

Berkshire Nature Recovery

Making Space for Nature

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Royal Borough of Windsor & Maidenhead

List of Priorities and Potential Measures for Public Consultation

A list of Priorities and Potential Measures is a key aspect of an LNRS, comprising Step 4 of the strategy (see Figure 1). The List of Priorities and Potential Measures is one of four LNRS elements; three written documents and a map tool. Together, the other two documents describe Berkshire and list its opportunities, and list important Berkshire species and specific measures for them. The interactive map tool displays the mapped locations of strategic significance for delivering potential measures. These work together and should be read and used in conjunction with each other.

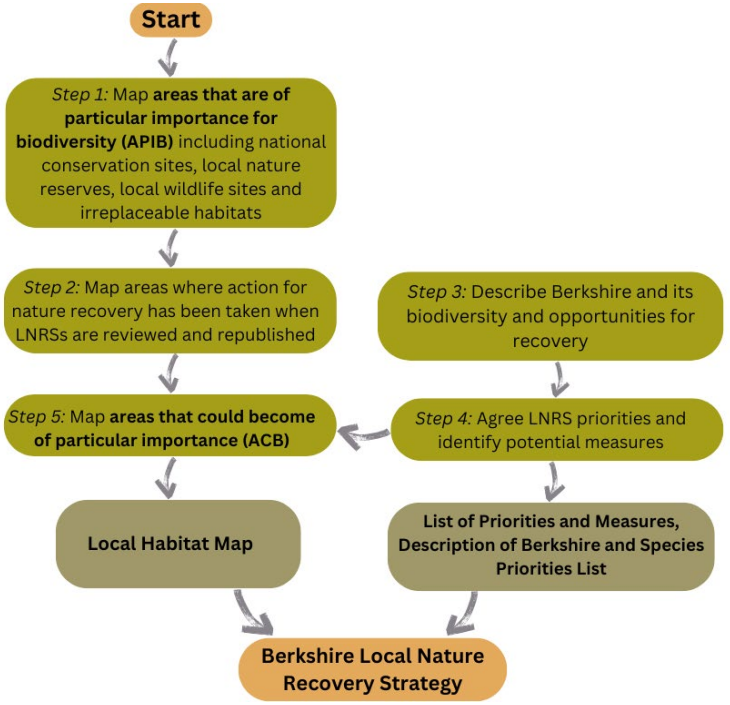


Figure 1: Flow diagram of stages of a Local Nature Recovery Strategy. Source: Defra

Priorities are "*the end results that the strategy is seeking to achieve*" (LNRS statutory guidance, paragraph 51). Potential measures are "*specific practical actions to achieve priorities*" (LNRS statutory guidance, paragraph 51). These are the suggested activities that, if done properly, would help to deliver the agreed priorities. (Department for Environment, Food and Rural Affairs, 2023)

The List of Priorities and Potential Measures below are split into seven main habitat groupings. These are defined in the contents page. Every measure has a unique code, these are shown in the third column in the tables. For example, 'PM01' is the first measure. This list includes all measures: 25 of these are measures mapped onto the Local Habitat Map, and 61 unmapped measures. Those which are mapped contain a layer name, e.g. PM01 has the name **'Create and Enhance Hedgerows'** which corresponds to its layer on the Local Habitat Map. To see where those measures have been suggested to take place across Berkshire, **check the Local Habitat Map.** The 58 unmapped measures, beginning at PM50, can take place anywhere across the county, not just in the Opportunities for Biodiversity layer.

Disclaimer: The hyperlinks used in this document are working at the point of publication, but it cannot be ensured that links remain valid and or/point to safe websites.

Quick links to habitat groupings

1. Agricultural Land and Wider Countryside Habitats
2. Wooded Habitats
3. Chalk Habitats
4. Urban Habitats
5. Rivers and Wetland Habitats
6. Heath Habitats
7. General Measures

Agricultural land and wider countryside Habitat Grouping

Agricultural land makes up a large proportion of Berkshire, and if managed correctly, can be fantastic habitat for mammals, birds, invertebrates and plants. Across all countryside areas, various changes in land management and agriculture have had an adverse impact on wildlife. The intensification of farming, encouraged by policies to increase domestic food production after the Second World War, the introduction of pesticides, artificial fertilizers and mechanisation, and the scarcity of agricultural labour in a prosperous part of the country has seen the removal of hedgerows, ponds and traditional orchards and farmsteads, and the decline of pastoral and mixed farming. These in turn have resulted in considerable reduction in plant variety and invertebrate numbers, with consequential effects up the food chain. However, there are many actions that are and can be taken to restore nature back to agricultural land and the countryside.

Agricultural land and the wider countryside Habitat Grouping *Note that this habitat grouping includes field margins, hedgerows, grassland and traditional orchards. Scrub, veteran trees and ponds are found in this habitat grouping, however their measures are covered in other habitat groupings.*		
Priority **In bold is the Priority: the end results to achieve.** Underneath is detail on wider benefits which could be delivered by each priority.	**Potential Measure Description** The Potential Measures are specific practical actions to achieve the priorities. Underneath in italics is detail on further information and habitat management guidance.	**Measure Code and name of layer on map if mapped**
PRIORITY 1: Improve the quality of habitats in agricultural land and the wider countryside	Take appropriate conservation measures on field margins (e.g. sow appropriate native wildflowers, create beetle banks, leave margins uncultivated, stop spraying herbicides, pesticides, and fertiliser near field margins). *More information on sown and created areas* *More information on arable margins* *More information on general insect rich farmland habitats*	PM50
	Enhance hedgerows to species rich. Create hedgerows where evidence shows previous hedgerow lines, particularly to reconnect relic trees. Extend hedgerows to connect fragmented woodlands, except in traditional open country landscapes. *PTES guidance on hedgerow management* *Further management information: Buglife, Farm Wildlife and NFFN*	PM01 **'Create and Enhance Hedgerows'**
	Enhance the Drove Road corridors on the Downs for wildlife.	PM02 **'Enhance Drove Road Corridors'**
	Reduce or avoid the use of inorganic fertilizers.	PM51

PRIORITY 1 (continued) **Wider environmental benefits** Air purification (cleaner air for nature) Carbon storage and sequestration Erosion protection Flood management Noise regulation Pollination **Non-environmental co-benefits:** Aesthetic value Mental health and wellbeing Recreation and leisure Sense of place	*More information on organic farming in Berkshire*	
	Improve diversity/quality of pasture sward by replacing monoculture planting with mixed grass seed using traditional native species and wildflower mixes. Encourage diversity across entire, contiguous parcel of habitat type, aiming for >45 species.* **>45 species per field unit.* *Plantlife guidance on managing meadows* *Information on managing equine land for nature* *Countryside Stewardship funding opportunities: SW7: Arable reversion to grassland with low fertiliser input*	PM03 **'Restore Grassland'**
	Work with farmers, farmer clusters, catchment sensitive farming, landowners and other stakeholders to deliver on site nature improvements or introduce regenerative farming techniques. *Information on the Nature Friendly Farming Network*	PM52
	Introduce and maintain target plant species that support LNRS short list species.	PM53
	Increase native trees outside woodlands (e.g. agroforestry) to increase crop/ livestock resilience to climate change, diversify incomes, and increase connectivity. Must be sensitive to landscape character and be the right tree in the right place. The use of small amounts of non-native species may be appropriate to improve resilience. *The Soil Association Agroforestry Handbook* *Tree Species Guide of UK Agroforestry Systems* Countryside Stewardship funding opportunities: *PA4; AF1; AF2; AGFI; AGF2, CAGF1; CAGF2; CAGF3*	PM54
	Create new traditionally managed orchards and community orchards. *PTES Orchard practical guides*	PM04 **'Create Traditional Orchards'**
	Conserve existing veteran orchards and create a succession of habitat by gradually planting new fruit trees. *PTES Orchard practical guides*	PM05 **'Restore Traditional Orchards'**
	Restore natural processes through the introduction of large herbivores to create open scrub habitat. *Rewilding Britain guide to grazing and browsing*	PM55
	Reduce pesticide use.	PM56

PRIORITY 1 (continued)	*Information on organic farming*	
	Convert arable land and species poor amenity areas to wildflower-rich grassland. *Buglife information on wildflower-rich grassland creation* *Buglife: How to create a Bee Bank*	PM06 **'Create Wildflower Grassland'**
	Create and maintain pockets of diverse scrub on grasslands as suitable. Prevent invasive scrub on existing species rich wildflower areas. *Natural England Scrub Management Handbook*	PM57

Relevant national Environment Objectives supported by Priorities of Agricultural and Wider Countryside Habitats:
Biodiversity on land - Restore or create in excess of 500,000 hectares of a range of wildlife-rich habitat outside protected sites by 2042, compared to 2022 levels
Biodiversity on land – Halt the decline of species abundance by 2030. Ensure that species abundance in 2042 is greater than in 2022, and at least 10% greater than 2030
Biodiversity on land - reduce the risk of species' extinction by 2042, when compared to the risk of species' extinction in 2022

Relevant Commitments from the Environment Improvement Plan supported by Priorities of Agricultural and Wider Countryside Habitats:
Reduce emissions of nitrogen oxides by 73% and ammonia by 16% by 2030 relative to 2005 levels.
Protect 30% of land and of sea in the UK for nature's recovery by 2030

Wooded Habitats Grouping

Ancient woodland is prominent in the county (29.7% of the woodlands). Berkshire hosts the third largest inventory of wood pasture and parkland in England. Woodland cover across the county varies between local authority areas. Bracknell Forest, which includes much of the Crown Estate's Windsor Forest area, is the second-most densely wooded local authority area in England, with 33.2% of its area, but the urban authorities of Reading and Slough have only 5.02% and 3.86% respectively (The National Archives, 2024). Much of the woodland in the east and south of Berkshire comprises commercial coniferous forestry, on acid soils and land that would traditionally have been heathland. Well-managed rotational forestry can create transient suitable habitat for some of these heathland specialists, and for scarcer woodland species. Woodland can also be found on some of the steeper slopes of the chalk downs, where beech and juniper occur, and in river valleys, where traditionally alder, willow and ash predominated. Many traditional woodlands in the county have deteriorated from a wildlife perspective. This is largely due to a decline in traditional management, as woodlands ceased to be a resource for firewood and materials for building, tool- and furniture-making. Local deer populations have expanded to unsustainable levels and are negatively impacting woodlands, having browsed away the ground cover layer and any natural regeneration.

Example important species: Woodcock

Wooded Habitats Grouping *Note that the woodland habitat grouping includes ancient woodlands, plantations on ancient woodland sites, native broad-leaved woodland, wood pasture, wet woodland, veteran trees and deadwood.*		
Priority **In bold is the Priority: the end results to achieve.** Underneath is detail on wider benefits which could be delivered by each priority.	**Potential Measure Description** The Potential Measures are specific practical actions to achieve the priorities. Underneath in italics is detail on further information and habitat management guidance.	**Measure Code and name of layer on map if mapped**
PRIORITY 2: Improve the quality of woodland	Remove non-native invasive species from woodlands (excluding introduced taxon of ancient origin with wildlife value). *Countryside Stewardship funding on species recovery and management* *GB Non-native species website* *The Code of Good Shooting Practice* *Forest Research publication on invasive rhododendron*	PM58
	Provide a broad mix of decomposing wood habitats and encourage more deadwood, including through veteranisation of mature trees and the management of veteran trees for longevity. *The Conservation Volunteers information: What is deadwood* *Forestry Commission information on managing deadwood*	PM59

PRIORITY 2 (continued) **Wider environmental benefits:** Air purification (cleaner air for nature) Carbon storage and sequestration Cooling and shading Erosion protection Flood management Noise regulation Pollination Water quality regulation **Non-environmental co-benefits:** Aesthetic value Mental health and wellbeing Recreation and leisure Sense of place	Allow natural regeneration of native tree species in existing woodlands and surrounding areas. *Forest Research on Natural Regeneration* *Woodland Trust on Natural Regeneration*	PM60
	Manage woodland through coppicing to restore where historically practiced, benefit associated species, or increase structural diversity. *Forestry Commission introduction to coppicing* *The Wildlife Trusts on managing woodland for wildlife* *Coppicing in a nutshell* *Examples of local Berkshire coppicing*	PM61
	Open up rides and glades in existing woodland to develop ecotones and scrubby areas that develop a graduated edge to better support a wider range of wildlife. *The Wildlife Trusts on managing woodland for wildlife* *Forestry Commission videos on: designing a new woodland; wildlife benefits of ride management; and benefits of managing woodland with rides*	PM62
	Introduce grazing animals, accounting for existing wild grazing pressure, on a controlled basis in larger woodlands to create a more dynamic ecology and structural diversity. *Forestry Commission information* *Rewilding Britain guide to grazing and browsing*	PM63
	Transform even-aged stands to a form of irregular or multi-structured continuous cover woodland. *Forest Research on thinning operations* and on *diversifying structure*	PM64
	Ensure sustainable gamebird releasing guidelines are followed to avoid overstocking and encourage management to improve overall woodland quality. *Game and Wildlife Conservation Trust guidance on releasing for shooting in lowland habitats*	PM65
	Undertake landscape-scale control measures to reduce deer and/or grey squirrel grazing in woodlands, to reduce their negative impact on woodland ecology from overgrazing. Access support, e.g. via Forestry Commission grants for capital installations to support culling. *The Code of Good Shooting Practice* *Countryside Stewardship funding information on species recovery and management* *Deer: Forestry Commission deer guidance, British deer society guidance, The deer initiative guidance, A deer management case study* *Grey Squirrel: Forest Research on controlling grey squirrels, Forest Research on managing grey squirrels, British Red Squirrel group on grey management, UK Squirrel Accord management information*	PM66

PRIORITY 2 (continued)	Transition management of productive woodlands to include mixed species crops where feasible. *Forest Research on creating mixed species stands*	PM67
	Transition management of productive woodlands to continuous cover silviculture where feasible and where it will benefit a site's wildlife. *Woodland Management Techniques* *Forestry Commission information: CCF*, *Forestry Commission guidance: CCF*	PM68
	When planting, use trees that are adapted for UK futures climates and are resistant to disease. *Forestry Commission on Managing England's woodlands in a climate emergency* *Forest Research on choosing tree provenance*, *Forest Research on Climate change and provenance*	PM69
	Include fire and fuel breaks and/or fire belts in woodland to reduce the risk of wildfires, and ensure woodlands are resilient to climate change in the future. *Forest Research on building wildfire resilience into forest management planning*	PM70
	Ensure existing woodlands are managed to improve the condition of the woodland for biodiversity, targeting at least 3 appropriate measures from PM58 – PM72, and are supported by an appropriate management plan. *Government information: Create a woodland management plan* *Countryside Stewardship funding information- PA3: Woodland management plan* *Self-assess your woodland*	PM07 **'Manage Woodlands'**
	Increase the number of species indicative of long-standing woodland to the level of or above the local wildlife site average for Berkshire, according to parcel size.	PM71
	Establish a woodland edge transition zone from other habitats of a 30m minimum, or the height of the trees, whichever is greater.	PM72
	Ensure sustainable gamebird releasing guidelines are followed to avoid overstocking and encourage management to improve overall woodland quality. *Game and Wildlife Conservation Trust – Sustainable gamebird releasing advice* *The Code of Good Shooting Practice*	PM73
	Only fell trees affected by ash dieback when there is a material safety risk, a clear future safety risk, or as part of normal silvicultural operations. *Government guidance on managing ash dieback in England*	PM74

PRIORITY 3: Improve the quality and connectivity of wood pasture and parkland **Wider environmental benefits and non environmetnal co-benefits:** Same as PRIORITY 2	Restore sustainable grazing to wood pasture and parkland. *PTES: What is Wood Pasture and Parkland?* *PTES: UK Wood Pasture & Parkland Network* *National Trust toolkit on creation of Wood Pasture Systems*	PM75
	Undertake management activities to veteranise individual trees outside woodland, in accordance with best practice. *Veteranisation handbook* and *Wildlife Trust information on Veteranisation*	PM08 **'Veteranise Trees'**
	Improve connectivity and improve condition for saproxylic species, for example creating more standing deadwood, retaining trees into veteran status. Fence areas from public access. *Buglife on Wood Pasture* *Woodland Trust assessment guide to ancient and veteran trees* *Natural England guide to good veteran tree management* *Ancient tree care and management*	PM76
PRIORITY 4: Restore, buffer and connect ancient woodland in Berkshire to protect from external pressures and fragmentation **Wider environmental benefits and non env co-benefits:** Same as PRIORITY 2	Create native woodland to provide connectivity to ancient woodlands, through natural regeneration or planting. *Woodland Trust on restoring ancient woodland*, *Woodland Trust woodland creation guide* *Woodland Creation Campaign* *Woodland Creation Planting Grant*	PM09 **'Buffer Ancient Woodland'**
	Manage plantation on ancient woodland sites by gradually transitioning towards native species and building on important relict features. *Woodland Trust on restoring ancient woodland* *Woodland Trust: Guide to conservation and restoration of plantations on ancient woodland sites* *Forest Research: Practical guide* *Forest Research: Choosing stand management methods* *Countryside Stewardship funding: WS2: Plantations on Ancient Woodland Sites (PAWS) - restoration and maintenance*	PM10 **'Restore Ancient Woodland'**

PRIORITY 5: Increase the extent and connectivity of wet woodland to increase patch size and connectivity **Wider environmental and non-environmental co-benefits:** Same as PRIORITY 2	Remove drainage in woodlands suitable for wet woodland creation or to restore historically wet woodland. *Woodland Trust management guidance for woody dams*	PM77
	Create wet woodland through planting or natural colonisation on low sensitivity sites in proximity to existing wet woodland. If wet woodland isn't appropriate for site (e.g. topography, soil type), create woodland. *Management guidance: Forest Research, Woodland Trust, Buglife, and Catchment Based Approach* *Guide to sensitivity maps for woodland creation* *Information on beavers*	PM11 **'Create Wet Woodland'**

Relevant National Environment Objectives supported by Priorities of Wooded Habitats:
Woodland cover - Increase total tree and woodland cover from 14.5% of land area now to 16.5% by 2050
Biodiversity on land - Restore or create in excess of 500,000 hectares of a range of wildlife-rich habitat outside protected sites by 2042, compared to 2022 levels
Biodiversity on land - reduce the risk of species' extinction by 2042, when compared to the risk of species' extinction in 2022
Biodiversity on land – Halt the decline of species abundance by 2030. Ensure species abundance in 2042 is greater than in 2022, and at least 10% greater than 2030

Relevant Commitments from the Environment Improvement Plan supported by Priorities of Wooded Habitats:
Manage our woodlands for biodiversity, climate and sustainable forestry
Protect 30% of land and of sea in the UK for nature's recovery by 2030
Work to ensure that everyone in England lives within 15 minutes' walk of a green or blue space
Ensure delivery & management of actions & policies that contribute towards our 25 YEP goals are suitable & adaptive to a changing climate
Reduce emissions of nitrogen oxides

Chalk Habitats Grouping

Much of the north and west of Berkshire, and part of the south-west corner of the county comprise chalk downland. Chalk is a porous rock, through which water permeates, and is characterised by lack of surface water, thin soils and rolling hills. As the soils were easy to work by early agriculturalists, it was the site of some of the earliest human settlement. As agricultural technology advanced, and cultivation of lower, wetter areas became possible, the downs became areas of open sheep grazing land.

Much area is currently dominated by arable cultivation, following the ploughing of the land for food production in two World Wars, and the advances in artificial fertilizers and mechanical farming that brought them into largely arable production in the 20th century. There are still various other land uses and landscape features that add to its value for wildlife. Substantial areas of permanent grassland are associated with the horseracing industry, notably areas of "dead land" around and between horse gallops, some chalk grassland still remaining on slopes too steep for cultivation, and the corridors created by the Ridgeway and other old drove roads, with wide uncultivated margins including thorn scrub providing additional wildlife habitats.

Chalk Habitats Grouping *Note that the chalk habitat grouping includes chalk downland and chalk pits.*		
Priority **In bold is the Priority: the end results to achieve.** Underneath is detail on wider benefits which could be delivered by each priority.	**Potential Measure Description** The Potential Measures are specific practical actions to achieve the priorities. Underneath in italics is detail on further information and habitat management guidance.	**Measure Code and name of layer on map if mapped**
PRIORITY 6: Improve the quality of chalk habitats	Restore abandoned quarries or disturbed land to calcareous grassland.	PM78
	Implement wildlife-friendly management of dead land around racehorse gallops. Implement late mowing to protect ground-nesting birds and a diversity of plant species.	PM79
	Maintain and improve existing calcareous grassland using best practise guidance e.g. cutting, collecting, and/or grazing. Ensure appropriate conservation grazing implemented at landscape scale. *Farm Wildlife management guidance*	PM12 **'Manage existing Calcareous Grassland'**

PRIORITY 6 (continued) **Wider environmental benefits:** Air purification (cleaner air for nature) Carbon storage and sequestration Erosion protection Flood management Pollination Water quality regulation **Non-environmental co-benefits:** Aesthetic value Mental health and wellbeing Recreation and leisure Sense of place	Restore degraded grassland on calcareous soils, for example after agricultural improvement or abandonment of grazing, in particular to encourage calcareous grassland specialist species.	PM13 **'Restore Calcareous Grassland'**
	Create calcareous grassland from arable land, following national management guidance, particularly on slopes and in situations that buffer or enhance connectivity between existing areas of calcareous grassland. *Government information: create and restore species rich grassland*	PM14 **'Create Calcareous Grassland'**

Relevant National Environment Objectives supported by Priorities of Chalk habitats:
Biodiversity on land - Restore or create in excess of 500,000 hectares of a range of wildlife-rich habitat outside protected sites by 2042, compared to 2022 levels
Biodiversity on land – Halt the decline of species abundance by 2030. Ensure that species abundance in 2042 is greater than in 2022, and at least 10% greater than 2030
Biodiversity on land - reduce the risk of species' extinction by 2042, when compared to the risk of species' extinction in 2022
Woodland cover - Increase total tree and woodland cover from 14.5% of land area now to 16.5% by 2050

Relevant Commitments from the Environment Improvement Plan supported by Priorities of Chalk habitats:
Work to ensure that everyone in England lives within 15 minutes' walk of a green or blue space
Restore approximately 280,000 hectares of peatland in England by 2050
Protect 30% of land and of sea in the UK for nature's recovery by 2030
Ensure delivery & management of actions & policies that contribute towards our 25YEP goals are suitable & adaptive to a changing climate
Reduce emissions of nitrogen oxides by 73% and ammonia by 16% by 2030 relative to 2005 levels
Reducing the rates of introduction and establishment of invasive nonnative species by at least 50%, by 2030

Urban Habitats Grouping

Berkshire's urban areas are defined by a mix of historic market towns and larger, rapidly expanding conurbations. Reading, the county town, serves as a major commercial and transport hub, while Slough, in the east, is a significant industrial centre. Other key urban towns include Newbury, Bracknell, Maidenhead, and Wokingham.

Within Berkshire's urban matrix, key habitats include allotments, churchyards, and brownfield sites. Allotments, with their cultivated plots, and diverse plant life, can support a rich variety of invertebrates and provide foraging areas for birds and small mammals. Churchyards, often undisturbed for long periods, can harbour ancient trees, patches of wildflower-rich grassland, and areas of bare earth, creating valuable habitat for specialist species. Brownfield sites, often former industrial land, can be surprisingly biodiverse, supporting a range of plants adapted to nutrient-poor and disturbed soils, which in turn provide resources for insects and other wildlife. The connectivity between these fragmented habitats is crucial and is often facilitated by green corridors such as hedgerows, railway embankments, canals, and even tree-lined streets. However, the urban environment also presents challenges, including pollution (air, water, and noise), habitat fragmentation, and the introduction of non-native species.

Example important species: Swifts, Swallow

Urban Habitats Grouping *Note this habitat grouping includes urban trees, public open spaces, open mosaic habitats/brownfield sites, private green-spaces and graveyards.*		
Priority **In bold is the Priority: the end results to achieve.** Underneath is detail on wider benefits which could be delivered by each priority.	**Potential Measure Description** The Potential Measures are 'specific practical actions to achieve the priorities'. Underneath in italics is detail on further information and habitat management guidance.	**Measure Code and name of layer on map if mapped**
PRIORITY 7: Improve the quality of urban habitats **Wider environmental benefits:** Air purification Carbon sequestration Cooling and shading	Encourage, support, and participate in local wildlife recording/citizen science schemes (Local Authorities, Parish Councils, community groups). *Send your Berkshire records to TVERC*	PM80
	Manage public open spaces and trees within them in a wildlife friendly way. Adapt mowing regimes to improve biodiversity in grass areas including roadside verges. The use of pesticides and artificial fertilisers should be reduced. *Plantlife on managing road verges and green spaces*	PM81

PRIORITY 7 (continued) Erosion protection Flood management Noise regulation Pollination Water quality regulation **Non-environmental co-benefits:** Aesthetic value Education and training Mental health and wellbeing Recreation and leisure	Surface water conveyance provided at surface and flow attenuation designed for biodiversity benefits. Restore undergrounded (piped) surface water conveyance to above ground flow. Incorporate Sustainable Drainage Systems (SuDS). Remove culverts where possible. *Susdrain information: Biodiversity benefits, Guidance*	PM82
	Create integrated bat boxes and bird boxes including nest bricks. Create ecological permeability in gardens, new developments, road verges and railways - for key species such as hedgehogs. *See specific guidance for hedgehogs, swifts, house martins, bats, grass snakes and barn owls* *Buglife: How to create a Bee Bank*	PM83
PRIORITY 8: Increase canopy cover and habitat connectivity in urban areas **Wider environmental and non-environmental co-benefits:** Same as PRIORITY 7	Plant native tree species that have the potential to grow to a very large size (as defined by the statutory metric user guide) in locations where long-term retention until they reach that size is viable. The use of small amounts of non-native species may be appropriate to improve resilience. *Forest Research: Urban Tree Manual* *Trees and Design Action Group*	PM84
	Plant new (native) street trees, prioritising areas that will connect existing greenspaces. The use of small amounts of non-native species may be appropriate to improve resilience. *Forest Research: Urban Tree Manual* *Trees and Design Action Group*	PM85
	Plant new trees in existing greenspaces, prioritising areas with low UK ward canopy over and low tree equity scoring. *Forest Research: Urban Tree Manual* *Trees and Design Action Group*	PM86

Relevant National Environmental Objectives supported by Priorities of Urban Habitats:
Biodiversity on land - Restore or create in excess of 500,000 hectares of a range of wildlife-rich habitat outside protected sites by 2042, compared to 2022 levels
Biodiversity on land – Halt the decline of species abundance by 2030. Ensure that species abundance in 2042 is greater than in 2022, and at least 10% greater than 2030
Biodiversity on land - reduce the risk of species' extinction by 2042, when compared to the risk of species' extinction in 2022

Relevant Commitments to Environment Improvement Plan supported by Priorities of Urban Habitats:
Work to ensure that everyone in England lives within 15 minutes' walk of a green or blue space
Restore 75% of our water bodies to good ecological status
Ensure delivery & management of actions & policies that contribute towards our 25YEP goals are suitable & adaptive to a changing climate
Support farmers to create or restore 30,000 miles of hedgerows by 2037 and 45,000 miles of hedgerows by 2050
Reduce emissions of nitrogen oxides by 73% and ammonia by 16% by 2030 relative to 2005 levels

Rivers and wetland habitats Grouping

Berkshire is crossed by rivers and streams of the Thames and its tributaries, and their valleys and floodplains. While these might once have been a substantial area of seasonal wetland, centuries of works to control flooding, improve navigation, drain land and (more recently) the decline in pastoral farming has seen much of this land converted to arable land that is only wet in exceptional flood conditions. These changes have seen the elimination or reduction of much of the traditional fauna and flora associated with marsh, fen, reedbeds and water margins. The watercourses include chalk streams draining the downs in the west of the county, previously renowned for the purity of the water filtered through the underlaying chalk, but whose quality has been impaired by agricultural run-off and sewage discharges.

In the 20th century the extraction of construction minerals (particularly gravel) and the flooding of the pits after extraction has created new wetlands and waterbodies. These have provided a refuge for some of the species that otherwise were disappearing and a new habitat for a number of species that previously seldom or never occurred in the county. The waterbodies also provided wintering sites for a substantial number of waterbirds. All open waters, both lakes and rivers, are impacted by recreational pressure, particularly near urban areas. The historic modification of river channels over time for land drainage, flood defence, milling, recreation and amenity has not only adversely affected the floodplains and wetlands which they supported, but severely compromised the ecological condition of the rivers themselves, resulting in less diverse and dynamic river habitat and the construction of numerous barriers to fish passage. Improving connectivity along the length of the rivers, as well as with the surrounding floodplain, will allow natural processes to return. There are great opportunities to create connected networks of new or restored wetland in our river valleys of Berkshire, for the benefit of wildlife.

Example important species: Brook lamprey, Bullhead, Barbell, Grayling

Rivers and Wetland habitats Grouping *Note that this habitat grouping includes lowland meadow, floodplain grazing marsh, mesotrophic / eutrophic / oligotrophic standing water, fens, wetland, gravel pits, rivers, reedbeds and swamps, wet meadows, canals and chalk rivers. Wet woodland is included in the 'Wood habitats' grouping.*		
Priority **In bold is the Priority: the end results to achieve.** Underneath is detail on wider benefits which could be delivered by each priority.	**Potential Measure Description** The Potential Measures are specific practical actions to achieve the priorities. Underneath in italics is detail on further information and habitat management guidance.	**Measure Code and name of layer on map if mapped**
PRIORITY 9: Increase the extent and improve the	Restore degraded floodplain meadows through management (hay cutting with aftermath grazing, unwanted plant control, hydrological regime restoration). If appropriate, reintroduce native species through green hay, reseeding, or brush harvesting.	PM87

quality of wetlands and floodplain **Wider environmental benefits:** Air purification (cleaner air for nature) Carbon storage and sequestration Cooling and shading Erosion protection Flood management Pollination Water quality regulation Buffer chalk streams against drought **Non-environmental co-benefits:** Aesthetic value Mental health and wellbeing Recreation and leisure Sense of place	Clear willow scrub invasion where impacting habitats of significance, except where facilitating wet woodland creation.	PM88
	Create 25m uncultivated margins alongside watercourses and other water bodies, which provide a barrier preventing nutrient and chemical pollution of water (eutrophication). *Countryside Stewardship Funding: SW8: Manage intensive grassland adjacent to a watercourse*	PM15 **'Buffer Watercourses'**
	Change land use from arable land or intensively grazed pasture within the floodplain, creating species rich floodplain meadows, fens and other wetlands where onsite conditions allow, or alternatively low intensity permanent pasture. *Countryside Stewardship Funding: SW15: Flood mitigation on arable reversion to grassland*	PM16 **'Convert Arable to Floodplain Meadow'**
	Improve artificial or artificially modified river and lake shorelines for wildlife by (as appropriate); regrading banks to provide muddy to gravel shores, planting new reedbeds in margins, planting/implementing management plans for surrounding vegetation and establishing/maintaining suitable habitats for lake shoreline fauna.	PM89
	Improve (and manage to maintain a good quality of) existing reedbeds to create a varied vegetation structure that supports reedbed species.	PM90
	Restore gravel and mineral workings for new waterbodies for nature reserves to enhance the network of waterbodies in river valleys.	PM91
	Introduce appropriate fen management where not already in place and conditions allow.	PM17 **'Restore Fens'**
	Maintain nightingale habitat within/around the water body complexes with local authorities accounting for the species when determining local planning decisions (e.g. of Lower Kennet Valley).	PM92
	Create and restore networks of clean water ponds, focusing on land uses and habitats which generate clean water (e.g. unimproved grassland, woodland, heathland). *Further advice on pond creation from Freshwater Habitats Trust and Buglife* *Freshwater Habitats Trust management guidance*	PM18 **'Create Ponds'**
PRIORITY 10: Improve ecological quality of rivers to support biodiversity CSW12: Making space for water	Improve the integration of regulatory and citizen-science water quality monitoring to inform priority action to address water quality pressures, working with stakeholders.	PM93
	Enhance and re-naturalise river habitats, addressing fish passage barriers and restoring connectivity to floodplains to facilitate the conservation and restoration of floodplain wetlands. Include any appropriate measures from PM89-PM90, PM94-100.	PM19 **'Restore Rivers'**

PRIORITY 10 (continued) **Wider environmental benefits:** Air purification (cleaner air for nature) Carbon storage and sequestration Cooling and shading Erosion protection Flood management Water quality regulation **Non-environmental co-benefits:** Aesthetic value Education and training	Adopt natural flood management techniques which serve to restore nature as well as to deliver benefits for alleviating flood risk, such as: temporary storage ponds; natural floodplain management; tree-planting on slopes; leaky dams and restoring and re-meandering rivers. *Countryside Stewardship Funding: SW16: Flood mitigation on permanent grassland* *Catchment Sensitive Farming advice*	PM94
	Conserve and restore natural riverbanks and riparian corridors to maximise their value for riverine wildlife.	PM95
	Create fish passes, barrier removal and natural channels to connect fragmented river sections.	PM96
	Aim for and manage an appropriate level of light and shade on rivers to ensure that they are resilient to climate change and the potential impacts on water temperature. *Woodland Trust guidance on keeping rivers cool*	PM97
	Reduce nutrients in rivers and groundwater sources through nutrient input reduction and habitat management measures across the farmed landscape, (particularly, but not exclusively, within nutrient neutrality areas). *Information on nutrient neutrality and nutrient neutrality within Berkshire* *Countryside Stewardship funding: SW13: Very low nitrogen inputs into groundwaters*	PM98
	Promote clean water generating land use around high-quality headwater streams by identifying their catchments as priority areas for terrestrial habitat restoration. *Water Framework Directive guidance*	PM99
	Identify modified headwaters in clean water catchments, and conduct Stage 0 restoration, or equivalent, to restore natural stream valley morphology.	PM100
	Work with relevant stakeholders to develop strategic approaches which mitigate low flows to reduce use of water during drought.	PM101

PRIORITY 11: Obtain good chalk stream management **Wider environmental and non-environmental co-benefits:** Same as PRIORITY 10	Address pressures on chalk rivers by restoring habitat, removing fish passage barriers, addressing agricultural/point source pollution, seeking long-term solutions to abstraction impacts and undertaking appropriate measures (PM89-PM90, PM94-100). *Catchment Based Approach: Chalk Streams Strategy*	PM20 **'Restore Chalk Streams'**
	Aim for and manage an appropriate level of light and shade on chalk rivers to ensure that they are resilient to climate change and the potential impacts on water temperature.	PM102

Relevant National Environment Objectives supported by Priorities of Wet Habitats:
Biodiversity on land - Restore or create in excess of 500,000 hectares of a range of wildlife-rich habitat outside protected sites by 2042, compared to 2022 levels
Improve water quality and availability -Reduce nitrogen (N), phosphorus (P) and sediment pollution from agriculture into the water environment by at least 40% by 2038, compared to a 2018 baseline

Relevant Commitments from Environmental Improvement Plan supported by Priorities of Wet Habitats:
Restore 75% of our water bodies to good ecological status

Heath Habitats Grouping

The heaths and forest of the acidic soils in the south and east of Berkshire are a part of one of Britain's important habitats, lowland heathland. These support a unique community of birds, reptiles, insects and plants. It is a transient habitat, dependent upon periodic regeneration by grazing, management or fire to maintain them as open heath and avoid encroachment by scrub and trees. In common with most of these in southern England, they have been considerably reduced by development, conversion to plantation forestry and scrub invasion. These threats are compounded by their proximity to urban and suburban areas, leading to recreational pressure and problems from disturbance and predation from domestic pets. Some sites in the east of the county are protected by the agreed planning policies to protect the Thames Basin Heaths (of which they form part) by requiring the provision of SANGS (Suitable alternative natural greenspace) to mitigate the effect of new development within the vicinity.

Heath Habitats Grouping *Note that this habitat grouping includes scrub and acid grassland.*		
Priority **In bold is the Priority: the end results to achieve.** Underneath is detail on wider benefits which could be delivered by each priority.	**Potential Measure Description** The Potential Measures are specific practical actions to achieve the priorities. Underneath in italics is detail on further information and habitat management guidance.	**Measure Code and name of layer on map if mapped**
PRIORITY 12: Improve the quality of heathland habitats	Manage and restore heathland flora to create structural diversity. Introduce a rotational management regime to create a mosaic of habitats across the site from bare ground to tall scrub. *For example, by traditional grazing bracken control, gorse management, birch removal, pine removal, heather cutting, and scraping.* Natural England lowland heathland management handbook	PM21 **'Restore Heathland'**
	Create heathland on arable land, improved pasture and coniferous plantations, particularly on areas of low yield or with remnant heathland plant communities. Create corridors where large-scale conversion is not possible. Manage appropriately. Natural England lowland heathland management handbook	PM22 **'Create Heathland'**

PRIORITY 12 (continued) **Wider environmental benefits:** Air purification (cleaner air for nature) Carbon storage and sequestration Erosion protection Flood management Pollination Water quality regulation **Non-environmental co-benefits:** Aesthetic value Mental health and wellbeing Recreation and leisure Sense of place	Create acid grassland on arable land, improved pasture and coniferous plantations, particularly on areas of low yield or with remnant acidic plant communities. Create corridors where large-scale conversion is not possible. Manage appropriately. Natural England lowland heathland management handbook	PM23 **'Create Acid Grassland'**
	Block drainage ditches to recreate wet heath and bog patches.	PM103

Relevant Commitments from the National Environmental Objectives:
Biodiversity on land - Restore or create in excess of 500,000 hectares of a range of wildlife-rich habitat outside protected sites by 2042, compared to 2022 levels
Biodiversity on land – Halt the decline of species abundance by 2030. Ensure that species abundance in 2042 is greater than in 2022, and at least 10% greater than 2030
Biodiversity on land - reduce the risk of species' extinction by 2042, when compared to the risk of species' extinction in 2022

Relevant Commitments from the Env Improvement Plan:
Work to ensure that everyone in England lives within 15 minutes' walk of a green or blue space
Restore approximately 280,000 hectares of peatland in England by 2050
Protect 30% of land and of sea in the UK for nature's recovery by 2030
Ensure delivery & management of actions & policies that contribute towards our 25YEP goals are suitable & adaptive to a changing climate
Reduce emissions of nitrogen oxides by 73% and ammonia by 16% by 2030 relative to 2005 levels

General Measures

General Measures *Note that these generic measures should apply in all appropriate priority habitats.*		
Priority	**Potential Measure Description**	**Measure Code and name of layer on map if mapped**
Priority 13: Increase the overall land areas dedicated to nature and wildlife	Create at least one and ideally more large-scale nature reserves, with appropriately managed visitor access and which supports PM108. This will support landscape scale restoration of ecosystems, improve habitat connectivity and support a wide range of species, as well as be of benefit to the public to experience wildlife, and support the rural and tourism economies.	PM104
Priority 14: Improve general biodiversity across Berkshire	Encourage the creation of and support the continued presence of local community groups to influence and enact positive nature friendly management of sites, in accordance with the Berkshire LNRS. *BBOWT Community Toolkit, BBOWT Community Groups* *Advice on community groups buying and managing land for nature recovery*	PM105
	Manage road verges (in line with road safety requirements) for nature in rural and urban areas to create wildlife corridors. *Plantlife on managing road verges and green spaces* *Buglife: Road verges and their potential for pollinators* *West Berkshire Wild Verges*	PM106
	Monitor habitat health with an appropriate toolkit (e.g. BNG, PTES) and address issues identified.	PM107
	Encourage landowners to manage habitat for nature in accordance with best practice.	PM108
	Establish refuge areas for wildlife (both as wintering and breeding areas) where access and recreational use is controlled.	PM109
	Educate users of public greenspaces of their value for nature and how to use them in a nature-friendly way.	PM110
	Promote greenspaces to be used as education facilities for local communities, e.g. through citizen science and community hubs.	PM111

	Establish buffer zones of all habitats greater than national guidance (e.g. >15m around ancient woodland sites), with an increased buffer of 50m where appropriate. Where bats are present in ancient woodland, provide a minimum development buffer of 40m, with at least 15m being graded ecotone edge creation. Prevent nature degradation occurring in buffer zones.	PM112
	Manage invasive flora and fauna, for example controlling mink to restore water vole populations, following latest best practice. *GB Non-native species website*	PM113

End of List

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