geographically and the suitability of the land. While conifers clearly have an ongoing role for timber and biomass, more could be done to encourage and support the restoration and development of management skills, supply chains, and markets for hardwood timber. Commercial forests are owned both by Forestry England and private estates. Policy and grants have for some time encouraged multi-purpose forestry for conservation and recreation benefits as well as timber production, supporting greater diversity with more broadleaved trees and open space. Forestry and woodland creation along with management of existing woodland offers valuable opportunities to farmers and landowners to diversify their businesses. Steep slopes and access for machinery to manage these woodlands can be a constraint and well-designed access tracks are needed.



Key link to other Plan themes - Local food and food systems

There can be a positive link between changes to the food system and landscape. The [Food, Farming & Countryside Commission](#) sees the synergy between farming for healthier diets in people and for a healthier environment, with a more mixed farming system with greater crop diversity and more biodiverse and permanent grasslands, grazed by native ruminants. This could deliver more sustainable/ regenerative land use, improving health, tackling climate change etc, all at once. More sustainable and healthier diets would include eating in season, eating lots of plants, less but better quality meat, home growing, less processed foods, and more whole foods. People's behaviour as consumers can help drive these changes but changes are needed in supply chains and the food system also. [Shropshire Good Food Partnership](#) is working on all these things locally with partners.

The affordability of local food remains a core factor where cost of living issues are systemically embedded within many communities in the National Landscape. Public understanding of the many different food accreditations is also an issue. Scalability, supply reliability, diversity of consumer choice and investment in local food chains within the National Landscape are relatively underdeveloped. In the Shropshire Hills a small number of meat producers sell direct, either from the farm, by mail order or through Farmers' Markets. Availability of local abattoirs is a barrier for local meat supply. The [Pasture for Life](#) group has been undertaking a project locally and nationally with FiPL funding.

In more fertile and sheltered valleys there are some vegetable growers. There are some speciality products such as cheeses, organic milk, ice cream and gin. Beer, cider and juices are a feature of the area with a number of local breweries and orchards. Outlets for local food include markets, farm shops and venues such as restaurants, cafes, shops. There are also some events such as the Slow Food Festival at The Bridges, and the now annual [Shropshire Good Food Trail](#). Some regenerative farms do public events and engagement.

Summary of statutory requirements and duties - Land

(not exhaustive)

(many of the statutory requirements highlighted in other topics also relate to land, especially those in Nature and Water)

Rules for farmers and land managers - what you must do when you keep livestock or manage land.

Nitrate Vulnerable Zones

Hedgerow regulations

Environmental Impact Assessment (Agriculture) regulations

PLAN POLICIES – LAND

(See the explanation of what the Policies are)

13. Geology and Soils

- i) Sites of geological and geodiversity importance should be protected, and actively managed and enhanced where necessary.
- ii) Soils should be protected, and soil degradation reversed by minimising erosion and compaction and increasing organic content.
- iii) The sustainable management of soils should be a priority, to increase their overall health and to support nature recovery, natural water management, climate change mitigation and adaptation, and long-term productivity of land.

14. Land use

- i) An optimum balance of land use should be sought to deliver the best overall long-term benefits to society.
- ii) The multi-functional benefits of land should be optimised.

15. Farming

- i) Farmers should be supported to continue growing food through profitable enterprises, in ways which are sympathetic to nature, climate, water, heritage and landscape. Farming and land management practices should as far as possible be sympathetic to the purpose of the National Landscape and priorities of the Plan.
- ii) The best and most versatile agricultural land should be protected from development.
- iii) The Environmental Land Management scheme and other relevant government funding schemes should deliver Management Plan priorities as far as possible.
- iv) Opportunities to develop and promote local food supply chains should be supported, and to increase local food resilience,



opportunities to expand sustainable horticulture and vegetable production should be supported where possible.

16. Agricultural development

i) Agricultural and diversification development regulated through the planning system should be in keeping with the special qualities of the National Landscape.

ii) New farm buildings should be of high design standards in keeping with the special qualities of the National Landscape and take account of published Agricultural Buildings guidance. The minimum of external artificial lighting should be erected, and where necessary, design lighting to be in accordance with the Bat Conservation Trust - Guidance Note GN08/23 Bats and Artificial Lighting At Night;

iii) Major development for intensive livestock including poultry should only be allowed where the stringent tests of exceptional circumstances in national policy are met. Criteria indicating that applications for intensive livestock developments should be refused include where:

- the scale of new buildings would exceed the farmstead's existing built footprint;
- proximity to other developments would create significant cumulative adverse impacts;
- development is proposed in open field locations away from other farm buildings;
- significant earth-moving or bunding is proposed, or landscape features such as hedgerows, watercourses, trees, and ponds are affected;
- the topography means that the development will be easily visible from publicly accessible vantage points;
- harm to local amenity and landscape character cannot be satisfactorily mitigated;

- proximity to residential properties or other businesses (within 400m has potential to generate harmful impacts on amenity, as recognised in the restriction in this zone for agricultural permitted development);
- units would be accessed by narrow roads and/or heavy traffic movements would alter the character of rural lanes or damage hedges or verges.

iv) Development of dwellings for rural workers should be allowed where:

- the proposal can demonstrate an essential need for permanent accommodation at or near a place of work;
- no significant adverse impacts upon the local community, landscape, nature, heritage, natural beauty, and tranquillity can be demonstrated.

17. Forestry

i) The optimum delivery of nature and public benefits from commercial forestry is encouraged.



Recommendations – Land

(See the [explanation](#) of what the Recommendations are)

- L 1. Continue the Farming in Protected Landscapes (FiPL) programme (this is a Defra decision) and a land management advice function in the National Landscape Team.
- L 2. Raise awareness of and champion agro-ecological and regenerative farming methods with a focus on soil health, and facilitate knowledge exchange for new sustainable farming methods.
- L 3. Continue to adapt to rapidly evolving government policy for land and farming.
- L 4. Support the development of farmer groups and clusters – including new and existing groups, linking and sharing experience.
- L 5. Continue to make the case for extensive grazing of livestock as a sustainable use of hill land.
- L 6. Support the special role of common land to deliver multiple benefits, and the continuation of common grazing and commoners associations.
- L 7. Raise awareness of geology as the foundation of our landscape and of how knowledge of rocks helps to understand soil – its pH, hydrology, etc, and what kinds of habitats would naturally develop, to inform land management decisions.
- L 8. Support a ‘nature positive’ and ‘carbon negative’ food system, and local food initiatives – e.g. networking producers with outlets, developing short supply chains, marketing which draws on the special qualities of the area and the quality of production.
- L 9. Seek to ensure an adequate and co-ordinated provision of farm advisers across all relevant topics, co-ordinated among a variety of providers.
- L 10. Support the provision of training and skills relevant to agricultural transition (e.g. habitat creation, carbon footprinting) as well as traditional skills (e.g. hedge laying, drystone walling).

Aspirations - Land

(See the [explanation](#) of what the Aspirations are)

- L(a) Secure DEFRA Landscape Recovery programme funding for appropriate areas of the Shropshire Hills.
- L(b) Foster ongoing constructive dialogue between farmers and other stakeholders to build common ground and reduce polarisation.
- L(c) Explore Maximum Sustainable Output approaches for farming, looking to lower inputs while maintaining or improving profitability.
- L(d) Explore local application of principles of the new Land Use Framework to influence local land use decisions.
- L(e) Apply holistic deer management strategies to enable woodland regeneration, and support this by building local venison supply chains.
- L(f) Support local provision of Community Supported Agriculture, where customers build a link with a producer through subscription, and through events and volunteering.
- L(g) Expand markets for a variety of woodland products to support sustainable woodland management.
- L(h) Support husbandry techniques to reduce methane emissions from livestock.
- L(i) Manage a priority suite of geological sites to a high standard with access and interpretation.
- L(j) Foster a local food culture, promoting local food and drink to visitors and through suppliers, retailers, and hospitality businesses.
- L(k) Develop a regular competition for a Shropshire Hills Local Food Hero – to reward and profile as a personal story in order to raise awareness of local food activity.

Extracts from Vision:

Water

Water is clean, and its flows and cycles support our lives, and all life

- Streams and rivers are naturalised and healthy, from headwaters to floodplains
- Water resources are managed carefully

Subsections in this 'Water' section of the Plan:

Integrated catchment management

Water quality

Flood attenuation, and managing low flows

Catchment **headwaters**

Water as a **resource**

Key link to other Plan themes - ***Managing land in order to look after water***

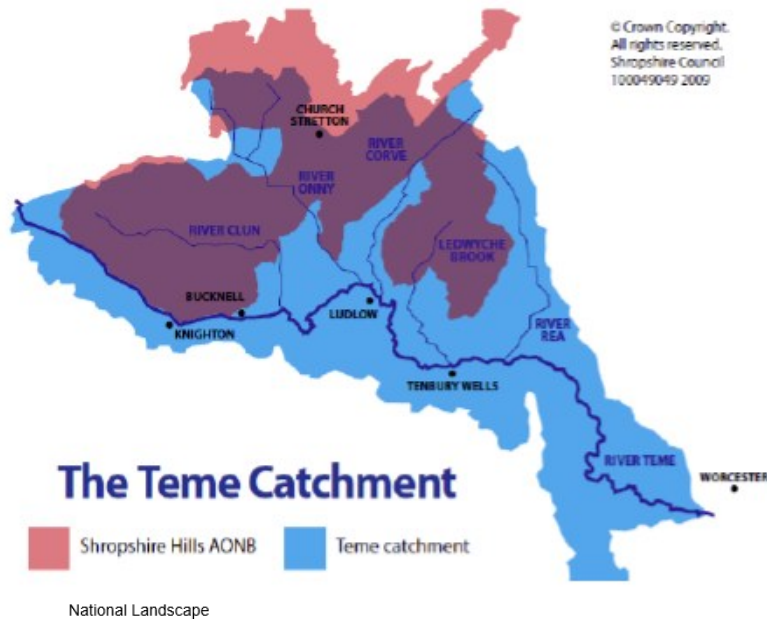
*"In the valleys of spring of rivers
By Ony and Teme and Clun,
The country for easy liver
The quietest under the sun..."*

Extracts from 'A Shropshire Lad' by A E Housman, 1896.



Integrated catchment management

A catchment is the area of land, often bounded by high ground, which drains into a given river and its tributaries, eventually joining a larger river or flowing out to the sea. The Shropshire Hills forms the majority of the headwaters of the Teme catchment, and it is helpful to think of it as this. Administrative units focus attention within a county boundary, but the way land and water are managed in the Shropshire Hills affects water flows beyond Shropshire, such as at Tenbury Wells and Worcester.



Integrated catchment management is about treating a river catchment as a system, looking at flood risk, water quality and other ecosystem functions together and engaging relevant stakeholders. The government supports this through the Catchment Based Approach (CaBA) and in our area there is the Teme Catchment Partnership, which is led by Severn Rivers Trust. Sub-catchments can also be a useful scale to work at, and in our area the Clun Catchment is the obvious example.

The Vision for the Teme Catchment is for:
“Healthy functioning rivers flowing through a balanced living landscape, cherished by all in the Teme Catchment.”

High level objectives for the Teme Catchment include:

- Water bodies with high ecological status and natural ecological function.
- A healthy and recruiting population of Freshwater pearl mussels.
- Wildlife returning to the river and the catchment, including rare fish, such as shad and formerly common birds such as cuckoo.
- Healthy and connected trees and woodlands.
- River sediment reduced to natural levels through improved practices, such as sustainable urban and rural drainage and good buffer strips along river banks on cultivated land and fewer livestock accessing the river.
- Sustainable levels of water in the streams and rivers.
- No need for pesticide removal from drinking water.

Northern parts of the National Landscape drain north into the Middle Severn especially via the Cound Brook, ending up also in the River Severn below the Teme confluence.

A small area in the north-west of the Shropshire Hills drains into the Upper Severn and falls within the area of the Severn Valley Water Management Scheme which is seeking to implement catchment management solutions to reduce flooding in Shrewsbury especially. This sits as part of the broader River Severn Partnership working for a sustainable future for the whole Severn catchment.

Catchments in the Shropshire Hills include valuable standing water – ponds and small lakes, as well as rivers and their tributaries. An integrated catchment approach recognises the connections of all these.

Water quality

The Water Environment (Water Framework Directive) Regulations 2017 put the EU Water Framework Directive into UK law post Brexit. The regulations require that a river basin management plan is prepared for each river basin district, ours being the Severn.

In a national context water quality in the Shropshire Hills is quite good, but it is not as good as it should be, and in many places has deteriorated. In 2024 figures, 0% of river length in the Shropshire Hills had 'high' ecological status, 3.7% had 'good' ecological status, 81% had 'moderate' status and 15% had 'poor' status. While the overall trend appears to be one of deterioration, the earlier data are not directly comparable so the amount of change is not entirely clear.

There are a range of factors affecting water quality in the area, but diffuse pollution from agricultural sources remains a significant one. The River Clun Special Area of Conservation with its population of freshwater pearl mussel rightly takes the most attention in the area, but the issues around water quality and influences on it are also applicable to other sub-catchments in the Shropshire Hills.



River Clun

In March 2022 Natural England published updated guidance on water quality and nutrient neutrality advice (NE785) which was based on the River Clun SAC being classified as in 'unfavourable condition' due to the continued depletion of the freshwater pearl mussel population as a result of declining water quality. As a result, Shropshire Council are not able to grant planning permission for new developments that provide overnight accommodation within the catchment of the River Clun SAC, unless it can be clearly demonstrated that they will not have a detrimental impact in terms of nutrient loading to the designated protected area.

Freshwater pearl mussels are very sensitive to water quality, with juvenile mussels being particularly susceptible to pollution. The River Clun SAC is in unfavourable and declining condition caused by high levels of phosphate, nitrogen and silt. Agricultural activities give rise to all three of these, whilst development mostly contributes phosphates from surface and foul water discharges. The phosphate levels required by the freshwater pearl mussel are extremely low and they are already too high for the pearl mussels to breed and also too high to maintain adult pearl mussels. Therefore, any additional phosphate entering the river will make the condition of the special area of conservation worse.

A joint statement by the Environment Agency, Natural England, Shropshire Council and Severn Trent Water of 2021 states that whilst the favourable conservation targets recognise the unique environmental value of the River Clun SAC, there is also the need to recognise the value of the area as an important rural community.

"Our combined vision for the River Clun SAC is therefore for the whole catchment area to be restored to a functional unit where a nature recovery plan enables ecological and human needs to successfully interact, thereby balancing the needs of people, economy and the environment."

The Clun Protected Site Strategy (PSS) is currently still in its pilot research and development phase. A Diffuse Water Pollution Plan for the Clun has also been recently prepared.

Flood attenuation, and managing low flows

Flooding is of two types - surface water flooding caused by water that is on a journey *towards* the river channel, and river flooding that is caused by excess water *spilling out of* a river channel. Available modelling including online public tools indicate that there is a low risk of river and surface flooding within the National Landscape except by the River Severn, and along the banks of the River Clun and its tributaries. However, damaging localised surface and river water floods are being seen increasingly often due to extreme weather events. There is a need to plan pro-actively, but a concern that the national modelling may underestimate the risks in our area. Such modelling also has the challenge of trying to take account of climate change predictions, which show that rainfall events will increase in their frequency and intensity, posing greater threat of flash flooding to communities.



Surface water flooding affects roads and paths as well as properties

There is a greater understanding now that holding water higher in a catchment for longer 'slowing the flow' helps to reduce or attenuate flood risk downstream, since so many catchment

streams come together. There is however still misunderstanding about flooding, and some attempts to reduce flooding by removing obstacles and speeding up flow simply exacerbate flooding downstream. The strategy can be summarised as "Slow it, sink it, spread it."

Re-naturalising and 're-wiggling' rivers to more natural form is a way to slow the flow further down the course of a river as well as having habitat benefits. Low flows also affect rivers in the area, especially the River Teme which has suffered from drying periods with significant impacts on fish and wildlife. They also affect the River Redlake and the Clun. Holding water back for longer high in a catchment also helps to recharge groundwater levels, which then maintain base flows for rivers and reduce the risk of drying.

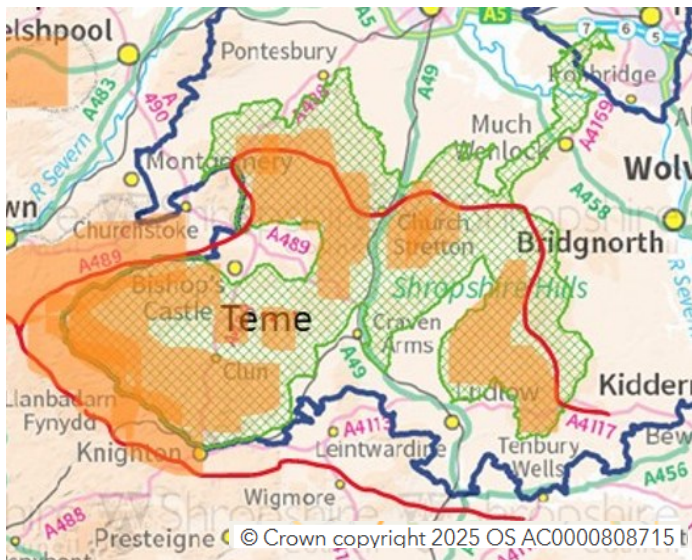


The River Teme drying up in a drought year (Environment Agency)

The interaction with heritage features and assets of action to slow flows needs to be considered e.g. ditches are sometimes of historical significance or protected. Compromise solutions can often be found.

Catchment headwaters

Headwaters are the tributaries feeding a river system, defined as the first 2.5km of streams from their source. Due to the very high number of branching small channels, these can make up 70% of total river length. They are the essential ecological foundation for healthy functioning river systems, a habitat in their own right and the support system for downstream rivers. Hydrologically they are the 'gathering grounds' for river flow and are crucial in controlling water supply (quality and quantity) and flood risk management.



Approximate extent of headwater areas in orange

The degree of naturalness or modification of land at stream sources makes a big difference to the river catchment. In the Shropshire Hills, headwaters are often highly modified - by drainage, simplified vegetation and in some cases culverting. The aim should be to restore natural headwater function and mosaics of in-channel, riparian and wetland habitats. Restoration of natural processes include natural flow, geomorphology and water quality regimes. This requires a large-scale perspective, looking at the land areas at catchment headwaters and not just the stream or riparian area.

Case study - Soil and hydrology surveying in the River Clun headwaters to inform work to re-naturalise hydrology

During 2023-25 detailed eco-hydrology survey work was done on 900ha of land where shallow peat was thought to be present, including farmland, forestry and nature reserves. The survey has made recommendations for enhancing environmental benefits by re-naturalising hydrology in the headwaters. The importance of high-functioning natural processes in headwater areas is key in climate change resilience. These soils, rich in organic matter and in places peaty, are important for water regulation as well as storing carbon and maintaining water quality. Hydrology in the Clun catchment is quite highly modified. Gaining detailed site-specific information about hydrology and habitats is seen as key to informing and encouraging land management centred on restoring natural hydrology.

The aim was to understand the condition and extent of shallow peaty soils and the current hydrology to inform future management, including:

- Peat soil survey (presence, depth, condition & extent)
- Vegetation surveys to understand plant communities and links between peaty soils, vegetation diversity and roughness, and hydrology.
- Eco-hydrology surveys to identify natural and human influences on water movement (surface water flows, ground water and streams)

<https://www.shropshirehills-nl.org.uk/our-work/projects/clun-headwaters>



Looking at shallow peat at Rhos Fiddle SWT nature reserve

Water as a resource

Water is used directly from watercourses and water bodies by farm livestock, through abstraction (pumping from streams and rivers), and treated mains water is used by farms, homes and businesses.

The water 'footprint' of different activities is increasingly understood to be important to consider and seek to minimise.

Rainwater capture and storage systems for farming have potential to reduce pressure on water resources at key times, as well as increasing the resilience of the farm business. Depending on the farm, use can also be made of natural storage with benefits to wildlife.



Solar powered pump for livestock watering funded by a Farming in Protected Landscapes grant

Key link to other Plan themes - Managing land in order to look after water

The land and water systems are integrally linked, and many of the measures to manage water quality and quantity are taken on land.

Water friendly farming techniques for water quality are set out in the [Teme Rivers Water Friendly Farming Guide](#), including livestock managements, ditches, woody debris, run-off and erosion.

Natural Flood Management measures on land include:

- Buffer strips along watercourses
- Peat restoration
- Soil management
- Tree planting, especially contour woodlands/hedges
- Passive floodplain storage
- Formal flood store areas
- Taller and more complex vegetation



New hedge with ditch reprofiled as a swale which will slow the flow over time

Beavers have been proven to have very beneficial effects on naturalising hydrology as well as improving habitats. They are a keystone species and their dams help to store water and slow the flow, with beneficial effects in lowering flood peaks. Species reintroduction needs to be done with great care and appropriate consultation, but the first beavers have arrived in the Shropshire Hills and could have an increased role to play in future.

Summary of statutory requirements and duties - Water

(not exhaustive)

The Water Environment (Water Framework Directive) Regulations 2017 – ecological and chemical status of rivers

Environment Act water targets

Farming rules for water

Nutrient neutrality

Pollution laws in Water Resources Act 1991

Consent regimes for alterations to watercourses



PLAN POLICIES – WATER

(See the explanation of what the Policies are)

18. Water Quality

i) All feasible steps should be taken to improve the condition of the River Clun SAC and the River Teme SSSI.

ii) Land use and land management should avoid adverse impacts on the quality of watercourses, waterbodies, and natural water systems. Water-friendly farming techniques should be encouraged to reduce diffuse pollution and soil loss to rivers.

iii) Development should avoid harm to water quality, including chemical pollution, nutrient pollution and sedimentation, and including through cumulative effects.

iv) Highways management and drainage should seek to minimise movement of sediment into watercourses, by careful management of road verges and use of sediment traps and swales, etc. where appropriate.

v) Sewage and wastewater treatment should be of a high standard to have no adverse impacts on river water quality.

vi) Septic tanks should be maintained to high standards to avoid harm to water quality.

vii) Impacts on water quality and nutrient levels from intensive pheasant rearing and duck shooting should be minimised.

19. Flood attenuation, and managing low flows

i) Natural Flood Management measures should be used to increase water storage, reduce flood risks, maintain aquifers and to help prevent low flows and drying of rivers.

ii) Development should support and enable the natural storage of water through sustainable drainage systems.

iii) Drainage and water management measures should avoid displacing flooding, and should look to water storage solutions where possible rather than speeding up flows.

iv) Natural water storage should be enhanced e.g. through restoration and creation of ponds and other small waterbodies.

20. Water as a resource

i) Harm should be avoided to water resources, by protecting rivers, wetlands and water environment. Regulation should be used where needed to protect water resources and the water environment.

ii) Water resources should be managed to be sustainable and more resilient to pressures from climate change.

iii) On-farm storage of water is encouraged, to help reduce demand on river and stream water supplies.

21. Managing land to look after water

i) Naturalness of watercourses and floodplains should be enhanced and restored, and river and riverbank habitats improved. Artificial in-channel obstructions limiting the natural range of fish should be removed where possible.

ii) Land use and land management in upland areas should support retaining water for longer in catchment headwaters.

iii) Methods should be adopted to avoid as far as possible soil compaction which reduces infiltration and accelerates run-off.

iv) Nature-based solutions should integrate water measures with nature recovery, climate mitigation and adaptation.



Leaky barrier to slow the flow in a small stream

Recommendations – Water

(See the [explanation](#) of what the Recommendations are)

- W 1. Deliver improvements to the condition of the River Clun SAC through activity linked to the Protected Site Strategy pilot.
- W 2. Take necessary steps for all rivers in the National Landscape to reach good ecological and chemical status.
- W 3. Strengthen co-ordination and avoid siloing water issues, by adopting a holistic approach.
- W 4. Focus on headwaters and upper catchments as a key significance of the Shropshire Hills area.
- W 5. Seek opportunities for rewetting, especially of deep peatland, valley mires and high organic matter soils in the headwaters.
- W 6. Support landowners to implement recommended actions from recent Upper Clun surveys to re-naturalise hydrology.
- W 7. Continue and promote Catchment Sensitive Farming scheme providing advice and grants for farmers for works to help improve water quality.
- W 8. Promote working and thinking at catchment and sub-catchment scales as functional units.
- W 9. Support the further reintroduction of beavers in selected and controlled suitable sites.
- W 10. Undertake re-meandering or re-wiggling of rivers at suitable sites to restore more natural form and habitats.
- W 11. Support greater public engagement and understanding about rivers and the water environment, including iconic species such as salmon, otter and water vole, and steps that individuals can take.
- W 12. Promote existing legal public access to rivers, and seek opportunities to extend access, such as through agreements.
- W 13. Encourage safe and sustainable use of water for recreation, including paddling and wild swimming.

Aspirations - Water

(See the [explanation](#) of what the Aspirations are)

- W(a) Establish a major project or area initiative for the Teme headwaters focusing on re-naturalising hydrology of headwater areas.
- W(b) Widespread adoption of water-friendly farming techniques.
- W(c) Undertake further hydrology surveys where appropriate.
- W(d) Use of soil erosion risk mapping to inform land management to avoid siltation in rivers.
- W(e) Raise awareness of human health importance of water quality.
- W(f) Strengthen fish populations.
- W(g) Support citizen science involvement in water and river health.



Extracts from Vision:

People

are healthy and connected to nature –
in vibrant communities and as welcome visitors

- People have sufficient income, housing and services
- All parts of society can enjoy natural beauty

Subsections in this 'People' section of the Plan:

Meeting the **needs of residents** – income, housing, access to services

Access and recreation – walking, cycling, other activities

Health and wellbeing

Equity, Diversity & Inclusion – young people and other underserved communities

Public engagement and communications, interpretation

Education, learning, skills and training

Volunteering and involvement, fund-raising

Key link to other Plan themes - ***Visitor management and environmental sensitivity***

*"Have you ever beheld freedom through these eyes?
These tall hills sitting right beneath the skies
A painful path is gonna teach you how to fly
In the dirt I think I saw a butterfly."*

Nature's Anthem, Still Shadey (Nature Calling arts project)



Meeting the needs of residents – income, housing, access to services

These topics lie beyond the direct scope of National Landscape purposes, but are a vital part of the context of the area, and so to any environmental work. These aspects are represented in the 'social foundation' inner ring of the Doughnut model used as a framework for this Plan. Through our Doughnut data portrait process, the top social challenges in the Shropshire Hills area were identified as housing, social equity, income and work, and access to services.



Though affordable housing is a particular priority, it is recognised that there is also a need for some market housing to meet local needs.

Communities in the Shropshire Hills face considerably higher levels of deprivation than the England average for rural areas, with 67% of the population falling within the five most deprived deciles in the Index of Multiple Deprivation (compared to 28% for rural areas in England).

Other challenges relating to access to services facing rural communities and businesses in the Shropshire Hills include:

- Transport – not necessarily 'connectivity', but cost and availability
- Broadband and mobile phone coverage, though these have improved
- Delivery of health and social services in sparse rural areas

Access and recreation – walking, cycling, other activities

Enjoyment of the landscape in many forms is a key public benefit from the Shropshire Hills and their designation as a National Landscape.

Walking is the most popular activity, enjoyed by a high proportion of visitors.

Many forms of countryside recreation are increasing, and patterns of use continue to change and evolve. New recreational users of the countryside often have a high reliance on poor quality digital mapping and low awareness of access rights and responsibilities, which can exacerbate visitor management issues.

The area has greater potential for cycling touring and both road and off-road cycling. The Shropshire Way is a valuable resource with potential to attract more people for multi-day walking holidays using local accommodation.

Physical pressure from numbers of visitors can be seen at well-used sites such as at the Long Mynd, the Wrekin and some other hills.



Path widening due to heavy use near the Wrekin summit

Health and wellbeing

The health and wellbeing benefits of contact with nature and outdoor exercise are well documented, including physical and mental health. On the other hand, there are increasing levels of obesity, and a widening divide in society between those who are physically active and those who aren't.

At a deeper level of connection, practical volunteering brings along with physical exercise the additional benefits of building sense of purpose and belonging to a place and often also of social connections.

The Shropshire Hills are visited by several million people a year and offer an accessible 'natural health service'. Health sector funding has been accessed in the past for countryside volunteering activities in Shropshire, but this has declined in recent years. The case for this kind of upstream, preventative investment remains strong however.



Equity, Diversity & Inclusion – including young people and other underserved communities

In March 2023 the National Landscape team commissioned a study on improving engagement with underserved groups in the Shropshire Hills. The recommendation themes in the report were:

1. Communicating confidently about diversity and inclusion
2. Maximising the health and wellbeing potential of the landscape
3. Increasing diversity in participation
4. Improving accessibility
5. Developing creative connections to nearby urban areas
6. Strengthening commitment to equity, diversity, and inclusion
7. Aligning strategy and action with national policy and best practice

Engaging with some 'hard to reach' groups in society is usually labour intensive and requires particular techniques such as outreach activities.

The Shropshire Hills Discovery Centre can play an even stronger role in enthusing people about climate action, nature recovery, cultural heritage, sustainable tourism and local regeneration, as a gateway to the Shropshire Hills.



Farm visit in the Shropshire Hills through Generation Green 2, a national project for young people

Case study - Young Rangers

From 2021-2023 the National Landscape team had project funding from our National Lottery and employed a new officer in our team three days per week specifically to run the Young Rangers. South Shropshire Youth Forum were also contracted to run a second group. Each group had an activity roughly every two weeks.



"I have learnt teamwork. I'm more brave and confident than I was. I'm more open and have joined in more activities. I've taken the lead in some of them and I feel myself and I can make new friends."

"Young Rangers has been fantastic for our son who is dyslexic and struggles sometimes at school. He also struggles a bit with social interactions so it's good practice to interact with other young people in a safe and caring environment". [Parent]

An informal consultation session with a Young Rangers group in August 2025 introduced the Doughnut model and asked young people what might be missing from this Plan that was important to them and they could help us understand. The main point they made was the **need to make more opportunities available and accessible for young people to get outdoors and connect with nature**. They recognised the barriers that exist for young people to get outside, but also how valuable this was for their mental health, especially to counteract the addictive patterns of use of online technology.

Case study - outreach work by Shropshire Hills Engagement Ranger

Through the new Engagement Ranger post, the National Landscape team worked in 2024 with new audiences including those with sight loss, Parkinson's disease and refugees. 20 organised events involved a total of 185 attendees. Insights from this were added to through our involvement in a EUROPARC study visit in 2024 on social inclusion in tourism. Lessons learned included:

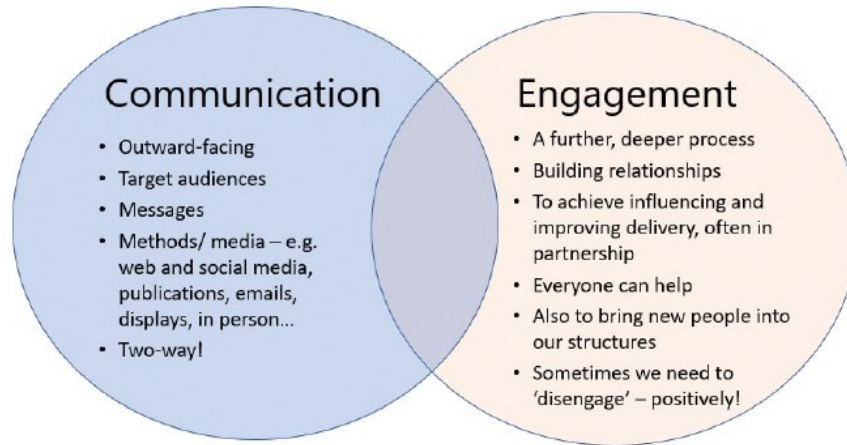
- People face different and sometimes intersecting barriers, including money, knowledge, confidence and social norms.
- A 'pathway' or gradual progression through local visits might be useful for people for whom the barriers are significant.
- Initiatives which help people to connect to greenspace close to where they live are likely to help people to develop confidence and interest, which may encourage them to participate more.
- Outdoor and environmental education programmes for children are a valuable way to give opportunities to underserved groups, including day visits and residentials. These may lead to children encouraging their parents to make trips to the countryside.
- Even relatively low cost opportunities for visits may exclude some people, due to cost, access to a car or outdoor equipment.



Visit to the Stiperstones by a Sight Loss group from Telford

Public engagement and communications, interpretation

Communication and engagement are seen as complementary and overlapping activities – engagement being more ongoing and done more through direct personal contact:



The National Landscape Team has a Communications and Engagement Strategy which is being reviewed in light of this Plan. There is a balance to strike between focusing limited resources on engaging 'high influence' stakeholders for maximum impact, and reaching new audiences in the general public. Both have a place.

Interpretation is used to invite people to explore, appreciate, enjoy and respect the special qualities of the National Landscape. All interventions should be carefully planned to ensure only the most appropriate and accessible approaches are used, for the right audiences, in the right locations and at the right times. Ideally, relevant people should be involved from the outset in communicating the significance of these places and the nature, stories, events, and objects that make them special. Media used may be digital, fixed, visual, audio, tactile, spoken, written, carved, crafted, performed, played, and demonstrated means to most effectively convey what makes the Shropshire Hills a special place.

Education, learning, skills and training

Education and learning can connect with and benefit the National Landscape at all levels. For formal education, the Shropshire Hills is a great resource. There are primary schools within the National Landscape and Secondary Schools in the towns around. There are further and higher education colleges which have courses in a range of relevant subjects. Local universities include Harper Adams, Chester and Birmingham. Cardingmill Valley and the Shropshire Hills Discovery Centre are particularly important venues for school visits and outdoor learning.

Adult learning happens through a wide variety of providers. Practical skills include those for nature conservation, heritage such as traditional buildings, and land management. More could be done on career training and pathways in to working in conservation or the land management sector.



Photo from a Generation Green 2 event in the Shropshire Hills

Volunteering and involvement, including fundraising

Active volunteering brings benefits to the landscape and to people. A number of organisations support practical volunteer activity in the Shropshire Hills, including the National Trust, Shropshire Wildlife Trust and Restoring Shropshire's Verges project. Volunteers are also involved in looking after heritage sites and biological recording. Organisations such as the Middle Marches Community Land Trust provide valuable learning and networking opportunities for voluntary groups through their conferences.



There can be a cross-over of involvement and support to more active donation and fundraising. The Shropshire Hills Landscape Trust is a good vehicle for this as a registered charity, but other organisations also fundraise for activities which contribute to the Management Plan.



There is a need to help communities and businesses within and around the National Landscape identify and celebrate being part of a nationally recognised landscape.

Key link to other Plan themes - Visitor management and environmental sensitivity

In our landscape, some of the most visited sites are hills which are also amongst our most important conservation sites. Physical pressure from numbers of visitors can be seen at well-used sites such as at the Long Mynd, the Wrekin and some other hills. There are also some disturbance impacts to wildlife from people and dogs, and localised adverse impacts from recreational off-road vehicle use. Negative impacts of tourism on natural and cultural resources are not as severe as in some more heavily visited places, but the resources available here to manage these problems are also quite limited.

A set of strategies for managing visitors and encouraging environmental sensitivity which were developed in the post-Covid peaks of visitor numbers have ongoing relevance:

- **Good public information to prevent problems at source**
Using key on-line platforms and sites, alignment of messages, listing of sites and locations
- **Managing popular sites and encouraging dispersal**
Better public information about parking places
- **Encouraging responsible visitor behaviour**
Using lessons from behavioural science – positive messages, connecting with people's motivations
- **Monitoring and understanding visitor use**
Lessons from visitor surveys and further data collection
- **Support for businesses, farmers and communities impacted by visitor pressure**
Co-ordinated messaging, ideally a troubleshooting capacity
- **In the longer term, develop and improve visitor infrastructure**
Walking and cycling routes, small scale parking, sites with facilities.

Summary of statutory requirements and duties - People

(not exhaustive)

Statutory levels of service for local authorities

Housing targets

Public rights of way – guide for farmers and landowners

Rights of Way – Council responsibilities

Rights of Way – responsibilities of users



PLAN POLICIES – PEOPLE

(See the explanation of what the Policies are)

22. Housing

- i) Development of affordable housing to meet local needs should be prioritised to increase the sustainability of communities within the National Landscape.
- ii) Development of affordable housing within the National Landscape should be supported where:
 - development design is of high design quality, and has regard for local and traditional vernacular styles;
 - density of development is sympathetic to existing housing density within the local area; and
 - no significant adverse impacts upon the local community, landscape, nature, heritage, natural beauty, and tranquillity can be demonstrated.

23. Employment

- i) Opportunities for local employment in activities which are sympathetic to the special qualities of the National Landscape should be supported and encouraged. Creation of jobs in activities which are harmful to the special qualities and other key characteristics of the National Landscape should not be used to justify harmful developments.

24. Services

- i) Priority should be given to maintaining and enhancing local community services and amenities and improving access to these.
- ii) Rural services should be delivered in sustainable ways, make the most of health and wellbeing opportunities from the landscape,

and as far as possible support the purpose of designation and the priorities of the Plan.

25. Access and recreation

i) The access network (including public footpaths, bridleways and roads, and open access areas) should be valued, protected and maintained as the bedrock of recreation, economic value and nature connection.

ii) Responsible access and sustainable recreation activities should be promoted, with a focus on quiet enjoyment and a strong ethic of care for visitors and providers. All recreation facilities, activities and events should be planned and promoted to ensure no significant impacts upon the local community, landscape, nature, heritage, natural beauty, and tranquillity.

iii) Recreational use of motor vehicles off sealed surface roads should not be encouraged or promoted within the National Landscape. Voluntary measures and pro-active work with users should be used where possible to minimise the impact of legal off-road use of motor vehicles on the landscape and on other people's quiet enjoyment of the countryside. Where local impacts are significant however, measures including traffic regulation orders restricting legal use should be employed. Illegal motorised activities should as far as possible be prevented.

26. Health and wellbeing

i) Opportunities should be maximised for improving people's health and wellbeing from outdoor exercise and relaxation, and from contact with nature and the landscape.

27. Inclusion and new audiences

i) The Shropshire Hills should strive to be a more inclusive and welcoming destination, reaching new audiences. Priority should be

given to inclusivity, equity and diversity and to improving provision for under-served groups and those with special needs.

ii) Access for as wide a range of people as possible should be encouraged, through easing physical access barriers where possible, with reasonable adjustments provided where environmental factors may limit access.

28. Promotion and public engagement

i) Promotion of the Shropshire Hills to visitors should be linked to the special qualities of the National Landscape and should encourage sustainable tourism practices and behaviours, including sustainable and active transport and travel.

ii) Interpretation and a variety of communication and engagement tools should be used to help enhance people's enjoyment, raise understanding of special qualities of the area, and to encourage people to help and participate.

29. Volunteering

i) Active participation in care for the landscape through volunteering and community groups should be encouraged.

30. Visitor management

i) Publicity and other management measures should, through promotion of a wide variety of visitor locations, seek to disperse visitors and spread visits across the area, to reduce pressures at heavily used locations and to spread economic benefits.

31. Education and skills

i) Opportunities should be maximised for outdoor and environmental education, and for skills development linked to caring for the landscape.

Recommendations – People

(See the [explanation](#) of what the Recommendations are)

- P 1. Foster mutual understanding among different stakeholders to help build consensus around management of the Shropshire Hills National Landscape.
- P 2. Use the Shropshire Hills Discovery Centre, along with other visitor centres and higher profile staffed visitor sites as gateways to the Shropshire Hills.
- P 3. Promote visitor information services and support visitor facing staff, businesses, and volunteers to be ambassadors for the area.
- P 4. Continue good levels of maintenance of public and recreation facilities on sites which are part of the public forest estate.
- P 5. Manage promoted walking routes to a high standard.
- P 6. Continue the successful Shropshire Hills visitor map.
- P 7. Continue and develop the Shropshire Hills Shuttle service.
- P 8. Continue to support volunteers to undertake path maintenance work through the Parish Paths Network.
- P 9. Continue and expand active engagement and outreach to expand opportunities for underserved groups and to help address health and wellbeing inequalities and barriers.
- P 10. Make more use of social prescribing to spread the benefits that the National Landscape provides for the health and wellbeing of residents and visitors.
- P 11. Support countryside site providers to manage pressurised sites through on the ground repairs, information and influencing patterns of use and behaviour.
- P 12. Co-ordinate and maintain high-quality visitor information, including on available parking and facilities highlighting opportunities to suit all abilities and tastes, including on-line, social media, print and interpretation.
- P 13. Continue to develop a network of providers of countryside sites to share ideas and best practice.
- P 14. Expand the range of visitor sites which are accessible to a people with a wider range of abilities.
- P 15. Increase provision and opportunities for children and young people resident in the area and nearby, to experience the Shropshire Hills and have increased contact with nature.
- P 16. Implement projects to encourage walking and cycling as identified in the Shropshire Great Outdoors Development Plan.
- P 17. Continue a varied programme of events for the public through various organisations and community groups.
- P 18. Maintain funding and investment for maintenance of rights of way, including capital programmes for larger items such as bridges.
- P 19. Raise awareness of the links between sustainable management of the landscape and people's health through food, exercise, nature and relaxation.
- P 20. Continue to maintain and promote the Offa's Dyke Path National Trail.
- P 21. Strengthen training opportunities and pathways to employment linked to caring for the landscape.
- P 22. Support continuation and expansion of care farming and social forestry opportunities.
- P 23. Support and promote opportunities for environmentally friendly activities e.g. horse riding, adventure sports.
- P 24. Strengthen and expand mechanisms for visitors and local people to donate to support conservation work.
- P 25. Improve virtual access and use of digital platforms to reinforce nature connection.
- P 26. Continue to monitor visitor use and trends, and attitudes.