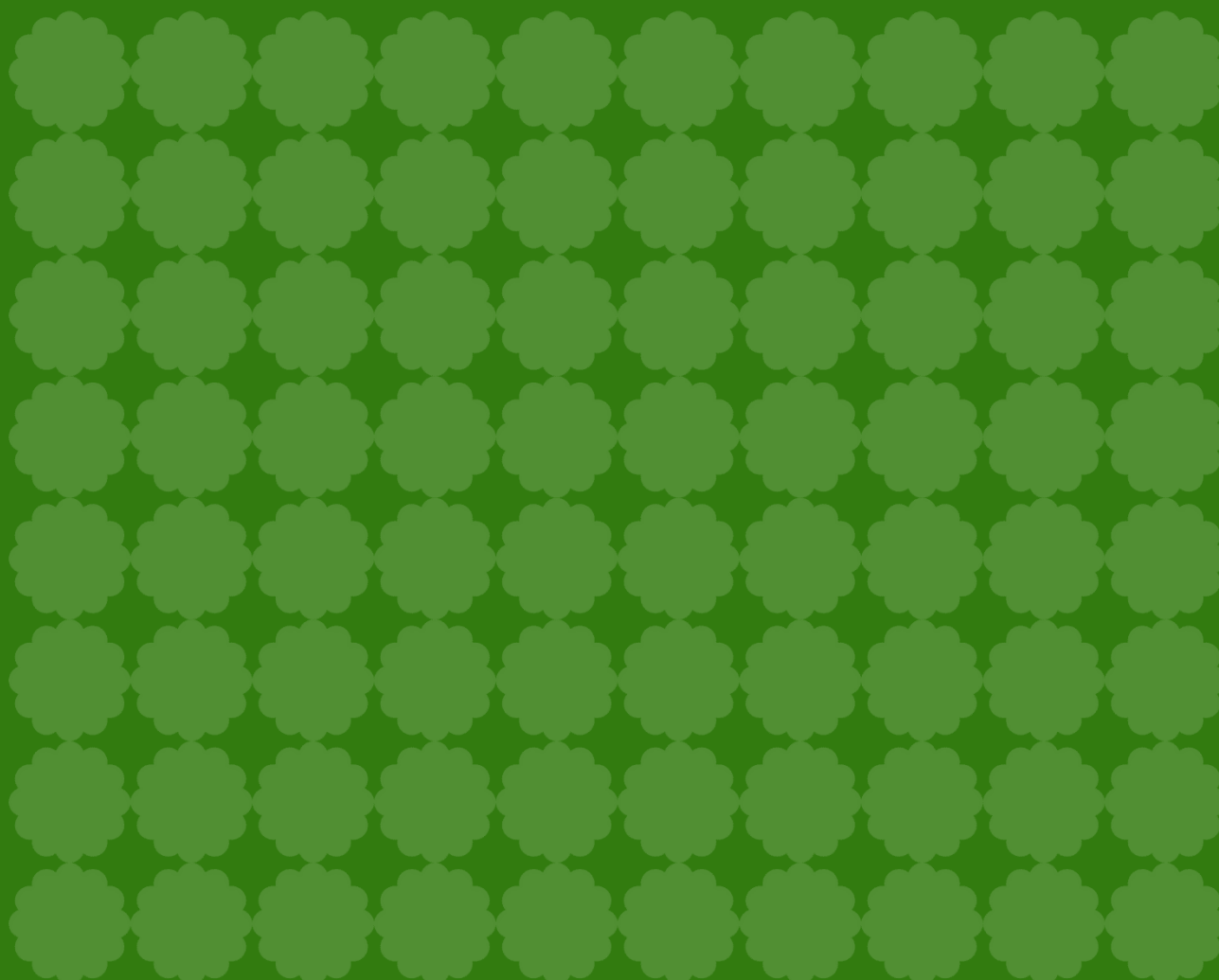


Greater Manchester Local Nature Recovery Strategy

Appendix 8 – Habitat priorities and actions



Overview

This document provides further technical details and examples, where available and appropriate for the habitat actions set out in the Greater Manchester Local Nature Recovery Strategy.

The text in italics provides examples and further technical details for suggested actions.

Actions that have been mapped as part of the Nature Network have been indicated with an asterisk (*).

Urban green spaces and buildings

Priority	Action code	Action
More schools, hospitals, public, commercial and community buildings have nature-rich accessible green spaces, better for wildlife and people.	Urban 1.1	<p>Enhance and increase the diversity of existing greenspaces and create dedicated wilder set-aside areas for nature.</p> <p><i>For example through: more native planting; encouraging a greater variety of habitats; encouraging a range of tree species, age structure and wooded habitats; safely allowing areas of scrub and dead wood; reducing pesticide or herbicide use; reducing mowing; removing invasive species; cleaning up litter; reducing water and light pollution; creating dedicated set aside areas; creating wildflower strips, meadows or pollinator friendly planting; creating wildlife ponds; planting trees; creating and implementing long term habitat management plans.</i></p>
	Urban 1.2	<p>Create more nature-friendly multiple-use spaces, such as wellbeing gardens, community grow spaces or orchards, that provide habitats for urban species and benefit people.</p> <p><i>For example through: creating nature friendly wellbeing or community gardens with pollinator-friendly planting and dedicated homes for wildlife; encourage creation of school nature areas for education and nature benefit; installing planters or raised beds; integrating green roofs or green walls onto buildings.</i></p>
	Urban 1.3	<p>Increase or expand nature-rich green spaces where they will provide stepping stones or corridors that better connect existing green space and reduce barriers to species movement.</p> <p><i>For example through: incorporating green nature-rich corridors or expanding habitats where they will better connect to another green space nearby; creating more wildlife crossing points and corridors (such as hedgerows) between and within spaces, particularly for target species like hedgehogs.</i></p>
	Urban 1.4	<p>Support species by installing homes for wildlife.</p> <p><i>For example through: installing bug hotels, bird or bat boxes, swift bricks or ponds.</i></p>

	Urban 1.5	<p>Create or allow more space for water and install sustainable drainage, providing water for wildlife and adaptation to climate change.</p> <p><i>For example through: installing ponds, raingardens, swales or other permeable surfaces.</i></p>
	Urban 1.6	<p>Support and involve local communities in the creation and maintenance of spaces for nature.</p> <p><i>For example through: improving access and inclusion; boosting awareness of nature recovery; installing better paths, access points and signage; supporting and involving communities with greenspace creation and maintenance; running awareness campaigns, training, courses, workshops or other promotional activities.</i></p>
Better parks and open spaces, enhanced and managed to be nature-rich and climate-adapted, with a range of habitats for wildlife supported by local communities.	Urban 2.1	<p>Enhance and increase the diversity of existing greenspaces for nature and create dedicated wilder set-aside areas for nature.</p> <p><i>For example through: more native planting; encouraging a greater variety of habitats; encouraging a range of tree species, age structure and wooded habitats; safely allowing areas of scrub and dead wood; reducing pesticide or herbicide use; reducing mowing; removing invasive species; cleaning up litter; reducing water and light pollution; creating dedicated set aside areas; creating wildflower strips, meadows or pollinator friendly planting; creating wildlife ponds; planting trees; creating and implementing long term habitat management plans.</i></p>
	Urban 2.2	<p>Create and maintain longer grasses and wildflower strips.</p> <p><i>For example through: reducing or modifying mowing regimes to allow longer grass; maintaining access with mown paths; creating wildflower strips and meadows of a variety of scales.</i></p>
	Urban 2.3	<p>Increase or expand nature-rich green spaces where they will provide stepping stones or corridors that better connect existing green space and reduce barriers to species movement.</p> <p><i>For example through: incorporating green nature-rich corridors or expanding habitats where they will better connect to another green space nearby; creating more wildlife crossing points and corridors (such as hedgerows) between and within spaces for target species like hedgehogs.</i></p>

	Urban 2.4	Support species by installing homes for wildlife. <i>For example through: installing bug hotels, bird or bat boxes, swift bricks; installing ponds.</i>
	Urban 2.5	Create or allow more space for water and install sustainable drainage, providing water for wildlife and adaptation to climate change. <i>For example through: installing ponds, raingardens, swales and permeable surfaces; daylighting brooks, streams or rivers where possible.</i>
	Urban 2.6	Create more nature-friendly multi-use spaces, with improved access for all, such as pocket parks and community grow spaces that benefit urban species and people. <i>For example through: creating community orchards or community gardens with pollinator friendly planting and dedicated homes for wildlife; creating community growing spaces; installing or maintaining better paths; installing more access points and signage.</i>
	Urban 2.7	Support and involve local communities in the creation and maintenance of spaces for nature and improve public awareness of the benefits of nature recovery. <i>For example through: installing or maintaining better paths; installing more access points and signage; supporting and involving communities with greenspace creation and maintenance; running awareness campaigns, training, courses, workshops or other promotional activities.</i>
More streets, roads, pedestrian and cycle routes are greener, nature-rich and tree-	Urban 3.1	Enhance and increase the species diversity of streets and highways verges, with longer grasses, native wildflower strips or meadows and more dedicated spaces for nature. <i>For example through: more native planting; encouraging a greater variety of habitats; encouraging a range of tree species, age structure and wooded habitats; safely allowing areas of scrub and dead wood, reducing pesticide or herbicide use; reducing mowing; removing invasive species; cleaning up litter; reducing water and light pollution; creating dedicated set aside areas; creating wildflower strips, meadows or pollinator friendly planting; creating wildlife ponds; planting trees; creating and implementing long term habitat management plans.</i>

lined, acting as corridors for nature and adapted to climate change.		<p>Increase or expand nature-rich green spaces along existing and new streets, highways and cycle-ways (our Bee Network).</p> <p><i>For example through: creating new greenspaces and green verges as part of highways improvements; planting more street trees; encouraging a range of tree species, age structure and wooded habitats; installing raingardens, planters or pocket parks along streets as part of improvement works; targeting greenspace creation in those communities with the least access to greenspace; encouraging peer-to-peer learning between councils; creating more wildlife crossing points and corridors (such as hedgerows) between and within spaces for target species like hedgehogs.</i></p>
	Urban 3.2	<p>Create or allow more space for water and install sustainable drainage along our existing and new streets, highways and cycle paths (our Bee Network).</p> <p><i>For example through: installing raingardens, swales, bioretention areas, SuDS enabled tree pits or more permeable surfaces along cycle paths, pavements and streets as part of improvements works.</i></p>
	Urban 3.3	<p>Reduce key barriers to wildlife movement across our major highways.</p> <p><i>For example through: creating green bridges.</i></p>
	Urban 3.4	<p>Support species by installing homes for wildlife.</p> <p><i>For example through: installing bug hotels, bird or bat boxes, hedges or ponds.</i></p>
	Urban 3.5	<p>Support and encourage more community involvement and more community adoption of unused greenspaces.</p>
Town and city regeneration and development driving new and enhanced nature-rich	Urban 4.1	<p>Safeguard and enhance important local habitats and green spaces.</p>
	Urban 4.2	<p>Restore existing local habitats and green spaces.</p>
	Urban 4.3	<p>Create dedicated new multifunctional and inclusive greenspaces as part of new development and regeneration, to meet the national Urban Greening Factors of 0.3 on commercial and 0.4 on residential development or the local authority set Urban Green Factor.</p>

green space creation, building more biodiverse, accessible and climate-adapted places and buildings		<i>For example through: creating a range of greenspaces from green roofs and walls to hedgerows or street trees; newly created greenspaces and habitats should have long term management plans and funding in place in perpetuity; follow clear standards e.g. Building with Nature.</i>
	Urban 4.4	Increase or expand nature-rich habitats and green-spaces where they will provide stepping stones or corridors that better connect existing green space and reduce barriers to species movement. <i>For example through: incorporating green nature-rich corridors within and across new developments or regeneration sites; installing more wildlife crossing points and corridors (such as hedgerows) between and within spaces for target species like hedgehogs; building green bridges; expanding habitats where they will better connect to another green space nearby.</i>
	Urban 4.5	Support species by installing homes for wildlife on and around buildings and reducing barriers to species movements across and between greenspaces. <i>For example through: installing bug hotels, bird or bat boxes, swift bricks and ponds.</i>
	Urban 4.6	Create dedicated space for water and wetter habitats by installing sustainable drainage and providing sufficient space for river corridors. <i>For example through: installing ponds, raingardens, swales or other permeable surfaces.</i>
	Urban 4.7	Support and involve communities in the design and creation of new or regenerated greenspaces. <i>For example through: running awareness campaigns, training, courses, workshops and promotional activities.</i>
More nature-friendly and climate-adapted gardens,	Urban 5.1	Plant gardens, yards and balconies that support local wildlife, using pollinator-friendly planting or planting size appropriate shrubs or trees.
	Urban 5.2	Support species by installing homes for wildlife and reduce barriers to species movements across and between gardens.

balconies, yards and driveways		<i>For example through: installing bug hotels, bird or bat boxes, swift bricks; installing ponds; installing hedgehog highways between gardens, swapping fences for hedges and working with neighbours.</i>
	Urban 5.3	Manage spaces in a wildlife-friendly way by leaving areas of longer grass for wildlife in gardens or reduce mowing, reducing use of pesticides and herbicides.
	Urban 5.4	Create more space for water in gardens and encourage more sustainable water use. <i>For example through: using ponds, raingardens or permeable surfaces; creating more permeable spaces rather than paving gardens; reducing garden water use by installing a water butt.</i>
	Urban 5.5	Boost awareness of the need for wildlife friendly gardening. <i>For example through: campaigns raising awareness of the need for wildlife friendly gardens; promoting guidance on wildlife friendly planting; initiatives such as Britain in Bloom, My Wild City and others.</i>
More community-led creation of new nature-rich green spaces and increased opportunities for local food growing	Urban 6.1	Encourage or enable the creation of new community-led green spaces in our least green areas. <i>For example through: helping communities apply for funding; supporting land allocation towards community greenspace; providing more training opportunities.</i>
	Urban 6.2	Increase or expand nature-rich green spaces where they will provide stepping stones or corridors that better connect existing green space and reduce barriers to species movement. <i>For example through: creating pocket parks or community gardens where they will act as stepping stones between existing green spaces or expand existing green spaces towards nearby green spaces; creating linear green corridors along streets e.g. using planters or by installing street trees to better connect up green spaces; installing hedges along boundaries.</i>
	Urban 6.3	Enable more opportunities for community-led action and community adoption of local greenspaces.

		<i>For example through: establishing a network of community nature groups; promoting community initiatives and projects e.g. clean ups and litter picks.</i>
	Urban 6.4	Support more opportunities for local food growing and the ‘right to grow’. <i>For example through: Encouraging and supporting the use of land for local green spaces, community orchards and allotments, community growing projects, etc.</i>
	Urban 6.5	Boost awareness and skills in nature recovery and connection to nature. <i>For example through: campaigns; running training sessions, skills sessions or educational talks; volunteering days; green social prescribing; events or self-led activities; encouraging wildlife monitoring and citizen science e.g. bioblitzs; developing a network of community nature groups.</i>

Woodlands, trees, scrub and hedgerow

Priority	Action code	Action
More existing woodlands, hedgerows, trees and scrub are safeguarded, restored and resilient	Woodland 1.1	<p>Identify, safeguard and enhance ancient, long-established and designated woodlands, veteran and notable trees*.</p> <p><i>For example through: the identification, notification, designation and safeguarding of ancient woodlands, long-established woodlands, veteran and notable trees; producing management plans and bringing more ancient or long-established woodland into management; managing and considering appropriate ground flora; restoring Plantations on Ancient Woodland Sites (PAWS).</i></p>
	Woodland 1.2	<p>Enhance existing woodlands, scrub and hedgerows through positive management, diversify them and increase their resilience to pests, disease and climate change.</p> <p><i>For example through: creating and implementing more woodland management plans targeting key types of woodland habitats and species; safely retaining standing or fallen dead wood, dead or dying trees; diversifying age and stand structure; encouraging species suitable for existing site conditions and future climate (taking site status into account); incorporating open space such as rides and glades; using natural regeneration or planting species of local provenance; introducing low impact silvicultural systems; managing grazing pressure; removing invasive species; controlling or managing pests, disease and species damaging woodlands (such as deer and squirrel) where appropriate and practical; encouraging the creation of clearings or rides; ensuring responsible recreational use; maintaining paths and rights of way; encouraging management at all stages of the woodland life cycle; planning for and encouraging site appropriate ground flora.</i></p>
	Woodland 1.3	<p>Promote better understanding of the value of woodland, scrub, trees, hedgerow, wood pasture and agroforestry habitats.</p>

		<i>For example through: supporting community groups; running training sessions and talks; adding signage boards.</i>
	Woodland 1.4	<p>Encourage wildlife-friendly recreational use of woodland.</p> <p><i>For example through: clearly maintaining marked paths; reducing damaging recreational uses; wildlife-friendly lighting.</i></p>
Bigger and better connected woodlands, trees and scrub, integrated with patchworks of other habitats	Woodland 2.1	<p>Target native woodland and scrub creation or establishment, where it will connect existing woodland and scrub*.</p> <p><i>For example through: planting or natural colonisation of woodland, scrub and trees of a range of different sizes and across a range of different land ownership and land use types; targeted planting or natural regeneration of riparian or wet woodlands; follow the 'right tree, right place, right reason' principle; targeted planting where these habitats have been lost; planting species of local provenance (where appropriate).</i></p>
	Woodland 2.2	<p>Expand existing woodland and scrub and other woodland fringe and transitional habitats*.</p> <p><i>For example through: the expansion of woodlands next to existing woodland sites or buffering of existing woodlands with other woodland fringe and transitional habitats; creation of woodlands of a range of different sizes and across a range of different land ownership and land use types; follow the 'right tree, right place, right reason' principle; planting species of local provenance (where appropriate); use planting, natural regeneration or colonisation; protection from grazing and browsing; supplementary planting if needed.</i></p>
	Woodland 2.3	<p>Encourage the planting or establishment of trees, woodland and scrub where they will play a role in natural flood management, control of pollution or reduce soil erosion.</p> <p><i>For example through: targeted planting of contour woodlands or shelterbelts; targeted planting of strips of trees; clough planting; planting of SuDs enabled street trees; follow the 'right tree, right place, right reason' principle; target planting projects where diffuse pollution and soil erosion is a known issue (for example near slurry pits or livestock housing).</i></p>

	Woodland 2.4	<p>Ensure new woodlands are well managed to maximise biodiversity, accessibility and support a variety of locally appropriate woodland types, mixes and scrub.</p> <p><i>For example through: diversifying species (where appropriate) and age structure; planting species of local provenance (where possible); choosing species for future resilience to pests and diseases and adapting to climate change (where appropriate); creating more woodland management plans, targeting key types of woodland habitats and species.</i></p>
	Woodland 2.5	<p>Involve local communities in new tree planting, woodland and scrub creation.</p> <p><i>For example through: establishing small stands of trees or tiny forests within schools; engaging community groups and volunteers with tree planting and woodland habitat management; boost awareness of the benefits of trees and woods.</i></p>
New urban street trees, urban community orchards and woodlands, improving access to nature and climate adaptation	Woodland 3.1	<p>Targeted urban tree and woodland planting where it will increase connectivity, climate adaption and accessibility.</p> <p><i>For example through: targeting planting where it will boost local access to shaded greenspace or provide other environmental benefits such as intercepting surface water flooding.</i></p>
	Woodland 3.2	<p>Create new and enhance old or traditional orchards and urban community woodlands, and work to ensure better access for communities.</p>
	Woodland 3.3	<p>Improve woodland path networks to diversify access for all users.</p> <p><i>For example through: creating well-drained paths, considering the surrounding landscape, managing vegetation along the edges as well as improving access for all needs and providing clear signage.</i></p>
	Woodland 3.4	<p>Support and engage diverse local groups with local woodlands, orchards and trees and encourage positive recreational use of woodlands.</p>

More native hedgerows created and maintained, linking together spaces for wildlife	Woodland 4.1	<p>Safeguard, manage and restore the species diversity and structure of existing hedgerows.</p> <p><i>For example through: filling gaps in hedgerows with new native species (where appropriate); restoring hedgerows along existing linear routes; following existing legislation and standards; managing using the hedgerow management cycle; introducing or favouring the development of mature trees along the hedgerow; ensuring enough space is given to hedgerows to reach a mature size; allow hedgerows to flower and set fruit.</i></p>
	Woodland 4.2	<p>Create more native hedgerows, particularly, where they act as corridors between existing trees and woodlands, or where they could intercept diffuse pollution or reduce soil erosion.</p>
	Woodland 4.3	<p>Encourage more mature trees in hedgerows.</p> <p><i>For example through: including native tree species when planting new hedgerows; including trees at irregular spacings minimum distance of 20m apart, tag and protect from routine hedgerow trimming; ensuring enough space is given to allow new created hedgerows to reach a mature size where possible.</i></p>
More varied trees, parkland, scrub and woodland habitats incorporated into our farmlands and more productive woodlands delivering nature recovery.	Woodland 5.1	<p>Enhance productive woodlands, parklands, scrub and orchards to maximise benefits to biodiversity, alongside the production of timber, food and environmental benefits, such as flood risk reduction.</p> <p><i>For example through: managing grazing pressure within existing woodland; low input orchards; uptake of agro-forestry and low density in-field tree planting; bringing more plantation woodlands into positive management for nature.</i></p>
	Woodland 5.2	<p>Encourage wildlife-friendly farm diversification opportunities which will enable more woodland, tree and hedgerow planting as well as agro-forestry.</p> <p><i>For example through: supporting and promoting financial incentives for tree planting and hedgerow creation; promoting support for agro-forestry projects; facilitating access to funding for farm diversification that benefits nature.</i></p>

Rivers, canals and waterbodies

Priority	Action code	Action
More accessible and visible rivers, canals and waterbodies.	Rivers 1.1	<p>Unblock, improve and extend rights of way along waterbodies and improve connections between these networks and our wider ecological corridors and recreational routes.</p> <p><i>For example through: removing invasive plants that block access, clear and maintain footpaths and continuous access along routes.</i></p>
	Rivers 1.2	<p>Celebrate rivers, canals and waterbodies as part of the local identity and increase understanding of their natural value and management.</p> <p><i>For example through: increased provision of signage, interpretation boards, guided walks, boat trips, guides, and web resources; more river monitoring e.g. using citizen science; more education about riparian ownership responsibilities and opportunities to assist nature.</i></p>
Cleaner, more resilient, rivers, canals and waterbodies.	Rivers 2.1	<p>Reduce point source pollution by identifying and tackling critical locations.</p> <p><i>For example through: targeted creation of sustainable drainage and wetland filter habitats (including raingardens, swales, bioretention areas and new reedbeds); raising awareness of misconnections and illegal discharges; reducing Combined Sewer Overflow (CSO) spills; monitoring/management of domestic misconnections; appropriate land management activities; public campaigns; targeting critical locations.</i></p>
	Rivers 2.2	<p>Reduce urban diffuse pollution using sustainable drainage and by tackling litter and plastic pollution.</p> <p><i>For example through: buffer strips; land decontamination; reedbeds and ponds used to clean water from industrial agricultural land; better management of road runoff; reduced macro and micro plastic</i></p>

		<i>loads from various sources such as urban runoff by, for instance, a public litter campaign, and/or a deep clean of urban hard surface.</i>
	Rivers 2.3	<p>Encourage agricultural, industrial and land management practices that deliver water quality improvements.</p> <p><i>For example through: improving agricultural practices in relation to soil, nutrient, and pesticide management e.g. Water Friendly Farming projects or wetter farming; land decontamination; and the management of diffuse pollution from industry sites; targeting critical locations; adoption of low impact silvicultural techniques; encouraging farmers and land managers to develop a diffuse water plan.</i></p>
More natural, well managed and biodiverse rivers and waterbodies.	Rivers 3.1	<p>Make water channels more natural and complex, re-meander channels and reconnect to floodplains where feasible*.</p> <p><i>For example through: encouraging a range of chutes, pools and submerged and exposed sediment bars, to vary flow and create habitats while providing shelter; allow water channels to follow natural routes and restoring natural processes where appropriate; reduce canalisation of rivers, streams and brooks; reconnecting to floodplains and introducing more natural features where feasible and appropriate such as re-meandering; removal of culverts.</i></p>
	Rivers 3.2	<p>Enhance and maintain existing habitats within our waterbodies and adjacent grassland, wetland and woodland habitats to increase species richness*.</p> <p><i>For example through: enhancing existing riparian grassland, wetlands, reedbeds and woodlands; removing invasive species; revegetating and increasing the species richness of waterside habitats.</i></p>
	Rivers 3.3	<p>Restore and maintain more natural banks, in appropriate locations, and reduce invasive species*.</p> <p><i>For example through: adding buffer strips where possible to support a range of bankside topology and riparian habitat; bank modifications that cannot be removed being softened by adding material at their base; hibernacula for reptiles and amphibians to shelter/over winter; sand and shingle patches to act as microhabitats for insects; vertical banks as nest sites for kingfishers and sand martins; tree planting for shade creation and water cooling; restoring space for expanded and new habitats and</i></p>

		<i>species to establish by controlling the spread of invasive plants, and other invasive species and diseases as necessary, with community involvement where appropriate.</i>
Increased habitat connectivity along our river corridors, canals and waterbodies.	Rivers 4.1	<p>Expansion, creation or restoration of a variety of waterside habitats, including woodlands, wetlands and meadows, where they will better connect existing habitats*.</p> <p><i>For example through: creation of reedbeds and pond networks with different sizes and structures, management of woodlands, grassland and wetland to improve species richness along riparian corridors.</i></p>
	Rivers 4.2	<p>Improve mobility for aquatic creatures by removing barriers, daylighting buried or covered waterbodies or installing by-pass structures, where feasible*.</p> <p><i>For example through: removing culverts, uncovering or daylighting buried rivers, waterbodies and canals where possible or appropriate; installing fish passes.</i></p>
More space for water and natural flood management in our communities and across catchments.	Rivers 5.1	<p>Install more sustainable drainage schemes, natural flood management schemes and permeable surfaces, in areas which will benefit nature and are most at risk of flooding.</p> <p><i>For example through: installing site appropriate swales, bioretention areas, rain gardens, buffer or filter strips along roads, soakaways, more permeable land surfaces across all our public and private spaces; expanding existing sustainable drainage schemes where possible; work with nature to better store and manage water in upper catchments and maximise the role of upstream habitats in reducing flood risk.</i></p>
	Rivers 5.2	<p>Increase awareness and understanding of climate resilience and the role of sustainable drainage and natural flood management schemes.</p> <p><i>For example through: running educational and awareness campaigns, creating resources to build awareness and engagement; running SuDS tours and events.</i></p>
More canals restored and	Rivers 6.1	Restoration and reconnection of canalside habitats, including targeted woodland creation and tree planting*.

well managed for nature and people.		<i>For example through: encouraging the preparation and implementation of long-term management plans for all our canals for nature.</i>
	Rivers 6.2	Softening manmade canal banks using natural materials and native plants*. <i>For example through: soft engineering solutions with coir rolls and native local provenance planting instead of sheet piles.</i>
	Rivers 6.3	Reduce litter and pollution in canals.
	Rivers 6.4	Encourage responsible recreational use of canals and maintain a good balance between more natural and diverse vegetation and keeping canals clear for recreation. <i>For example through: disposing of dredged material where it will have least negative impact; boat speed limits; keeping paths clear; controlling invasive species such a Greater Reedmace (native) and Japanese Knotweed (non-native).</i>
	Rivers 6.5	Improve mobility for aquatic creatures by removing barriers and ensure appropriate daylighting and reduced disturbance. <i>For example through: removing culverts, uncovering or daylighting buried rivers, waterbodies and canals where possible or appropriate.</i>

Lowland wetlands and mosslands

Priority	Action code	Action
More lowland bogs, fens and other wetland habitats are restored and better managed for nature, able to store more water and emit less carbon.	Lowland 1.1	<p>Enhance, maintain and manage existing and remnant areas of lowland raised bog, fens and other wetland habitats over the long term, to improve diversity*.</p> <p><i>For example through: managing and working to reduce key pressures including reducing pollution and run-off from roads, agriculture, and industry; reducing pesticides and fertiliser; reducing land drainage and optimising water tables; reducing invasive species; reducing overgrazing; working to create agreed management plans where appropriate, based upon agreed best management practice to reach good condition; working to identify small remnant areas of lowland bog, fen and other wetland habitats; always following existing best practice and using existing standards and decision-support frameworks.</i></p>
	Lowland 1.2	<p>Enhance patchworks of semi-natural habitats surrounding our remaining lowland raised bog, fens and other wetland habitats to improve resilience*.</p> <p><i>For example through: enhancing and working towards dynamic lowland wetland mosaics and associated habitats surrounding remaining sites, such as brooks, open water bodies, bog, fen, swamp, flashes, ponds, wet woodland and wet species-rich grassland; reducing overgrazing; reducing land drainage; removing invasives; always following existing best practice and using existing standards and decision-support frameworks.</i></p>
	Lowland 1.3	<p>Reintroduce lost species across a range of mossland and wetland communities*.</p> <p><i>For example through: establishing satellite nurseries to grow the rare wetland plants.</i></p>
Bigger mosslands	Lowland 2.1	<p>Restore degraded wetland sites and areas of restorable deep peat, particularly where they will connect remaining wetland habitats*.</p>

and wetlands, with more habitat corridors and stepping stones reconnecting and expanding remaining habitats.		<i>For example through: expanding or buffering existing sites; maintain an optimal water table, restore habitat-specific vegetation; targeted creation of continuous habitat corridors between sites; creation of new patches of habitat where they will act as stepping stones; small isolated sites are particularly crucial areas for improved connectivity; during restoration projects always following existing best practice and using existing standards and decision-support frameworks.</i>
	Lowland 2.2	Create more patchworks of wetland habitats and transitional habitats, particularly around remaining and restored lowland raised bog, fens and other wetland habitats*. <i>For example through: maintaining an optimal water table surrounding key remaining sites; targeting small or isolated sites; always following existing best practice and using existing standards and decision-support frameworks.</i>
	Lowland 2.3	Maintain and enhance restored sites and new corridors over the long term to maximise benefits for nature, carbon emissions reductions and water management. <i>For example through: maintaining an optimal water table, restoring habitat-specific vegetation; always following existing best practice and using existing standards and decision-support frameworks.</i>
More of our historic wetlands and restorable peat are wet.	Lowland 3.1	Identify former wetland habitats and investigate their potential for restoration to contribute to climate resilience and nature recovery.
	Lowland 3.2	Reduce land drainage and positively manage the hydrology of land adjacent to lowland raised bog, fens and other sensitive wetland habitats, to increase climate resilience. <i>For example through: managing surface water drainage and groundwater abstraction to help re-wet peat soils and prevent harm from lower water levels; always following existing best practice and using existing standards and decision-support frameworks.</i>
	Lowland 3.3	Encourage the uptake of wetter farming and commercial paludiculture.

Reconnect local communities to mosslands and wetlands, and their heritage.	Lowland 4.1	Enable more well-managed recreational access to mosslands and wetlands.
	Lowland 4.2	Increase awareness of the importance and benefits of healthy mosslands and wetlands. <i>For example through: more signage, campaigns and the promotion of peat-free products.</i>
	Lowland 4.3	Enhance and extend networks and other access opportunities for walkers, cyclists, horse-riders and other outdoor recreational pursuits in ways that are compatible with habitat enhancement.
Better quality and better connected ponds.	Lowland 5.1	Safeguard, enhance and appropriately manage existing ponds and encourage good connectivity to surrounding habitats. <i>For example through: controlling scrub; reducing pollution and pesticide runoff; removing invasive species; controlling livestock access to decrease poaching or contamination from farm animals; creating supporting ditch and pool infrastructure; ensuring the sloping edges around ponds are structurally diverse and including hibernacula for reptiles and amphibians to shelter/over winter.</i>
	Lowland 5.2	Create a variety of new ponds and resurrect ghost ponds, in the right places to connect existing ponds. <i>For example through: following the existing site hydrology; ensuring variety in terms of size, depth, seasonality and vegetation.</i>

Grasslands, farmlands and lowland heath

Priority	Action code	Action
Species-rich and semi-natural grasslands and lowland heath are safeguarded, well-managed and restored.	Grassland 1.1	Identify and safeguard remaining notable semi-natural grasslands*. <i>For example through: public and volunteer surveys or BioBlitz surveys.</i>
	Grassland 1.2	Enhance and appropriately manage remaining semi-natural grasslands and lowland heath, including increasing species richness*. <i>For example through: writing management plans when appropriate; promoting good management of public access; removing invasive species, targeted grazing management and mowing regimes for key species.</i>
	Grassland 1.3	Showcase successful grassland and heath management and encourage awareness of the value of these habitats. <i>For example through: celebrating examples of good quality species-rich grasslands; considering landscape suitability (e.g. woodland cover and extent, agricultural management practices and landscape homogenisation) for ground nesting birds in relation to nesting sites.</i>
More species-rich grasslands and lowland heath created, particularly where they will connect	Grassland 2.1	Creation or restoration of species-rich grasslands and lowland heath, particularly where they will expand or act as stepping stones or corridors*. <i>For example through: using seedbanks of local provenance; reducing mowing; reintroducing appropriate native species and where appropriate reducing nutrients by stripping topsoil or cut-collect regimes; monitoring and tracking grassland creation.</i>
	Grassland 2.2	Creation and maintenance of transitional areas or more mosaics of habitats, on the boundaries between grasslands and other habitats.

existing habitats.	Grassland 2.3	Enhance and manage improved or semi-improved grasslands to boost species richness*. <i>For example through: wildlife-friendly cutting, mowing or grazing regimes; reducing spraying regimes or nutrient enhancement; where appropriate reducing nutrients by stripping topsoil; reducing the intensity of management.</i>
	Grassland 2.4	Ensure appropriate long-term management of newly created grassland to achieve increased species-richness, and lowland heath. <i>For example through: writing management plans; targeted grazing management and mowing regimes; low inputs; long-term monitoring.</i>
More urban meadows, with native wildflower species and longer grasses.	Grassland 3.1	Allow areas of urban grasslands to grow long and flower and increase species diversity through planting or other measures. <i>For example through: reducing mowing or cutting regimes; using seedbanks of local provenance and appropriate native species; removal of topsoil and wildflower seeding of subsoil.</i>
	Grassland 3.2	Encourage greater understanding and acceptance of long grass and less intensively managed grasslands. <i>For example through: engagement with local communities to explain changes and increase acceptance.</i>
More dedicated spaces for wildlife integrated into farmland and buildings, alongside food production.	Grassland 4.1	Install or enable more accessible homes for birds and bats on and around farms and rural buildings. <i>For example through: homes for species such as barn owl, house martin, swift and bats; avoid blocking or covering existing access points; creating skylark plots in arable fields.</i>
	Grassland 4.2	Set aside dedicated patches of sympathetically managed or uncropped areas, along field boundaries, margins, corners or less productive areas, particularly where they will connect.

	Grassland 4.3	<p>Create and maintain forage areas and homes for species on farmland, alongside food production.</p> <p><i>For example through: species-diverse hedgerows; ponds; scrapes; in-field blocks or strips of wildflower pollen or nectar flower mixes.</i></p>
	Grassland 4.4	Safeguard existing hedgerows and plant more native hedgerows along field boundaries wherever possible
	Grassland 4.5	Grow and maintain multi-species cover crops, and cut later in the year, to provide food and cover for wildlife.
	Grassland 4.6	<p>Support and collaborate with farmers, landowners and managers to enhance their land for nature, alongside food production, and involve farmers in targeted species conservation programmes.</p> <p><i>For example through: collaborating with farmers, farmer groups and landowners to build on existing success including through local farm open days, local knowledge and story sharing; providing resources such as a tailored and easily accessible guide for wilder farming funding and delivery; increasing uptake of relevant agri-environment schemes.</i></p>
More biodiverse farmland, with healthier soils, better water management and fewer intensively managed areas.	Grassland 5.1	<p>Manage grassland and cropland at lower intensity and with low inputs.</p> <p><i>For example through: adjusting timing of cropping or mowing to better protect wildlife; reduce herbicide, pesticide use and minimise use of artificial fertilisers.</i></p>
	Grassland 5.2	<p>Reduce soil erosion, minimise bare ground and encourage soil recovery.</p> <p><i>For example through: practices such as direct drilling, minimising tillage, cover crops or maintaining ground cover.</i></p>
	Grassland 5.3	<p>Support switch to diversified plant species for grazing livestock, establish and maintain herbal lays or species-rich hay meadows</p> <p><i>For example through: promoting appropriate rotational grazing practices.</i></p>

	Grassland 5.4	<p>Improve water quality and pollution management on farmland, in farmyards and control livestock access to waterbodies.</p> <p><i>For example through: installing roofs over slurry/silo stores; discouraging arable production on steeply sloping fields; fencing off or hedging ditches and water bodies to prevent poaching and contamination by farm animals; encouraging the growth of diverse riverside habitats, conversion away from arable crops in frequently flooded areas.</i></p>
	Grassland 5.5	<p>Support awareness raising efforts around responsible recreation in nature rich areas.</p> <p><i>For example through: encouraging more awareness of the countryside code, campaigns and engagement with schools and universities.</i></p>

Upland moorlands

Priority	Action code	Action
More varied and well-functioning upland habitats, with patchworks of restored bog, heath, trees, springs and flushes, reducing flood and wildfire risk.	Upland 1.1	<p>Stabilise, rewet and restore deep bare peat towards active blanket bog*.</p> <p><i>For example through: nurse crops; raising the water table; reducing land drainage; grip and gully blocking; reprofiling gully sides, bunding, reintroduction or translocation of moorland plants e.g. sphagnum, reducing intensity of grazing or considering choice and type of grazing animals; always following existing best practice, standards and decision-support frameworks; encouraging positive long term management for nature.</i></p>
	Upland 1.2	<p>Encourage more diverse native vegetation and more flower-rich habitats on existing upland moorlands*.</p> <p><i>For example through: cutting to create a varied age structure; bracken and invasive species control; reintroduction of blanket bog plants; encouraging positive management for nature; considering the most appropriate grazing regimes and grazing animals to encourage more plant diversity and dynamic habitats; ensuring a diversity of heathland structure and managing fire risk; flower-rich habitat restoration and creation; always following existing best practice, standards and decision-support frameworks.</i></p>
	Upland 1.3	<p>Create transitional habitats or corridors to increase linkage between our uplands and lowland habitats, where conditions allow*.</p> <p><i>For example through: using carefully designed woodland, heath and scrub mosaics on moorland edges and in valleys replacing modified grassland or bracken dominated ground; considering the most appropriate grazing regimes and grazing animal to maximise benefits for nature; expanding upland heath habitat (e.g. substrate and nutrient levels); using locally sourced heather brash (dry and wet heath).</i></p>

	Upland 1.4	Reduce wildfire risk by creating natural fire breaks, rewetting, and boost awareness. <i>For example through: creating more flushes, dense trees and bunds, re-wetted and restoring water tables, to act as firebreaks; reducing gorse cover in targeted areas to minimise fire risk; influencing people's awareness and behaviour; always following existing best practice, standards and decision-support frameworks.</i>
More of our upland flushes are thriving, rich with sphagnum moss, rushes and sedges, supporting a diverse range of species.	Upland 2.1	Restore more naturalised wet areas, flushes and ponds*. <i>For example through: bunds, grip and gully blocking, scrapes and pond creation.</i>
	Upland 2.2	Create rough, diverse grasslands around flushes and wetlands, wet in some areas with rushes around flushes and springs*. <i>For example through: cutting or managing for different sward heights; considering the most appropriate grazing regimes and grazing animal to maximise benefits for nature.</i>
	Upland 2.3	Reduce and slow land drainage and encourage natural flood management. <i>For example through: bunds, grip and gully blocking, leaky dams, scrapes and pond creation.</i>
More trees, small woods and scrub are naturally regenerating, in appropriate places, across our uplands, helping slow and store water.	Upland 3.1	Encourage the restoration and regeneration of existing upland woodlands and clough woodlands*. <i>For example through: more woodland management plans created and implemented; targeted restoration, natural colonisation or regeneration of key woodland types and shrubs (such as temperate Atlantic rainforest, upland oak woodland and wood pasture) to reach good condition; restore and increase clough woodlands and scrub, adding to the habitat available for woodland species; reducing grazing intensity or restricting access by grazing animals where possible; restoration efforts should always follow existing best practice, standards and decision-support frameworks.</i>
	Upland 3.2	Increase woodland and tree regeneration and planting, with varying density from closed canopy woodland in some places to scattered trees in others.

		<i>For example through: adding fencing in target areas to restrict access by grazing animals and enable natural colonisation or planting of less-dense woodlands, scrub and scattered trees over the top of cloughs onto the edges of less-sensitive open moorland; using traditional boundaries, fencing and grazing management; taking a coordinated landscape scale approach to deer management; restore and increase clough woodlands and scrub edges to expand tree cover, adding to the habitat available for woodland species; fence and let natural colonisation occur; planting efforts should always follow existing best practice, standards and decision-support frameworks to avoid planting on important existing grassland, heath or bog habitats.</i>
	Upland 3.3	Encourage moorland and clough edges to ‘scrub up’, to improve diversity, securing soils and slowing water flow. <i>For example through: fencing or reducing grazing pressure to enable the natural colonisation of trees and scrub; always following existing best practice, standards and decision-support frameworks; considering the most appropriate grazing regimes and grazing animal to maximise benefits for nature.</i>
	Upland 3.4	Target woodland creation, tree planting and the creation of leaky dams, where they will also contribute towards slowing water flow.
Restore and rewet peat to active blanket bog and wet heath, to retain more carbon and hold more rainwater.	Upland 4.1	Stabilise, rewet and restore deep peat towards active blanket bog and wet heath. <i>For example through: nurse crops; raising the water table; reducing land drainage; grip and gully blocking; reprofiling gully sides, bunding, reintroduction or translocation of moorland plants e.g. sphagnum; reducing intensity of grazing or considering choice and type of grazing animals; always following existing best practice, standards and decision-support frameworks; encouraging positive long term management for nature.</i>
	Upland 4.2	Work at scale to restore larger areas of remaining blanket bog faster. <i>For example through: reducing heath and grass dominance by cutting and reintroduction of blanket bog plants; reducing grazing pressure on blanket bogs; reducing burning on deep peat, blanket bog and wet heath; always following existing best practice, standards and decision-support frameworks.</i>

More upland communities, land managers and landowners are rewarded for helping nature recover.	Upland 5.1	Support the switch to land management practices that will further enhance the diversity of upland habitats. <i>For example through: supporting creation of management plans for more nature friendly land uses; encouraging more landowners to access support for woodland and tree planting or agro-forestry or other relevant agri-environment schemes; coordinating support for farmers across partners; considering the most appropriate grazing regimes and grazing animal to maximise benefits for nature; encouraging positive long term management of land for nature.</i>
	Upland 5.2	Encourage more sustainable upland grazing and less intensive management of uplands. <i>For example through: encouraging appropriate rotational and mixed grazing systems that can ensure a sustainable grazing intensity while maintaining productivity and supporting upland biodiversity; considering the appropriate choice of grazing animal to maximise benefits for nature.</i>
	Upland 5.3	Maintain, restore and increase upland hedgerows, hedgerow trees and field boundaries as important habitats.
	Upland 5.4	Encourage sustainable recreation and reduce activities that damage upland habitats. <i>For example through: promoting awareness and education about the impacts of accidental fires and damage from off-road vehicles and implementing measures to prevent such damages.</i>