

The Royal Borough of Windsor and Maidenhead

Biodiversity Action Plan 2021-26

Foreword

The Council declared a Climate and Environment Emergency in 2019, recognising that we need to take urgent action not just on carbon emissions but on the biodiversity crisis. I am therefore proud to be able to present this Biodiversity Action Plan for the Royal Borough. It has been developed in close collaboration with local conservation groups and the Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust. I am grateful for everyone's time and input into the plan.

We know that residents in the Borough value its green open spaces and nature reserves. As a Council, we are proud of the work we have undertaken at Battlemead and Ockwells specifically, where we have transformed what was poor quality agricultural land into nature reserves with new habitats and space for nature to thrive. That being said, we know we have much more work to do and we have recently established a new Natural Environment Team to lead the Council's delivery of our work across this area.

At the Braywick Nature Centre we are already providing education sessions to over 1000 children each year to connect them better with nature. We blend traditional outdoor education activities with new, innovative approaches such as using technology to create nature films. Much of this plan relies on engaging with residents, communities, landowners and public/private sector organisations. We will build on the work we are already undertaking at the Centre to engage all these areas and harness the passion and enthusiasm in the Borough for nature to deliver this plan.

We are committed to the target set by central government, and supported by the Wildlife Trusts, to save 30% of land for nature by 2030. It is a tough challenge but one we believe is important to ensure that our residents can enjoy all the benefits of restoring local biodiversity.

The recently passed Environment Act will support our action locally with policies such as the crucially important requirement for new developments to deliver at least 10% net gain in biodiversity and the requirement to bring forward a Local Nature Recovery Strategy. These national policies will give us the power, as a local authority, to ensure developments across the Borough make space for nature.

We recognise there is no time to waste and where possible will accelerate the delivery of this strategy where opportunities and resources allow. We are looking forward to working with all parties in the Borough to get going and deliver this plan.

Cllr. Donna Stimson

Cabinet Member – Climate Action and Sustainability

Introduction

What is biodiversity

Biodiversity is the variety of life on earth in all its various forms. Biodiversity includes not only species we consider rare, threatened, or endangered but also every living thing—from humans to organisms we know little about, such as microbes, fungi, and invertebrates. Each of these species work together in ecosystems, to maintain balance and support life. No organism can exist in isolation and each contributes to the balance of nature and the survival of life on earth.

Biodiversity supports everything in nature that we need to survive such as food and fuel production, regulation of flooding and climate change, maintaining and being maintained by soil and water quality, shelter and carbon storage. Biodiversity also provides a better living environment with health, recreational and inspirational benefits.

We have many species of plants and animals in RBWM some of which are rare and important within the county. They may be important because they are nationally uncommon, but relatively abundant locally or may have a small population within the Borough.

Many human activities have directly affected species and habitats; altered key ecosystems, and in many cases have led to extinctions both on a local and global scale. The key issues influencing the loss of biodiversity include habitat loss and fragmentation, pollution, increased development pressures and climate change. Conservation efforts are necessary to preserve biodiversity and protect species and habitats within RBWM.

The need for action

At the 1992 Earth Summit in Rio the UK government, along with other countries signed the Convention on Biological Diversity. This is a commitment that all contracting parties shall “rehabilitate and restore degraded ecosystems and promote the recovery of threatened species through the development and implementation of plans or other strategies”. The UK’s strategy was the UK Biodiversity Action Plan (UK BAP), launched in 1994. Local Biodiversity Action Plans (LBAPs) followed, recognising that action for biodiversity conservation ultimately takes place at the local level. LBAPs identify priorities for action and give guidance on implementing targets to reverse the loss of habitats and species

Habitats and species within the Royal Borough of Windsor and Maidenhead, as in much of the UK, have suffered significant declines in recent years and many once common species are becoming increasingly rare. This has happened predominantly due to loss, damage and fragmentation of habitats from agricultural intensification, development and pollution. Although RBWM has large urbanised areas, it is also rich in biodiversity and contains habitats such as woodland, grassland, wetland and farmland, which provide excellent habitat for numerous rare and threatened species. However, without actions which will help protect and enhance the biodiversity, it will continue to decline and we may lose habitats and species that we currently have within the borough.

The Lawton Report, Making Space for Nature (Lawton, 2010), summarised what needs to be done in England to halt and reverse biodiversity losses in four words: ‘more, bigger, better and joined’.

The Biodiversity Action Plan for RBWM has been produced in order to achieve a borough richer in wildlife and covers both local and national concerns as well as contributing at an international level.

The aim of the BAP is to provide guidance on the borough's conservation priorities, how to achieve them and who should, and could, be involved. The BAP provides a baseline, objectives and targets for five years for each main habitat. The aim of the action plan is not to duplicate existing policies and strategies, but it will incorporate and reflect them in order to complement the existing work already being undertaken within the borough such as the Environment and Climate Strategy. The objectives and targets within the BAP will also help to achieve the council's commitment to protecting and enhancing 30% of the land within the Borough by 2030.

The benefits of action

Supporting our natural environment will have a positive impact in tackling climate change. Nature based solutions are going to play a key role in helping to reduce carbon emissions and sequester carbon through new planting, tree cover and in our soils. These solutions are also likely to have wider benefits to the environment helping to improve the quality of our air, water and soils helping to make a healthier environment for our communities. Having a thriving biosystem, with a biodiverse species landscape, is crucial to food production, with a rich wildlife ensuring we have sufficient insects to pollinate our crops.

It has also become clear that our green spaces and nature play a key role in our health and wellbeing. Access to green spaces to walk and cycle help to improve our physical health and promote a healthy lifestyle as well as physical activity like gardening. Being in nature has proven to reduce feelings of stress and anger, improve mood and therefore can help to transform mental health. Therefore, taking direct action and empowering others to take action will help to support healthy and vibrant communities.

Legislation and Policy Context

Local authorities have a key role to play in conserving the biodiversity of the county and RBWM are already engaged in a range of conservation activities within the borough. Local authorities have a statutory duty to consider biodiversity while undertaking all of their functions.

This duty is set out in Section 40 of the Natural Environment and Rural Communities Act (NERC) 2006 and states '*Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, in the purpose of conserving biodiversity*'. The BAP fulfils part of the duty by setting out actions for biodiversity within RBWM and will continue to support projects which conserve and raise awareness of biodiversity.

More recently our Prime Minister has signed the Leaders Pledge for Nature at the United Nations Summit for Biodiversity <https://www.leaderspledgefornature.org/> which commits the UK to 'well-connected and effectively managed systems of Protected Areas'. In September 2020 the Prime Minister announced that that by 2030 30% of UK land would be "protected to support the recovery of nature" <https://www.gov.uk/government/news/pm-commits-to-protect-30-of-uk-land-in-boost-for-biodiversity>

The recently approved Environment Bill has placed additional responsibilities with Local Authorities to support the natural environment. The overarching national approach for tackling the decline in the natural environment includes a new system of spatial strategies for nature covering the whole of England. The aim of these Local Nature Recovery Strategies is to establish priorities and map proposals for specific actions to drive nature's recovery and provide wider environmental benefits.

Other legislation which relates to Local Biodiversity Action Plans are listed below and further detailed in Appendix 1.

- Conservation of Habitats and Species Regulation 2010
- Wildlife and Countryside Act, 1981, as amended
- The National Planning Policy Framework 2012, 2019 and 2021
- Biodiversity 2020: A strategy for England's wildlife and ecosystem services
- The Natural Environment White Paper 2011
- ODPM Circular 06/2005. Biodiversity and Geological
- Environment Act

There are a number of other policies and documents that are linked to the Biodiversity Action Plan which include:

- RBWM Borough Local Plan (2019-2033)
- RBWM Neighbourhood Plans Ascot & the Sunnings; Hurley & the Walthams; Horton & Wraysbury; Old Windsor; Eton & Eton Wick; Windsor
- RBWM Environment and Climate Strategy (2020-2025)
- Dark Skies strategy
- GCN District Level Licensing Scheme
- RBWM Landscape Character Assessment Pts. 1 and 2 (2004)
- RBWM Open Space Study and Audit (2008)
- RBWM Tree and Woodland Strategy
- Wild Maidenhead BAP: Initial Scoping Document (2016), Maidenhead's Nature Matters (2016), Local Biodiversity Action Plan Summary (2019)
- Thames Basin Heaths Special Protection Area Supplementary Planning Document (SPD) (2018)
- RBWM Green and Blue Infrastructure Report (2019)
- RBWM Open Space Study (2019)

Sites of importance within the Borough

1,975ha of the Borough is covered by an ecological designation, including 126ha Ramsar, 1663ha. SSSI and 186ha. Local Nature Reserve. The total coverage equates to almost 10% of the Borough.

There are a number of internationally important sites designated through the European Union (Special Areas of Conservation and Special Protection Areas) and by international convention (Wetlands of International Importance or Ramsar sites) within the borough. SACs provide increased protection to a variety of wild animals, plants and habitats and are a vital part of global efforts to conserve the world's biodiversity. SPAs are areas that have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds, while Ramsar sites are those that are of international importance as wetlands. These sites have been designated by the UK government or statutory bodies such as Natural England. Listed below are the five internationally designated sites within and neighbouring the Borough.

- Chiltern Beechwoods SAC
- Windsor Forest and Great Park SAC
- Thursley, Ash, Pirbright and Chobham SAC
- Thames Basin Heaths SPA
- South West London Waterbodies SPA and Ramsar

Sites of Special Scientific Interest (SSSIs) are designated by Natural England as the very best wildlife and geological sites in the country. Within the borough there are a total of 11 sites that have been designated as SSSI's, details of which are provided in the following table.

Name of SSSI	Size (ha)
Bisham Woods	86
Bray Meadows	6.6
Bray Pennyroyal Field	3.5
Cannoncourt Farm Pit	0.3
Chobham Common	655.7
Cock Marsh	18.3
Englemere Pond	26.1
Great Thrift Wood	14.2
Windsor Forest and Great Park	1778.9
Wraysbury and Hythe End Gravel Pits	117.2
Wraysbury No 1 Gravel Pit	58

Local Nature Reserves are a 'statutory designation made under Section 21 of the National Parks and Access to the Countryside Act 1949'. A LNR is defined as a place with wildlife or geological features that is of special interest locally. There are nine local nature reserves in the Borough, which are listed below.

- -- Bisham Woods LNR;
- -- Park Woods / Gouldings Wood LNR;
- -- Bradnam Wood LNR;
- -- Carpenter's Wood LNR;
- -- The Gullet LNR;
- -- Braywick Park LNR;
- -- Ockwells Park LNR;
- -- Sutherland Grange LNR; and
- -- Arthur Jacob LNR.

There are also a number of locally designated sites within the borough. Local Wildlife sites are non-statutory sites of significant value for the conservation of wildlife. They protect threatened habitats, which in turn protects the species making use of them. Sites are identified by the Thames Valley Environmental Records Centre (TVERC), which collects, collates and makes available information on wildlife and geological sites in Berkshire. Local Wildlife Sites do not have the same level of protection in planning as statutory designated sites, yet are more vulnerable to inappropriate management, neglect and being impacted by development. These are reviewed and monitored on a rolling basis to report on their condition and status for national monitoring purposes, with advice provided to improve their management and enhance their value. There are a total 84 LWS's within the Borough. When last assessed (2021), a total of 33 Local Wildlife Sites in RBWM (39%) were deemed to be in positive conservation management. The proportion of sites in positive conservation management in RBWM is ranked sixth in the county and is 25% lower than the Berkshire average of 64%.

There are a number of Biodiversity Opportunity Areas within the Borough. These BOA's do not represent a statutory designation or a constraint upon activities. Instead, they indicate areas that are considered to be the most important for biodiversity in the area and where there are substantial opportunities to make positive changes for biodiversity. BOAs identify where the greatest opportunities for habitat creation and restoration lie, enabling the efficient focusing of resources to where they will have the greatest positive conservation impact.

Structure of the document

The remainder of the document is structured as follows:

- **Chapter 2: Strategic approach** sets out the over-arching vision and approach adopted in the Biodiversity Action Plan. It explains the rationale for this approach and the key outcomes.
- **Chapter 3: Habitat action plans** sets out the proposed set of priority actions for the next five years, split by the type of habitat and the types of action.
- **Chapter 4: Monitoring and delivery** sets out how the plan will be delivered and monitored.

Strategic approach

The Biodiversity Action Plan is the key pillar of the natural environment theme of our Environment and Climate Strategy, which seeks to protect and enhance the natural environment, green our towns and urban areas and increase awareness of biodiversity. Therefore, the overarching approach is based on those objectives. The overarching vision for our Biodiversity Action Plan is:

‘To reverse the decline in our natural environment and through better data, partnerships and direct action to increase biodiversity across the borough’

In support of this, we will work with the other Berkshire Authorities to support the Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (BBOWT) ‘Wilder’ target to have **30% of land for nature by 2030**. We will also support the national commitment that has been made to well-connected and effectively managed systems of Protected Areas which are protected to support the recovery of nature. The scale of the challenge for this BAP is then clear: to ensure high standards of biodiversity and bioabundance on the 1,975 hectares already ecologically designated in the Borough, and to identify an additional 3,977 hectares for nature by 2030.

Strategic Framework

We recognise that the vision is ambitious and will require action across a wide range of stakeholders. It will also require targeted and prioritised action, which will require a stronger evidence base to support our work moving forward. Therefore, we have set out three themes for action:

Better data: we recognise that to monitor and measure the success of the BAP, we need to have better quality of data. It will also support better evidence and allow us to prioritise future action to make sure the proposals in future plans will have the greatest benefit in achieving our aims.

Stronger partnerships: the ambitious vision and targets of the plan will only be delivered through partnerships. This will include engagement with key landowners, delivery partners and community groups. We will also work to deliver better communication, education and awareness of biodiversity in line with our objectives.

Direct action to improve biodiversity: either through the council, partners organisations or community groups we will deliver a series of projects that will improve our priority habitats and support our species.

Areas of focus

This Biodiversity Action Plan features the following Habitat Action Plans (HAPs) covering broad habitat types. These were developed and agreed in partnership with our key stakeholders and community groups:

1. Woodland HAP
2. Grassland HAP
3. Farmland HAP
4. Waterways HAP
5. Standing Water HAP
6. Urban HAP

Not all habitats and species within RBWM have been included within the Biodiversity Action Plan, as this would be unrealistic working within the available resources. Rather, we have identified a number of key habitats and species which will provide a focus for the work within the BAP. The habitats and in turn associated species have been chosen because they fulfil at least two of the following criteria:

- Species which have viable/significant populations within RBWM
- Habitats which are widespread across the Borough.
- Species or habitats which can be influenced by RBWM (through site management, development, projects, statutory duties, partnership or engagement).
- Species or habitats which are rapidly declining through Britain and/or RBWM and are therefore a conservation priority.
- Flagship species which are highly characteristic to RBWM and popular with the general public.
- Indicator species which reflect the state of an environment and/or indicate the diversity of other species within an area.

Each Habitat Action Plan has been broken down into actions under each of three themes set out in the strategic framework.

- Those related to data collection and evidence gathering.
- Those with a direct benefit to biodiversity/nature conservation.
- Those that relate to stakeholder engagement, relationship building or partnerships

Each HAP includes actions to survey and improve the ecological quality of existing protected sites.

Carbon Sequestration

For major natural environmental projects that are likely to have a significant carbon sequestration impact, a desktop-based assessment will be undertaken prior to project implementation to calculate how much carbon is estimated to be sequestered. If there are opportunities to increase the amount, whilst also delivering the primary objectives of the project then they will be explored.

Communication

Beyond specific Community Engagement and Partnership actions for each HAP, the successful delivery of this plan depends on significantly increasing understanding of biodiversity in the Borough amongst residents, businesses, landowners and civil society groups. The positives of the wild things and wild places we already have, and the negatives of what we have lost, need to be widely

communicated as part of the Council's day to day communications with residents, and in a special programme of key messages (see General Themes below). This will be supported by a senior level commitment within the Council to create and deliver an effective communications programme that supports individual actions and gives a clear expression of the overall aims of the BAP and the need for the community as a whole to engage in it.

Resourcing and Delivery

In the Council's recently adopted Corporate Plan covering 2021/26, action to tackle climate change and improve the natural environment is listed as one of the Council's top 3 priorities. The Council has recruited two new staff to work on increasing and supporting biodiversity, in a Natural Environment team. The Natural Environment Team will take overall responsibility for delivering the Council's responsibilities in this plan and they will continue to draw in support from other colleagues from across the Council including Ecologists, Planners and Tree specialists. There is also a key role for enforcement at the council. We will ensure that biodiversity enhancements at development sites are implemented, and Tree Replacement Notices are complied with.

In addition, we will continue to invest in our partnership with Groundwork South who jointly run the Braywick Nature Centre with the Council. This relationship has delivered huge benefits to the natural environment in the Borough over recent years delivering both on the ground conservation management but important environmental education for thousands of young people from local schools and community groups.

In 2021/22, the Council has allocated £80,000 for natural environmental capital works which combined with external funding secured will deliver;

- New interpretation signage at Braywick Nature Reserve and Battlemead,
- Pond enhancements,
- Signposted nature trails at Braywick Nature Reserve
- Large replanting of Kidwells Park to improve habitat for pollinators
- Planting of 8000 trees at Ockwells

Whilst the Council will continue to invest and improve biodiversity across its estate as well as using other tools at its disposal to influence the wider community, we recognise that we need to work more collaboratively across the Borough and include as many people as possible.

The forthcoming Climate Partnership to which the Council has committed £250,000 annually, to ensure the secretariat function is well resourced, will have a key role in delivering natural environment improvements across the Borough. Funding will be needed to achieve the targets described in the Habitat Actions Plans and General Themes below. The Climate Partnership will include businesses, academics, community groups and residents and this will enable it to oversee the breadth and depth of issues arising from 30% by 2030 within the Borough. Until the Climate Partnership is in place, the Council will play a coordinating role to bring together the key partners.

RBWM will work with volunteers and local groups to access some funding opportunities. These may be national schemes run by corporates, Lottery funding, Community Infrastructure Levy (CIL) funds, the council capital bids, planning obligations (section 106 agreements) or other funding resources. The Biodiversity Action Plan will help to raise awareness of the value of biodiversity interventions that may benefit from additional funding.

Habitat Action Plans

Woodland Habitat Action Plan

Woodlands are one of the UK's richest wildlife habitats. Woodlands are important for most forms of wildlife, including trees, shrubs, fungi, lichens, mammals, birds and invertebrates. They contain large numbers of species as well as provide important habitat for rare and threatened native species. The woodlands within RBWM include both areas of ancient woodlands such as Windsor Forest and Great Park and Bisham woods and newly planted woodland areas such as those at Ockwells Park. The multi-functional value of woodlands is well understood and they provide both direct value such as timber production and recreation but also indirect value such as flood management, reduction in air pollution, health benefits, climate change mitigation and urban cooling.

Some woodland habitats within RBWM comprise priority habitats which include the following:

- Lowland beech and yew woodland
- Lowland mixed deciduous woodland
- Wet woodland
- Wood-pasture and parkland
- Traditional orchards
- Hedgerows

Sub habitats

Within RBWM, we have large areas of woodland and this woodland HAP will include the following sub habitats:

- Ancient Woodland
- Veteran Trees
- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Wood Pasture and Parkland
- Hedgerows
- Orchards
- Non- priority habitat woodland.

Associated Species

Numerous species are associated with woodland habitats and the following species/ groups of species have been chosen to represent woodland habitat which either have a stronghold within RBWM, are nationally, regionally or locally declining or are flagship species.

Noctule Bat - Our largest bat, this species roosts within tree cavities and forages over woodland and rides. Noctule bats are protected under European and UK legislation and are a priority species. Although widespread in the UK currently, their roosting habitat is under threat from habitat loss and fragmentation.

Dormice - Dormice are a priority species and are in current decline due to habitat loss. There are no known records of dormice within RBWM, however, our neighbouring Boroughs have strongholds of dormice and therefore they may have spread within RBWM boundaries.

Lesser spotted woodpecker - The lesser spotted woodpecker is the smallest and least common of the three woodpeckers that are resident in Britain. Their population is estimated to have fallen by 83% since 1970, with no more than 2,000 pairs thought to be left in the UK. The key factor in the decline of this species is thought to be loss of ancient and mature woodland as well as the removal of rotting and dead wood.

Stag Beetle – The UK’s largest beetle. It is a nationally declining species, although there is a stronghold within the Thames Basin in which Windsor and Maidenhead fall. They require rotting dead wood as habitat and therefore the loss of this habitat, particularly within woodlands, has caused their decline in numbers.

Butterflies – It is thought that 76% of the entire butterfly population has declined over the last 40 years and numerous butterfly species are associated with woodland habitat found within RBWM including the speckled wood and silver-washed Fritillary. There are 59 butterflies on the British list, of which more than half have been recorded in the Royal Borough.

Bluebell – Bluebells are a native species that grow in woodlands and are protected under UK Law. Although still common in the UK/ the borough, they are threatened by habitat destruction, such as the loss of hedgerows, scrub and woodlands.

Current status

The UK is one of the least wooded countries in Europe with the area of woodland estimated at 3.23 million hectares representing 13% of the total land area in the UK and 10% in England (Forestry Statistics published by Forestry Commission, 2013). However, woodlands represent the greatest area of priority habitat in Berkshire and within RBWM , woodland and their sub habitats cover an area of approximately 6580ha which equates to about 33% of the entire borough land. Ancient woodland, which is defined as land that has been continuously wooded since 1600 and is deemed irreplaceable, represents 6.22% of the woodland within the borough and should be protected from development and other external pressures.

The following table shows the woodland types within the borough and the areas and percentage of the borough they cover.

Woodland type	Area (ha)	Percentage of borough
Ancient Woodland	1233.56	6.22
Woodland: Broadleaved	0.211	0
Woodland: Broadleaved Plantation	401.747	2.02
Woodland: Broadleaved Semi Natural	1573.61	7.93
Woodland: Coniferous Plantation	129.108	0.65
Woodland: Coniferous Semi Natural	3.321	0.02
Woodland: Mixed Plantation	245.474	1.24
Woodland: Mixed Semi Natural	7.073	0.04
Lowland Mixed Deciduous Woodland	1310	6.6

Woodland type	Area (ha)	Percentage of borough
Lowland Beech and Yew Woodland	159.299	0.8
Wet Woodland	48.869	0.25
Traditional Orchard	39.064	0.2
Wood Pasture and Parkland	1380.832	6.96
Parkland and Scattered Trees	28.061	0.14
Parkland and Scattered Trees: Broadleaved	15.848	0.08
Recently Felled Woodland: Broadleaved	0.013	0

Threats to woodland habitat

There are numerous threats to woodland habitats within the borough, which include the following:

Fragmentation of habitat - the isolation of woodlands leaves them unable to sustain populations of woodland species. This is caused by development or clearance for other land uses.

Inappropriate management – the lack of active woodland management due to depleted funding and resources , poor timing of forestry operations and the use of herbicides and fertilisers on woodland margins and edge habitats.

Impact of Invasive species – the spread of invasive species such as rhododendron and laurel has caused degradation to many of our woodland flora.

Loss of areas of wet woodland - due to drainage and change of management.

Removal of standing dead wood - the removal of deadwood for health and safety reasons

Increasing deer population - deer browsing within woodlands has resulted in the damage of regenerating and newly planted trees and can impact the woodland structure.

Inappropriate recreational activity – due to increasing public access, trampling of ground flora, vandalism, dog faeces and rubbish dumping.

Pests and diseases – such as ash dieback and oak processionary moth

Climate change- this could result in changes in vegetation communities and put certain species at risk

Loss of traditional management practises - such as coppicing and pollarding

Objectives for the 5 year Plan

Woodland and sub habitats are 33% of the borough and the largest proportion of habitat. Therefore managing woodland habitats must be a top priority for the BAP if we are to restore them to the quality needed to achieve 30% for nature by 2030 and reverse the decline in the natural environment. The woodland HAP should result in a greater understanding of the woodlands that we have within the Borough, protect and provide better management for existing woodlands with regards to biodiversity and increase the area of woodland, trees and hedgerows through planting. The following table sets out the objectives and targets for the first five years of the plan.

Data Collection

Objective	Target	Responsibility		Target date
		Lead	Partner	
Understand the distribution of Priority Habitat woodland and the species they support	Survey 25% of woodland LWS in five years to inform priority habitat distribution and condition	TVERC	RBWM	2025
	Find out whether RBWM have dormice within the Borough by surveying 30 accessible woodlands, starting with the ones closest to the boundaries of the borough where dormice have been recorded	RBWM Wild Group	Volunteers Mammal Society	2025
	Map survey findings on RBWM GIS and data share with TVERC and local recorders.	RBWM	TVERC	2025
	Engage with Mammal society and BCA with regards to existing data	RBWM	Mammal Society BCA	2023
	Undertake bat surveys in 30 woodlands to increase our knowledge of woodland bat species and distribution within the borough	RBWM Wild Groups	South Bucks and Berks Bat Group TVERC	ongoing
Understand the distribution of Priority Habitat hedgerows	Undertake an annual programme of hedgerow surveys, surveying 5km per year	RBWM	Wild groups Volunteers	2024
	Add to RBWM GIS layer and send data to TVERC and I record			

Data Collection

Objective	Target	Responsibility		Target date
		Lead	Partner	
Understand the distribution of veteran/ancient trees	<p>Promote the surveying, recording and monitoring of all veteran/ancient trees in the Borough</p> <p>Encourage landowners to register ancient trees at: https://ati.woodlandtrust.org.uk/.</p> <p>Allocate TPO's where necessary</p>	RBWM		2025
Identify opportunities to enhance the biodiversity value of existing woodlands and create new woodland	Undertake woodland surveys to identify 20 woodlands for biodiversity improvement	RBWM	Volunteers	2024
	Identify five woodland LWS with potential to be extended	RBWM	TVERC	2023
Achieve 30 by 30	Identify how targets will have contributed to 30 by 30 by 2025 and how much additional woodland and hedgerow would need to be created by 2030. Estimate carbon sequestered.	RBWM		2023
	Start to identify opportunities to create or enhance additional woodland and hedgerows to contribute towards 30 by 30 and, where practicable, start creation/enhancement work	RBWM		2025

Direct benefit to biodiversity

Objective	Target	Responsibility		Target date
		Lead	Partner	
Maintain and increase the area of priority habitat woodland in good condition in the Borough	Design and start to implement new management regimes to improve the condition and carbon sequestration of 20 existing woodlands	RBWM		2025
	Maintain all SSSI woodland in favourable condition	NE		2025
	Ensure 30% of LWS woodland in positive management	RBWM	TVERC Wilds Groups	
Increase the area of other woodland in the Borough	Increase the number of trees by 15,000 via natural regeneration and augmented when necessary via planting.	RBWM	Wild groups Volunteers	2025
Increase the length of hedgerow in the Borough	Plant 5km of native hedgerows in the Borough, with prioritisation to areas where hedgerows have been previously removed.	RBWM	Wilds groups Volunteers	2025
Increase the opportunities for invertebrates	All council owned woodlands to have at least 2 deadwood piles partially buried.	RBWM	Wild groups Volunteers	2024
Invasive species management	Ensure that all council owned woodlands are positively managing invasive plant species and stopping the spread of the species	RBWM	Volunteer	Ongoing each year

Community Engagement and partnerships

Objective	Target	Responsibility		Target date
		Lead	Partner	
Encourage the creation and enhancement of biodiverse woodlands and hedgerows	Encourage 50 landowners in the Borough to create woodland and/ or plant trees and hedgerows on their land and manage them for biodiversity resulting in new woodland, tree cover and hedgerow.	RBWM	National Trust Wild Groups	2025
	Provide best practice guidelines to other landowners, including private individuals and organisations, schools and other public bodies.	RBWM	NE, BBOWT	From 2022
	Engage with LWS landowners to encourage tree planting to extend existing LWS/Priority Habitat woodlands by 5ha	RBWM	Wilds groups	From 2022
Invasive species management	Providing education to other woodland owners within the borough with regards to invasive plant species management in woodland	RBWM		2025

Grassland Habitat Action Plan

Grasslands cover a large area of the UK and although they are dominated by grass cover, they can also contain lots of other plants species. Grasslands provide vital habitats to a range of native species including invertebrates, reptiles, amphibians and small mammals some of which are rare and threatened species within the UK. Not only do grasslands provide habitat for wildlife, but provide opportunities for education and recreation, involving the local communities in projects and provide huge potential for locking up carbon through the plants associated within grassland habitats and also the fungi and bacteria associated within the soil.

Some grassland within RBWM comprise priority habitats which include the following

- Coastal and Floodplain Grazing Marsh
- Lowland Meadows
- Lowland Dry Acid Grassland

Numerous UK BAP Priority species associated with grassland habitats occur in the Borough, including: Great crested newt, reptiles, small mammals and invertebrate species.

Sub habitats

Within RBWM, we have large variety of grassland habitats. This grassland habitat Action Plan will include the following sub habitats:

- Roadside verges
- Grazing marsh
- Meadows
- Outdoor sports grounds
- Railway and Motorway/ A road embankments

Associated Species

Numerous species are associated with grassland habitats within the borough and the following species/ groups of species have been chosen to represent grassland habitat which either have a stronghold within RBWM, are nationally and regionally declining or are flagship species.

Glow Worm – Glow worms are fairly common across the UK but there have been some declines over the last 10 years, mainly due to changes in land use and habitat, uses of pesticides and light pollution. There are a small number of sites within the borough that glow worms are still found including Cookham.

Barn Owl – A nationally protected and amber listed species, barn owl numbers have steadily declined since 1990. Barn owl nesting occupancy in 2020 was 8.5% less than the average of all previous years (Barn owl Trust, 2020). They require tussocky grassland to provide mammal prey and undisturbed nest sites in buildings or tree cavities.

Reptiles - British reptiles are protected under UK Law and are listed as priority species. Reptiles are found in a range of places, including grasslands. There are six species of reptiles in the UK, four of which are known to reside within the borough (adder, slow worm, grass snake and common lizard).

Pennyroyal – this plant species is protected under Schedule 8 of the Wildlife and Countryside Act, 1981, as amended and is a priority species. It is considered endangered within the UK. It is a priority species and is protected in several SSSI's including Pennyroyal Field in Maidenhead.

Invertebrates, including bees and butterflies – Wild bees including solitary and bumble bees are facing a serious decline within the UK due to habitat loss, pesticide use and climate change. This is also the same for other invertebrates such as moths, butterflies and wasps. All these species provide essential roles within the environment with many food crops depending on these pollinators, many of which rely on grassland for food sources.

Current Status

In England there are around 4.5 million hectares of grassland which covers many different types. Many species rich grasslands have been lost in the past 20 years due to lack of appropriate management. RBWM own and manage some of our larger grassland habitats including Allen’s Field, which is one of our Suitable Alternative Natural Greenspaces (SANG), Sutherland Grange LWS, and Battlemead Common. These sites are not only managed for wildlife but also provide benefits for people and their quality of life.

In RBWM, grassland habitats constitute an estimated 5788 ha of the borough, approximately 29%, with the following grasslands recorded (TVERC, 2020).

Grassland type	Area (ha)	Percentage of borough
Marsh: Marshy Grassland	3.675	0.02
Poor Semi Improved Grassland	172.913	0.87
Lowland Calcareous Grassland	21.663	0.11
Calcareous Grassland: Semi Improved	0.735	0
Calcareous Grassland: Unimproved	21.663	0.11
Lowland Dry Acid Grassland	94.481	0.48
Acid Grassland: Semi Improved	107.341	0.54
Acid Grassland: Unimproved	81.47	0.41
Dry Heath Acid Grassland	3.104	0.02
Lowland Meadows	86.243	0.43
Improved Grassland	4625.79	23.31
Neutral Grassland	2.789	0.01
Neutral Grassland: Semi Improved	538.433	2.71
Neutral Grassland: Unimproved	26.244	0.13
"Possible Priority Grassland Habitat"	1.397	0.01

Threats

The grassland areas within RBWM are under threat due to the following reasons:

Lack of management – this leads to scrub encroachment and invasion of coarse grasses which out compete wildflower species.

Inappropriate management - over mowing which causes floristic changes and improving soils with nutrients.

Overgrazing - particularly by cattle and horses which results in trampling and poaching and can become invaded by species such as ragwort, dock and thistles

Development pressures – this will result in the loss of species rich grassland habitats and fragmentation of this habitat.

Agricultural practices – the increased use of herbicides and fertilisers of grassland habitats particularly within agricultural environments cause nutrient enrichment and a decline in species diversity, and the increase in arable use.

Air pollution – including nitrate deposition.

Increased recreational use – which includes trampling of vegetation and disturbance to wildlife

Objectives for the 5 year Plan

Grassland is the second largest habitat (29%) in the borough and so offers great opportunities for reversing the decline in our natural environment. The grassland HAP should result in a greater understanding of the habitat that we have within the Borough, protect and provide better management for existing grassland with regards to biodiversity and improve the condition of our grassland. The following table sets out the objectives and targets for the first five years of the plan.

Data Collection

Objective	Target	Responsibility		Target date
		Lead	Partner	
Understand the distribution of Priority Habitat grasslands and the species they support	Survey 25% of grassland LWS in five years to inform priority habitat distribution, condition and carbon sequestration	TVERC	RBWM	2025
	Survey at least 20 sites for each of the associated species in five years to better understand their distribution	Wild groups	RBWM, BBOWT	2025
Identify opportunities to increase the distribution of Priority Habitat grassland	Survey at least 5ha of potential priority habitat grassland sites with the aim to propose new LWS	RBWM	Wild groups, TVERC	2025
	Identify 10% of other grassland (from direct benefit to biodiversity table below) creation or enhancement that can be managed to develop into priority habitat	RBWM	RBWM, Developers	2023
Identify opportunities to enhance the biodiversity value and carbon Sequestration of existing grasslands	Review management plans for all RBWM owned grasslands to optimise opportunities for wildlife (to include recreational areas, roadside verges and roundabouts) and estimate sequestered carbon.	RBWM		Update management plans by 2024
Achieve 30 by 30	Identify how targets will have contributed to 30 by 30 by 2025 and how much additional grassland would need to be created by 2030	RBWM		2022

Direct benefit to biodiversity

Objective	Target	Responsibility		Target date
		Lead	Partner	
Increase the area of priority habitat grassland in the Borough	Encourage 50% of LWS grassland in positive management	RBWM	TVERC, BBOWT	2025
	Maintain all SSSI grassland in favourable or favourable recovering condition with at least 40% in favourable condition.	NE	RBWM	2025
Increase the area of other grasslands managed for biodiversity	Positively manage 5km of roadside verge and roundabout grasslands	RBWM		2025
	Provide best practice guidance for RBWM grassland areas	RBWM		Provide best practice guidelines by 2025
	New developments to create 20 ha biodiverse grasslands	RBWM	Developers	2025

Community Engagement and partnerships

Objective	Target	Responsibility		Target date
		Lead	Partner	
Encourage the creation and enhancement of biodiverse grasslands	Engage with the National Trust to look at increasing the land owned by them for biodiversity by 10%	RBWM	National Trust Wild Groups	2025
	Provide best practice guidelines to other landowners, including private individuals and organisations, schools and other public bodies.	RBWM	NE, BBOWT	From 2022

Farmland Habitat Action Plan

The area of farmland within England is approximately 9.34 million hectares, about 70% of the land area of the England. There are large areas of agricultural land across RBWM including both pasture and arable. Much of the wildlife interest in arable areas is now found at the field margins with many arable weeds now among our rarest plants.

Farmland habitats within RBWM comprise priority habitats which include the following

- Arable field margins
- Ponds
- Hedgerows

Numerous protected species and UK BAP Priority species associated with farmland habitats occur in the Borough, including a number of bird species (skylark and lapwing), reptiles and invertebrates.

Sub habitats

Within RBWM, we have large areas of farmland. This HAP will include the following sub habitats:

- Field margins
- Boundary hedgerows
- Set aside
- Winter stubble
- Cropland
- Pasture/ grazing land

Associated Species

Numerous species are associated with farmland habitats and the following species/ groups of species have been chosen to represent the farmland habitats within the borough, which either have a stronghold within RBWM, are nationally and regionally declining or are flagship species.

Barn Owl – A nationally protected and amber listed species, barn owl numbers have steadily declined since 1990. Barn owl nesting occupancy in 2020 was 8.5% less than the average of all previous years (Barn owl Trust, 2020). They require tussocky grassland to provide mammal prey and undisturbed nest sites in buildings or tree cavities.

Skylark – Skylarks are in the red list as a bird of conservation concerns. In recent times the Skylark population has plummeted so that today the population is about one-third what it was 30 years ago. The decline is mostly due to the changes in agricultural practices such as the increase in intensive agricultural processes decreasing suitable habitat for breeding and foraging.

Yellowhammer – The Yellowhammer is a priority species and is a red listed bird species of conservation concern. The yellowhammer population has declined over the last 40 years and it is thought that main factor in their decline is low overwinter survival, probably because fewer seed food sources are available to them on farmland.

Swallows - Swallows are widespread and common birds of farmland and open pasture near water. Although their numbers in the UK have fluctuated over the last 30 years they are still a regular visitor within the borough.

Invertebrates, including bees and butterflies – Wild bees including solitary and bumble bees are facing a serious decline in numbers in farmland habitats due to habitat loss, pesticide use and

climate change. This is also the same for other invertebrates such as beetles, moths, butterflies and wasps. All these species provide essential roles within the environment with many food crops depending on these pollinators.

Current Status

The agricultural area currently in the UK is approximately 9.09 million hectares, which is about 70% of the land area of the England (DEFRA 2019). This includes land for cereals and grassland for cattle, pigs, sheep and other farm animals. Based on DEFRA Agricultural census 2010, the area of farmed land in Berkshire is 64,188ha.

In RBWM, the total estimated area of farmland habitat has been mapped using available datasets (TVERC, 2021) and include the following:

Farmland type	Area (ha)	Percentage of borough
Cultivated Disturbed Land	4.463	0.02
Cultivated Disturbed Land: Amenity Grassland	733.386	3.70
Cultivated Disturbed Land: Arable	4359.27	21.97
Cultivated Disturbed Land: Ephemeral Short Perennial	6.947	0.04
Ponds	1.391	0.01

Threats

Farmland habitats within RBWM are under threat due to the following reasons:

Intensification of crop habitat – including the increased use of herbicides and pesticides within arable areas leading to nutrient enrichment and a decline in species diversity.

Intensity of farmland management – the increased grazing on pastoral land

Increase of pollution – due to an increase in livestock farming causing an increase to the levels of nitrogen and phosphorus.

Reduction in rotation of cereal crops and other land covers - which includes including grass leys and fallows.

Regular recreation – increase of horse riders within farmland field margins.

Objectives for the 5 year Plan

Farmland covers 26% of the borough, the third largest habitat area after woodland and grassland. Therefore, partnerships with landowners and farmers will be critical to reversing the decline in our natural environment. The farmland HAP should result in a greater understanding of the habitats that we have within the Borough, protect and provide better management for the existing farmland with regards to biodiversity and improve their condition. The following table sets out the objectives and targets for the first five years of the plan.

Data Collection

Objective	Target	Responsibility		Target date
		Lead	Partner	
Understand the distribution of farmland Priority Habitats and the species they support	Survey 50ha of arable field margins/hedgerows in five years to inform priority habitat distribution and condition	TVERC, Wild groups	RBWM	2025
	Undertake a desk-based study to identify existing farmland ponds	TVERC	RBWM	2022
	Undertake 20 farmland bird surveys in five years to better understand their distribution	Wild groups	RBWM	2025
	Undertake annual monitoring of 10 new barn owl boxes to record use.	RBWM Bisham Barn owl group	Volunteers	2025
Achieve 30 by 30	Identify how BAP targets for farmland will have contributed to 30 by 30 by 2025	RBWM	Landowners	2025

Direct benefit to biodiversity

Objective	Target	Responsibility		Target date
		Lead	Partner	
Sign up to the GCN licencing scheme	Collaborate with Berkshire borough ecologists and the Naturespace partnership to ensure the scheme is progressing.	RBWM	Naturespace Natural England	2022 to start and ongoing
Increase the numbers of breeding barn owls within the Borough	Collaborate with the local barn owl group and put up at least 10 new barn owl boxes in areas identified as potential nest sites	RBWM Bisham Barn owl group	Volunteers	2022

Community Engagement and Partnerships

Objective	Target	Responsibility		Target date
		Lead	Partner	
Form partnerships with local land owners	Engage with landowners, NE, DEFRA, NT and ELM's to discuss future partnerships with regards to biodiversity	RBWM	Wilds Groups	2025
Encourage the creation and enhancement of biodiverse standing water on farmland	Provide best practice guidelines to landowners. Collaborate with new GCN District Licensing Officer and landowners/developers to identify and secure new opportunities for pond creation within farmland in the borough.	RBWM Nature Space	NE, BBOWT	From 2022

Waterways

Waterways are dynamic and varied habitats and are for invaluable wildlife habitats in the Borough.

The River Thames is one of the country's largest and most important rivers although there are several other waterways including Local Wildlife sites (LWS) such as the Greenway LWS and York Stream LWS which run not only through rural areas but also very built up areas including the centre of Maidenhead. Waterways, either in their own right or in association with other habitats, are a vital nature conservation and wildlife resource for the borough. Marginal and bankside vegetation is also an integral part of the river habitat and acts as an important migration corridor

A significant proportion of our rivers, streams and other water courses are under threat. Protecting and improving our watercourses is an important part of achieving sustainable development and is vital for the long term health and well being of the residents within the borough.

Waterways can not only provide economic importance through food and drinking resources, tourism and recreational opportunities, but can provide important wildlife habitats and provide important wildlife routes and stepping stones for a number of species within the borough as well as significant potential for carbon sequestration.

Some waterways habitats within RBWM comprise priority habitats which include the following

- Rivers
- Reedbeds

Sub habitats

Within RBWM, we have a number of waterways. This waterways HAP will include the following sub habitats:

- Rivers
- Streams
- Canals
- Ditches

Associated Species

Numerous species are associated with waterways and the following species/ groups of species have been chosen to represent the waterway habitats within the borough, which either have a stronghold within RBWM, are nationally and regionally declining or are flagship species.

Brown trout – this species is a freshwater fish and resides within the borough's waterways. Although it is widespread within the UK, the species is listed as a priority species and is thought to be threatened due to over fishing, habitat loss, pollution and climate change.

Water vole – water voles are protected under UK legislation and are a priority species. Water vole populations nationally are continually declining due to factors such as loss of riverside habitats, development, increased pollution and predation.

Kingfisher – kingfishers are found along the watercourses within the borough and nest in earth banks along the rivers and streams. They are an amber listed bird of conservation concern and have declined in numbers due to factors such as human disturbance, increased development, pollution increased predation and lack of food due to invasive species.

Loddon Lily – this plant species thrives within Berkshire and is found along the Thames path between Oxford and Maidenhead. The species has been recorded in a few places within the borough and is threatened due to increasing pollution and human disturbance.

Aquatic invertebrates – there are a huge number of invertebrates that require habitat within the waterways to survive. Their presence is the standard indicator of the health of the habitat they live in and supporting the food chain. However, many of our aquatic invertebrates are declining in the face of pollution, invasive species, abstraction and development.

Current status

There are about 90,000 km of rivers in UK, and they are found in all parts of the country. Within RBWM, the River Thames, which is the largest river in UK, flows through the borough for 25 miles. In addition the Jubilee River, which is a seven-mile-long man-made flood channel, forms part of the Maidenhead, Windsor and Eton flood alleviation scheme, has been constructed to reduce the flooding risk to approximately 3000 local properties.

In RBWM, the total estimated area of waterway habitat has been mapped using available datasets (TVERC, 2021) and include the following:

Waterways type	Area (ha)	Percentage of borough
Running Water	1.934	0.01
Running Water: Eutrophic	95.748	0.48
Rivers	1.915	0.01
Reedbeds	0.549	0.00

Threats

Waterways within RBWM are under threat due to the following reasons:

Declining water quality and increasing pollution - due to nutrient enrichment through agricultural runoff and leaching and sewerage overflow or spills.

Inappropriate management – river dredging, re sectioning and the lack of management of bankside

Over development – the increase in flood lighting and lighting along rivers can have a detrimental effect on nocturnal wildlife including birds and bats.

Climate change – which can cause enormous fluctuations in water levels.

Increased recreational use – which includes trampling of vegetation and disturbance to wildlife

Inappropriate Land drainage and management practices- these can adversely affect water quality and river flows

Impact of Invasive species – the spread of invasive species such as Himalayan Balsam and New Zealand Pygmyweed has caused degradation to the boroughs waterways and the increase in American mink and signal crayfish has caused the population of our native species to decline due to predation and competition for food resources.

Man made barriers - Barriers in the form of weirs, locks and flood defence structures alter the natural flow and sediment regime of the river and prevent fish migration

Objectives for the 5 year Plan

The waterways HAP should result in a greater understanding of the habitats that we have within the Borough, protect and provide better management for the existing waterways with regards to biodiversity and improve their condition. The following table sets out the objectives and targets for the first five years of the plan.

Data Collection

Objective	Target	Responsibility		Target date
		Lead	Partner	
Understand the distribution of Priority Habitat rivers and reedbed and the species they support	Survey 30% of river/reedbed LWS in five years to inform priority habitat distribution and condition	TVERC	RBWM	2025
Ascertaining waterway quality/condition in order to better understand our baseline and strategically plan for biodiversity net gain in the future.	Monitor the water quality for PO4 and NO3 in all main waterways in RBWM	RBWM	Wilds groups Volunteers	Annually from 2022
	Annual participation in Thames WaterBlitz Outreach to National Riverfly Monitoring Scheme and investigate opportunities for joint working Work with the Riverfly project to secure and train new volunteers and implement an effective 5 yr survey program/strategy to cover our waterways.	RBWM	Wilds Groups Volunteers	2025
Understand the distribution of Kingfishers in the Borough	Outreach to BTO/RSPB/local bird groups/recorders in order to obtain data to identify where Kingfishers use and nest along our waterways. Map all known kingfisher nest sites on waterways within the borough, map on RBWM GIS system and provide all the data regarding kingfisher to TVERC	RBWM	BTO RSPB Local recorders	2025

Data Collection

Objective	Target	Responsibility		Target date
Understanding the status of water vole populations	<p>Obtain data from local groups to identify where water voles are present along our waterways.</p> <p>Conduct water vole and habitat condition surveys to fill in gaps in data.</p> <p>Identify stretches of suitable degraded riparian habitat where habitat enhancements such as suitable vegetation planting/bank re-profiling etc could be made to join up existing habitat.</p> <p>Make efforts to secure permission from EA/landowners/Canal and River Trust (and, where possible, resource) to undertake habitat enhancement works/planting along river banks (start these works as soon as this secured).</p>	RBWM	Local recorders Volunteers Wilds Groups TVERC	2026
Achieve 30 by 30	Identify how targets will have contributed to 30 by 30 by 2025 and how much additional waterway habitat would need to be created/enhanced by 2030	RBWM		2022

Direct benefit to biodiversity

Objective	Target	Responsibility	Target date
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Direct benefit to biodiversity				
		Responsibility		
		Lead	Partner	
Enhance the biodiversity value of existing waterways	Encourage 50% of LWS waterways in positive management	RBWM	TVERC	2025
	Produce a management plan for waterways north of Maidenhead that ensures 2km is enhanced/maintained for biodiversity	RBWM		
	Improve 3 km of waterway bankside vegetation habitat for wildlife by making improvements e.g. for access, nesting, flora for target species	RBWM	Wilds Groups Volunteers	2024
Manage/eradicate INNS along our waterways	Undertake INNS removal along 5km of waterways	RBWM		2025/ ongoing

Community Engagement and Partnerships				
Objective	Target	Responsibility		Target date
		Lead	Partner	
Manage/eradicate INNS along our waterways	Form partnership with landowners/National Trust/Wildlife Trusts/EA/Rivers and Canal Trust to form an INNS taskforce to identify presence of non-native invasive plant species and devise/implement effective control/eradication programs where possible.	RBWM	Volunteers	2026

Community Engagement and Partnerships

Objective	Target	Responsibility		Target date
		Lead	Partner	
	Form partnerships with other councils and EA with regards to mink control			
Increase our baseline data, engage with the public, network and build partnerships with local experts and recorders in order to increase awareness/knowledge of riparian and associated habitats	Organise and run/participate in existing bioblitz events along our waterways	RBWM	Volunteers Wilds Groups Local Recorders Thames21 Thames Water	Every year from 2022
Encourage the creation and enhancement of biodiverse waterways	Provide best practice guidelines to other landowners, including private individuals and organisations, schools and other public bodies.	RBWM	NE, BBOWT	From 2022 80% of landowners by 2025

Standing water

The standing water action plan relates to still or very slow flowing open water habitats including ponds, lakes and seasonal flushes. Within the borough there are oligotrophic (nutrient poor) mesotrophic (moderately nutrient rich) and eutrophic (nutrient rich) areas of standing water. Both eutrophic and mesotrophic waters can be very diverse, each with its own range of common and less common species. Standing water areas also have immense value for communities providing access to water for recreational, educational and nature conservation activities. The ponds and lakes within the borough are used for fishing, boating, socialising, education and nature conservation.

The HAP will help to maintain the current range, extent and diversity of wildlife rich ponds and lakes throughout the area and encourage the sympathetic management of them and their adjacent habitat. In addition, it will seek to provide additional ecologically beneficial standing water within the borough through the creation of new wetland areas.

Some standing water habitats within RBWM comprise priority habitats which include the following

- Eutrophic standing waters
- Mesotrophic lakes
- Ponds
- Reedbeds, which overlap with the waterways HAP.

Numerous protected species and UK BAP Priority species associated with standing water habitats occur in the Borough, including great crested newts, amphibians, birds and invertebrates.

Sub habitats

Within RBWM, we have a number of standing water habitats. This HAP will include the following sub habitats:

- Ponds
- Lakes
- Reedbeds
- Marginal vegetation

Associated Species

Numerous species are associated with standing water habitats and the following species/ groups of species have been chosen to represent the standing water habitats within the borough, which either have a stronghold within RBWM, are nationally and regionally declining or are flagship species.

Toads – Toads are a priority species due to recent declines within the UK. RBWM has one of the largest urban toad populations in the south of England. The two largest toad migrations are at Ray Mill Road East in Maidenhead and Strand Lane in Cookham. Toads require suitable large areas of standing water for breeding and surrounding terrestrial habitat for hibernation.

Great crested newt – a species that is protected under European and national legislation and is a priority species. The UK's populations of the great crested newt are internationally important. Great crested newts usually require standing water as breeding habitat, need aquatic vegetation to lay their eggs and suitable terrestrial habitat surrounding the waterbody for foraging and hibernating.

Water rail – water rail live in reedbeds and freshwater wetland areas and are secretive and rarely seen. There are approximately 1,100 nesting pairs in the UK and have been seen within the borough at sites such as Battlemead and Ockwells Park.

Aquatic invertebrates – there are a huge number of invertebrates that require habitat within the waterways to survive. Their presence is the standard indicator of the health of the habitat they live in. However, many of our aquatic invertebrates are declining in the face of pollution, invasive species, abstraction and development.

Current Status

Berkshire supports an estimated 1525ha of lakes and 40ha of reedbed. There are also a large number of ponds and ditches within Berkshire, both within public spaces and private gardens, although it has not been possible to measure the exact extent of these habitats through mapping given the extent and small sizes of some of these areas.

In RBWM, the total estimated area of standing water habitat has been mapped using available datasets (TVERC, 2021) and include the following:

Waterways type	Area (ha)	Percentage of borough
Reedbeds	0.549	0.00
Standing Water: Eutrophic	605.177	3.05
Standing Water: Mesotrophic	0.0000031	0.00
Ponds	1.391	0.01

Threats

Standing water habitats within RBWM are under threat due to the following reasons:

Declining water quality and increasing pollution - due to nutrient enrichment through agricultural runoff and leaching.

Lack of management –this can cause the gradual loss of open water through siltation, expansion of marginal vegetation and build up of plant material.

Lack of control of invasive species - Invasive and non-native garden plant and fish species can seriously affect indigenous flora and fauna

Climate change – which can cause enormous fluctuations in water levels.

Drainage and agricultural infilling of ponds – this results in the reduction in water bodies and habitat isolation.

Overstocking of fish – this can cause the reduction of native species such as amphibians and aquatic invertebrates.

Increased recreational use – which includes trampling of vegetation and disturbance to wildlife

Objectives for the 5 year Plan

The standing water HAP should result in a greater understanding of the habitats that we have within the Borough, protect and provide better management for the existing standing water habitats with regards to biodiversity and improve their condition. The following table sets out the objectives and targets for the first five years of the plan.

Data Collection

Objective	Target	Responsibility		Target date
		Lead	Partner	
Understand the distribution of standing water Priority Habitats and the species they support	Survey 50% of LWS that contain standing water in five years to inform priority habitat distribution and condition	TVERC	RBWM	2025
	Conduct aquatic invertebrate/amphibian/great crested newt and water rail surveys on all council-owned ponds and at least two other ponds per year	Wild groups	RBWM, BBOWT	2025
Improve our knowledge and baseline records of the condition of our ponds and the species they currently support. Use this to inform future management decisions	Hold 3 pond-dipping events for schools, youth groups, and the general public per year	RBWM	Volunteers	2022 and ongoing
Achieve 30 by 30	Identify how targets will have contributed to 30 by 30 by 2025 and how much additional standing water habitat would need to be created/enhanced by 2030	RBWM		2022

Direct benefit to biodiversity

Objective	Target	Responsibility		Target date
		Lead	Partner	
Increase numbers of wildlife ponds within the borough for the benefit of all wildlife including GCN, toads, and aquatic inverts	Secure 2 new wildlife ponds per year as net gain agreements through planning.	RBWM		On going
Secure new ponds with reedbeds for use by water rail and other nesting birds.	Use planning application responses to secure 0.5ha of reedbed planting and other biodiversity enhancements for all suitable SUDs ponds Engage with EA regarding new wetland habitat	RBWM		On going
Improve existing appropriate ponds/lakes for use by water vole.	Improve/increase marginal vegetation in 5 suitable lakes/ponds	RBWM	BBOWT	2025
Prevent and reverse degradation of our waterbodies from INNS.	Ensure an effective INNS control/eradication program on all waterbodies	RBWM	Riparian landowners Volunteers	2025

Community Engagement and Partnerships

Objective	Target	Responsibility		Target date
		Lead	Partner	
Increase numbers of wildlife ponds within the borough for the benefit of all wildlife including GCN, toads, and aquatic inverts	Collaborate with new GCN District Licensing Officer and landowners/developers to identify and secure new opportunities for pond creation within the borough.	RBWM	Naturespace Partnership	Start 2022 and ongoing
Improve existing appropriate ponds/lakes for use by water vole.	Collaborate with partner organisations to identify lakes/ponds with water vole populations and/or potential to support water vole.	RBWM	TVERC BBOWT Local Recorders	2025
Encourage the creation and enhancement of biodiverse standing water	Provide best practice guidelines to other landowners, including private individuals and organisations, schools and other public bodies.	RBWM	NE, BBOWT	From 2022

Urban Habitat Action Plan

Urban areas are found across the UK and are expanding due to the increased pressure for housing numbers. The Urban Habitat Action Plan covers habitats occurring within towns or villages in RBWM. Not only will this Habitat Action Plan cover larger settlements within the Borough such as Maidenhead, Windsor, Ascot and Wraybury, but smaller villages such as Holyport, Cookham and Datchet. Urban areas are often considered as being less important for biodiversity than the more rural environments. However, urban environments can provide important habitats for a range of plants and animals as well as providing ecosystem services for local residents, such as mental and physical health and well being, provision of food and clean water, reduction of pollution and flood amelioration. Features such as roads and railways connect the majority of the man made structures within the borough but can also provide important connectivity for wildlife.

New developments can have a significant effect on wildlife and on the ability of people to experience and enjoy nature and therefore it is important that this be recognised, protected and enhanced.

The biggest opportunity for enhancing biodiversity and creating new habitat in urban areas is by 'urban greening'. This can be through the creation of green roofs, green walls, providing artificial nest and roosting sites for birds and bats or through the incorporation of Sustainable Urban Drainage systems (SUDS).

Sub Habitats

Certain habitats are unique to, or typical of, the urban environment and it is these that this section of the plan will focus on. The following sub habitats are or can be valuable for biodiversity and have been chosen to represent the urban areas within the borough

- Buildings
- Private gardens
- Schools and colleges
- Sport pitches and play areas
- Allotments
- Roundabouts and verges
- Public parks, gardens, and other urban green spaces
- Churchyards and cemeteries

Associated Species

Numerous species are associated with urban habitats and the following species/ groups of species have been chosen to represent this habitat which either have a stronghold within RBWM, are nationally and regionally declining or are flagship species. The following species have been chosen to represent the urban habitat within the Borough.

Common Swift - A summer visitor to the UK, and found in some parts of the borough, with strongholds in Maidenhead, Cookham and Windsor. Swifts are Amber listed in the UK and there has been a steady decline in swift numbers since 1996 (BTO, 2021). They reside in a number of habitats, but they have the greatest distribution within towns and villages. They nest in open eaves and gables and a loss of suitable nesting sites due to development has caused their decline.

House sparrow - House sparrows were once a familiar sight throughout RBWM but are now in serious decline. Due to this decline, they are now a red listed bird of conservation concern. The

reasons for the decline in urban areas is not fully understood, but it is likely to be due to loss of suitable nesting sites, reduction in food sources, predation by an increased number of domestic cats and increased levels of pollution.

Bats, e.g. Common pipistrelle and soprano pipistrelle - These pipistrelle bat species are frequently associated with buildings, trees and green spaces throughout the borough's urban environment and are the most common bat species in urban environments. There continues to be a significant threat to bats in the UK in terms of loss of roosting, maternity and hibernating sites in both natural and artificial structures. Loss of suitable feeding sites and disruption of flight paths due to artificial lighting have also had a significant impact on bat populations.

Hedgehog – Hedgehogs, which are a priority species have seen their numbers decline in the UK, with at least a third lost from Britain since 2000 (State of Britain's Hedgehogs Report, 2018). The reasons for the decline are not known but it is likely, in part, due to habitat loss and fragmentation and the lack of food due to the increase of pesticides and herbicides. Hedgehogs are found in small numbers across the borough and need supporting to avoid loss.

Stag beetles – Stag beetles are a priority species and are nationally scarce. They have a stronghold within the borough of Windsor and Maidenhead and are found widely across parks, gardens and woodlands within the borough. They require rotting dead and buried deadwood as habitat and therefore the loss of this type of specific habitat has caused their decline within the UK.

Invertebrates, including bees and butterflies – Wild bees including solitary and bumble bees are facing a serious decline in numbers in urban areas due to habitat loss, pesticide use and climate change. This is also the same for other invertebrates such as moths, butterflies and wasps. All these species provide essential roles within the environment with many food crops depending on these pollinators, many of which are declining in numbers.

Current Status

The housing demand is increasingly high throughout the UK including within Windsor and Maidenhead and so the extent of the towns and villages is likely to rise. The population of RBWM is currently 150,906 (2018).

RBWM is made up of 15 parishes and 19 wards all of which contain urban settlements, either towns or villages. Maidenhead is the largest town within the borough with a total area of 198.4 square km, the majority of which is made up of commercial and residential buildings and gardens all of which have the opportunity to increase the biodiversity within the borough.

Threats to Biodiversity within the Urban Environment

Urban biodiversity is often overlooked and the habitats and species that are found within this environment are under threat from the following factors:

- **Urban expansion** – the increase in residential and commercial development, along with associated infrastructure has caused the loss, fragmentation and change of habitats.
- **Loss of soft ground** – conversion of front gardens to parking, reduction in highway verge extents
- **Boundary treatments** – solid boundaries with no gaps for species movement between properties.
- **Impact of invasive species** - the spread of invasive species such as Japanese knotweed and Himalayan Balsam which can displace native species.

- **Inappropriate management techniques**, e.g. impermeable boundary fencing and walls, removal/ severe pruning of trees, frequent and intensive mowing, pruning and 'over tidying'
- **Flooding** – due to an increase in hard surfaces.
- **Lack of recognition and understanding of wildlife value** - not enough information regarding the importance of urban habitats for wildlife
- **Climate change** – this is heightened in urban areas due to the increased heat island effect
- **Anti-social behaviour** – the increase in vandalism and fly-tipping.
- **Increased levels of pollution** – many sites are subject to human disturbance which can cause noise, air, soil and light pollution.

Objectives for the 5-year Plan

The Urban Habitat is a relatively small proportion of the borough, less than 10%, and so whilst it offers less opportunities for habitat restoration towards our aim of 30% by 2030, it offers higher profile opportunities for public engagement. The Urban HAP will make a positive and progressive contribution to the borough's urban biodiversity. This will include improving community engagement, increasing the areas of green infrastructure and encouraging good conservation practices across urban settlements.

Data Collection

Objective	Target	Responsibility		Target date
		Lead	Partner	
Support smaller toad colonies to increase number of toads	Survey locations of historic toad migrations, where known, to see if conditions can be improved so toads can increase their numbers	RBWM	Wilds Groups Volunteers	2024
Increase floristic diversity on Borough land by negotiating changes to mowing regimes.	Identify at least 40% of borough land such as verges and parks to leave uncut and implement wildlife friendly mowing regimes	RBWM		2022
Decrease the lighting across the Borough in order to positively impact bats and other nocturnal animals	Review all RBWM Street lighting to identify at least 20% of areas where lights can be switched off, lit for part of the night, dimmed or changed to LED. Campaign to inform and persuade residents to switch off outdoor lights at night	RBWM		2022
Extend B-Lines across the urban landscape	20 pollinator projects will be identified and initiated within the Borough's B-lines	BBOWT	RBWM Wild groups TVERC	2025

Direct benefit to biodiversity

Objective	Target	Responsibility		Target date
		Lead	Partner	
Increase the number of wildlife friendly gardens within the Borough	Ensure that 50% of gardens in RBWM who enter the Wild About Garden Awards competition achieve at least bronze level and that 10% of gardens will achieve gold level	Wilds Groups	RBWM Wild About Gardens Awards	2023
Support regionally significant Common Toad colonies	Put in place protection strategies including signage, installation and maintenance of toad ladders, and monitoring of populations for annual Toad migrations	Toad patrol	RBWM Wilds groups Volunteers	ongoing
Improve allotment sites for biodiversity	<p>Ensure all Council owned allotments to become organic, following principles of the Soil Association.</p> <p>Assess each allotment site to determine improvements such as encouragement of predator species for pest control</p> <p>Promote regenerative management techniques.</p>	RBWM		All by 2025
Control and minimise use of pesticides and herbicides in public areas	Ensure all streets, paths, community spaces, cemeteries and other council owned land provide management plans that have specific instructions as to permitted use of these chemicals to reduce the total use by 25%	RBWM	Town and Parish councils	2022
		RBWM	Windsor Allotments and Home Gardens Association.	2022

Direct benefit to biodiversity

Objective	Target	Responsibility		Target date
		Lead	Partner	
To ensure permeability for hedgehogs and other small mammals and amphibians across the borough	Ensure 100% of planning applications, with new boundary treatments (excluding any exceptions, such as high security facilities), provide permeability for hedgehogs and small mammals and amphibian migration between suitable habitats, including gaps in fencing	RBWM		From 2022
To improve ecological connectivity within urban areas	<p>Ensure a no net loss of roadside verges. Where verge side vegetation is lost, a commensurate area of hard standing will be converted to soft ground, to a similar or improved quality</p> <p>Unless there is a statutory requirement or consents acquired through the planning, ensure, a no net loss of soft ground on any council site. Where soft ground is lost, a commensurate area of hard standing will be converted to soft ground, to a similar or improved quality</p>	RBWM		2022
Decrease the lighting across the Borough in order to positively impact bats and other nocturnal animals	Roll out of the new lighting strategy	RBWM		2025
Maintain and enhance the favourable conservation status of bats within the borough	Ensure that integral bat boxes are installed on 75% of all new developments.	RBWM	Volunteers	2022

Direct benefit to biodiversity

Objective	Target	Responsibility		Target date
		Lead	Partner	
	Make sure at least 50% of new major developments will create suitable foraging and/ or commuting habitat for bats		Berkshire and South Bucks Bat Group	
Maintain and enhance the favourable conservation status of birds within the borough	<p>Ensure that integral bird boxes are installed on 75% of all new developments.</p> <p>Make sure at least 50% of new major developments will create suitable foraging habitat for birds</p>	RBWM	Volunteers	2022
Increase the numbers of green roofs/ walls	<p>Ensure that 10 green roofs and/ or walls are secured within the planning system</p> <p>Install 10 green roofs or walls on council owned structures (Bin Stores, bus stops)</p>	RBWM	Neighbourhood Plan groups Developers	2025
Increase the biodiversity within all council owned parks	Ensure all parks owned by the council have a wildlife area/ fruit and herb garden within them. This will include wildflower areas, insect hotels/ bird and bat boxes and standing deadwood and log piles. Implement management plans for each site.	RBWM	Volunteers Wild groups BBOWT	2025
Increase the opportunities for invertebrates	Ensure that each school within the Borough is involved with the PTES “Bury a Bucket for Beetles” school scheme	RBWM	Volunteers	2025
Protect 30% of land in the Borough for biodiversity by 2030	Ensure all new developments provide a minimum 10% net gain in biodiversity and that	RBWM		From 2023

Direct benefit to biodiversity

Objective	Target	Responsibility		Target date
		Lead	Partner	
	land used to provide gains is protected for a minimum of 30 years.			

Community Engagement and partnerships

Objective	Target	Responsibility		Target date
		Lead	Partner	
Create or improve wildlife gardens in schools and use in educating the next generation	Provide all primary schools with advice regarding wildlife gardening for use within teaching.	RBWM	Schools Volunteers Wilds groups	2025
Engage the community with regards to biodiversity in the borough	Increase social media presence and writing regular articles in the ATRB magazine to increase biodiversity awareness.	RBWM Wilds groups	Other wildlife groups	One article in ATRB each year from 2022

				Social media page set up and managed by 2023
Educate the community with regards to wildlife gardening and promote the Wild about Garden Awards competition	Hold yearly educational events to provide information regarding wildlife friendly gardening and promote Wild about Gardens Award scheme. Provide information by social media and ATRB magazine.	RBWM BBOWT	Other wildlife groups	Ongoing each year starting 2022

General Themes

Certain themes run through many of the individual action plans, and therefore this action plan relates to habitats and species that fall into a number of previous HAP's. These areas represent the nature conservation of all species and habitats within the borough on a wider scale. The general themes HAP does not contain sub habitats or specific species, but the objectives that have been chosen within this section have multiple benefits for a much wider range of species.

Objectives for the 5 year Plan

The general themes HAP should result in a greater understanding of the habitats that we have within the Borough, protect and provide better management for the existing habitats with regards to biodiversity and improve their condition. The following table sets out the objectives and targets for the first five years of the plan.

Data Collection

Objective	Target	Responsibility		Target date
		Lead	Partner	
Build a comprehensive habitat/species analysis/map for the Borough.	Analyse/map at sufficient detail (ie key/enough species covered) for planning purposes. This to include new visualisations of the data for decision-makers, residents and others	RBWM	Local recorders BBOWT TVERC	50% by 2025
Increasing ecological knowledge of our local wildlife sites within the borough	Organise and run at least 1 bioblitz event at a local wildlife site each year	RBWM	Volunteers Local Groups	From 2022 and then yearly

Direct benefit to biodiversity

Objective	Target	Responsibility		Target date
		Lead	Partner	
Ensure the protection of our locally designated sites	Every Local Wildlife Site to be surveyed once every 10 years Ensure 50% of LWS are in positive management	RBWM TVERC		Ongoing 2025
Reduction in the use of herbicides and pesticides on highways	Reduce or eliminate the use of chemicals on 100% of our roadside verges and parks.	RBWM	Contractors	2023

Direct benefit to biodiversity

Ensure planning conditions with regards to biodiversity are enforceable	<p>Ensure that the biodiversity enhancement conditions on all suitable planning applications include a signing out report confirming compliance from a suitably qualified ecologist</p> <p>Performing spot checks on conditions relating to biodiversity to ensure the enhancements have been installed appropriately.</p>	RBWM		From 2022
Ensure all council owned land is in positive management	Update all council owned habitat management plans	RBWM		From 2022 ongoing with implementation for all sites underway by 2026.

Community Engagement and Partnership

Objective	Target	Responsibility		Target date
		Lead	Partner	
Promote and encourage best practice and make it easy for landowners, residents and volunteers to find relevant information about local flora, fauna and habitat management so we can all work together.	Create (and maintain) a library web page of links to best practice for surveys, ID support and habitat maintenance & improvement plans generic and specific to local sites (so everyone can monitor and support the plans)	RBWM	Local Groups Wilds groups	2023

Community Engagement and Partnership

<p>Increase awareness of the importance of biodiversity and improve people’s connectivity with nature (E.g. Communication programme to raise awareness of species and habitats in the Borough, and how individuals and organisations can help them.)</p>	<p>Develop key messages on species and habitats that are thriving in the Borough, and those that have been lost, are in decline; engender action to increase and support wildlife from individuals and organisations</p>	<p>RBWM Wilds Groups</p>	<p>Volunteers</p>	<p>2023 start and annually</p>
	<p>Hold at least 30 wildlife activities within the borough each year</p>	<p>RBWM</p>	<p>Wilds Groups</p>	<p>2022 then ongoing</p>
	<p>Ensure at least 3000 hours of volunteering annually which will include tree planting, habitat management and surveying.</p> <p>Enhance RBWM’s website to provide better access for users to biodiversity information and to provide quarterly updates and news.</p>			

30 by 30

Introduction

The government have set a national target to protect 30% of land and sea for nature by 2030 in its commitment to UN Convention on Biological Diversity global biodiversity framework. The Council is committed to protecting 30% of the land within the Borough for nature by 2030. Measures to achieve 30 by 30 are being rolled out at a national level and as they emerge will help inform how the Borough can achieve its target. This BAP covers the first half of the 30 by 30 period and is focussed on assessing the current and emerging situation, identifying and influencing opportunities for contributing to 30 by 30 by 2025 and identifying a method to ensure 30% of land is protected by 2030.

Achieving the targets of this BAP will provide the data needed for a post-2025 BAP to set out specific targets on how 30 by 30 will be achieved.

In the period to 2025, the Borough will identify 30% of land to be protected and the mechanisms that can be used to protect it. This may include existing protection measures, such as designating an area of land as a LWS, or using emerging measures such as measures provided in the Environment Act (2021) or in agricultural policy or local policy. These may include:

- Land within a Local Nature Recovery Strategy
- Land providing a Biodiversity Net Gain for development
- Land within an agricultural scheme aimed at conserving or enhancing biodiversity, such as ELMs
- Land providing carbon offsets that also provides opportunities for biodiversity
- Land designated as a Local Green Space where it also provides opportunities for biodiversity.

Data Collection

Objective	Target	Responsibility		Target date
		Lead	Partner	
Identify land to be protected (in addition to existing protected areas) to achieve protection and enhancement of 30% of the land in the Borough for biodiversity.	Influence the Local Nature Recovery Strategy for Berkshire to ensure 30% of land in the County is identified for protection.	RBWM	Other Berkshire Local Authorities TVERC BBOWT LNP NE	Ongoing from 2022
	Ensure all developments are providing a minimum 10% biodiversity net gain and that land providing gains is adequately protected for a minimum of 30 years, as per the requirements of the Environment Act.	RBWM	Developers	2023
	Encourage and advise landowners on agricultural schemes that protect areas for biodiversity.	RBWM	Land owners	2022
	Engage with private landowners to identify biodiversity enhancement projects undertaken by them	RBWM		On going

Monitoring and delivery

Whilst working towards the objectives and targets of the BAP, it is important to record and communicate this to the stakeholders as well as the wider public. Lead Partners will meet and update their actions on an annual basis and meet to review progress made every six months. Biodiversity information, including the annually updated actions will be provided and made available to the public after the lead partners review.

To make sure the goals are clear and reachable, the progress of the BAP will be based and reported following the “SMART” criteria

- **Specific** – outline in a clear statement precisely what is required.
- **Measurable** – the objectives and targets need to be quantifiable.
- **Achievable** – the objectives and targets should be ambitious but realistic.
- **Relevant** - Within the availability of resources, knowledge and time
- **Time-bound** – deadlines should be set for each objective and target so they can be recorded.

This Biodiversity Action Plan has been developed with wide consultation and it is recognised as the starting point for future BAPs as well as being a working document setting out actions until 2025. Actions will be reviewed on a regular, at least six monthly basis, with a full review at the end of this period in consultation with all partners. The work on this BAP will develop the knowledge and provide data for the analysis required to develop a prioritised Biodiversity Action Plan for implementation from 2026.