

Appendix 1 - Biodiversity

- 1.1. Biodiversity is in decline across England, which is one of the most nature-depleted countries on Earth, something which Three Rivers has not escaped. This, and growing public awareness of this biodiversity emergency was recognised by the Government's 2023 Environmental Improvement Plan which stated:

There is a "... clear, scientific case and growing public demand for a step change in environment protection and recovery."

- 1.2. Whilst much legislation and Government policy that informed the last Local Plan remains valid, other components have evolved, and new laws and guidance created to provide local authorities with the best chance of playing their part in reversing this decline. In terms of legislation, for instance, local authorities now, importantly, have a duty to 'conserve and enhance' (instead of simply 'to have regard to') biodiversity when exercising its functions, a consequence brought about by the Environment Act 2021. Additionally, the terms 'nature recovery' and 'Biodiversity Net Gain' have become embedded in the scientific and public vocabulary, both of which have significant planning implications.
- 1.3. In this context, the primary drivers now influencing the conservation and recovery of nature in Three Rivers include but are not limited to those set out below:

- The Wildlife and Countryside Act 1981 (as amended)
- Circular 06/2005 Biodiversity and Geological Conservation
- NERC 2006
- The Habitats Regulations 2017 (as amended)
- The Environment Act 2021
- [The Environmental Improvement Plan](#) (2023)
- [National Planning Policy Framework](#) (2024) and associated [Planning Practice Guidance](#)
- [The Environmental Principles policy statement](#) (2023)

Together, these bring forward a range of aspirational, policy or mandatory requirements which combine to frame the local plan's policies.

- 1.4. National policy states that the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity. The National Planning Policy Framework requires local authorities to identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks; and promote the conservation, restoration and enhancement of important habitats and species. Further, it requires that appropriate weight is given not only to protected sites but also to protected features of biodiversity and geological interest in the wider environment.
- 1.5. In terms of the Local Plan, these drivers can be taken to act together to ensure that local authorities conserve and enhance nature in part by establishing Local Plan policies that ensure that harm to biodiversity within protected sites and, beyond these boundaries, the habitats and species distributed across the rural and built environments is firstly avoided, secondly that harmful impacts are mitigated before they arise, and only as a last resort, that effective compensation is secured for any unavoidable damage that cannot be mitigated. This is the

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'*mitigation hierarchy*' and its use should be evident both in terms of the allocation of development opportunities and subsequent development proposals. Depending on circumstances, each of the three stages can be heavily influenced by differing legislation, policy and best practice guidance and should not be treated lightly.

- 1.6. More specifically, the Environment Act (2021) promotes positive actions such as the establishment of a Local Nature Recovery Strategy (LNRS), which will aim to increase the quality and size of existing protected areas, buffer harmful impacts from outside and link these together by creating new wildlife sites as stepping-stones or direct physical connections. In turn, the Hertfordshire LNRS will contribute to the national Nature Recovery Network (NRN) to begin to deliver the aspirations of the Lawton Report for a network that comprises a '*more, bigger, better, better joined*' biodiversity resource (which in turn can help deliver other societal benefits).
- 1.7. Biodiversity is an integral part of the character of Three Rivers and contributes to the high quality of life in the area. The district supports a variety of wildlife in habitats as diverse as wetlands, woodlands, grasslands, orchards, heathlands and urban gardens. Conserving and enhancing the diversity of wildlife and habitats in Three Rivers is a strategic objective.
- 1.8. Further, biodiversity provides numerous benefits, or ecosystem services, for people, such as flood attenuation, softening extremes of temperature and weather, recreation, wellbeing, pollinators and carbon sequestration. Nature conservation and its recovery are therefore not only required but highly desirable.
- 1.9. In these and other ways, the new local plan has a wide remit to take positive steps towards achieving the '*step change*' demanded by the Environmental Improvement Plan and provide the framework by which Government expects it will achieve commitments made in the 25-year Environment Plan.

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Biodiversity Net Gain (BNG)

- 1) All qualifying development must deliver at least 10% measurable biodiversity net gain from the existing baseline value of a site through the use of DEFRA's statutory biodiversity metric. Development should apply the mitigation hierarchy to minimise or mitigate harmful effects on biodiversity.
- 2) Biodiversity net gain should be delivered using the following biodiversity **net** gain hierarchy:
 1. On-site
 2. A mixture of on and off-site
 3. Off-site
 4. Purchase of statutory biodiversity credits

On-site biodiversity net gain should be prioritised and undertaken wherever possible. Off-site measures will only be considered where it can be demonstrated that, after

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following the **biodiversity net gain** hierarchy, all reasonable opportunities to achieve measurable net gains on-site have been exhausted or where greater gains can be delivered off-site where the improvements can be demonstrated to be deliverable and are consistent with the Local Nature Recovery Strategy. As a last resort and following the submission of robust and justified evidence that on-site or off-site biodiversity provision will not achieve 10% biodiversity net gain, the Council will consider allowing the developer to purchase statutory biodiversity credits as an alternative approach.

- 3) Biodiversity Gain Plans will be required to demonstrate how BNG will be achieved. This will apply to on-site and / or off-site BNG requirements. Consequently, where it is not possible to avoid or mitigate any or all impacts on site, the Biodiversity Gain Plan should also demonstrate and confirm how any off-site measures proposed will enhance local and nationally important biodiversity priorities.
- 4) To ensure the long-term net gain, all development proposals **delivering a significant onsite enhancement or off-site enhancement** should prepare a long-term monitoring and maintenance plan for biodiversity and habitat proposals for a minimum period of 30 years.
- 5) Biodiversity net gain will be secured by condition, conservation covenant, and/or legal agreement, including a requirement to cover the Council's costs associated with the long-term BNG monitoring.
- 6) Where possible, the Council will encourage the delivery of greater than 10% biodiversity net gain.

Protection and Enhancement of Biodiversity

- 7) The weight given to the protection of protected sites will be commensurate with their position in the hierarchy:
 1. International
 2. National
 3. Local
 4. Irreplaceable habitats
- 8) Proposals that are likely to have, directly or indirectly, an adverse impact on protected sites will not normally be permitted except where the public benefits of development in that location clearly **and significantly** outweigh both the impact on the site and the wider network.
- 9) Proposals resulting in, directly or indirectly, the loss or significant harm to a Local Wildlife Site will normally only be permitted if it can be demonstrated there is a need for the development in that specific location and the benefit of the development clearly **and significantly** outweighs the loss or harm.
- 10) Proposals resulting in directly or indirectly, in the loss or significant harm of an irreplaceable habitat will normally be refused.
- 11) In all cases, the mitigation hierarchy should be used to first avoid, then mitigate and, where necessary and possible, compensate for the loss of biodiversity, and evidence provided to show how this has been followed. Where loss or harm to a European or other designated site cannot be avoided or mitigated, as a last resort, effective compensation must be secured and delivered.

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- 12) Proposals should further the aims and objectives of the Local Nature Recovery Strategy including via the delivery of biodiversity net gain where applicable.
- 13) Proposals must not result in the fragmentation or further fragmentation of wildlife habitats and should link or reconnect fragmented wildlife habitats where possible.
- 14) Proposals should seek to conserve, restore and enhance **statutorily** protected species **and those listed under Section 41 of the NERC Act 2006**, not addressed by “Biodiversity Net Gain” and reduce fragmentation by enhancing the connectivity of their populations and supporting habitats, and promote the functionality of other green **and blue** infrastructure. It is expected that applicants submit a proportionate and up-to-date ecological survey and assessment where it is likely that a proposal may impact upon a **statutorily protected species or a species listed under Section 41 of the NERC Act 2006 or their habitats**, and where appropriate action plans detailing how the habitat of those species will be protected to ensure that there will be no negative impact on the population of the species.
- 15) All new housing developments must provide on average at least one swift brick per dwelling across the development. All new proposals for non-residential buildings must include a proportionate number of swift bricks appropriate to the scale and use of the building.

Reasoned Justification

Biodiversity Net Gain

- 1.10. Biodiversity net gain aims to leave the natural environment in a measurably better state than it was beforehand. The Environment Act (2021) requires that all applicable development shall deliver a net gain of at least 10% against the ecological baseline. Net gain is not intended to facilitate the unnecessary loss of valuable habitats, and all proposals are expected to follow the mitigation hierarchy and the measures required to deliver a net gain go beyond those required to mitigate or compensate any harm after following the mitigation hierarchy.
- 1.11. Net gain is measured using Defra’s Statutory Biodiversity Metric, which quantifies the value of biodiversity in terms of the habitats present and those proposed to be created and/or enhanced. A simplified version (the Small Sites Metric) may be used for sites proposing fewer than ten dwellings on land of less than one hectare. Exemptions for small self-build development exist which fulfil other requirements. Successful applicants will also be required to provide a Biodiversity Gain Plan to be approved in writing by the Council prior to commencement of development.
- 1.12. The creation or enhancement of features to achieve the net gain can be delivered on-site, off-site (or a combination of the two) or, as a last resort, via the purchase of statutory biodiversity credits. On-site solutions are preferred. Off-site solutions should be located in proximity to the development site where possible, **should be** within Three Rivers **(unless strong and justified evidence suggests this is not possible)** and ideally contribute to the functioning of the emerging LNRS or other green infrastructure networks within the district. All will be secured for a period of at least 30 years via planning conditions, legal agreements and conservation covenants as appropriate.

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- 1.13. Applicants are reminded that if the site boundary includes land within 10m of a watercourse, the adjacent lengths of watercourse should be included within the watercourse baseline assessment in the Metric. Unless an exemption applies, applicants would need to deliver a minimum 10% net gain in watercourse number biodiversity units.
- 1.14. Whilst it is acknowledged that this is not a statutory requirement, applicants are encouraged where possible to deliver greater than 10% biodiversity net gain which will further the aims of BNG to leave the natural environment in a measurably better state after development than before.

Protection and Enhancement of Biodiversity

- 1.15. Despite the widespread decline in nature, Three Rivers retains a valuable biodiversity resource albeit fragmented by built development, infrastructure and intensive agriculture. These range from sites of national to local importance, although all will be afforded protection either in law, policy or best practice, but to differing degrees.
- 1.16. The relative importance of these is typically presented as the following hierarchy:
1. Designated (or Protected¹) sites and species
 2. Irreplaceable habitats
 3. Habitats and species of principal importance

Whilst each is described below, there is considerable overlap on the ground with certain features or sites frequently arising in all three categories.

The range of protected sites are shown below in descending importance:

Internationally important sites (Statutory)	Special Areas of Conservation (SAC) Special Protection Areas (SPA) Ramsar sites
Nationally important sites (Statutory)	Sites of Special Scientific Interest (SSSI) National Nature Reserves (NNR)
Locally important sites	Local Nature Reserves (LNR) (Statutory) Local Wildlife Sites (LWS) (Non-statutory) Local Geological Sites (LGS) (Non-statutory)

- 1.17. SACs and SPAs are afforded the highest levels of protection via the Habitats Directive (transposed into UK law by the Habitats Regulations 2017 (as amended)), with Ramsar sites enjoying similar protections though only in national policy. SSSIs, NNRs and LNRs are protected by domestic legislation and LWS and LGS are locally identified. Whilst the levels of protection therefore differ, these are set out in the NPPF, and local plans are expected to reflect this.
- 1.18. Irreplaceable habitats are listed in and protected by the biodiversity net gain legislation as examples of England's most ecologically valuable features that are very difficult to restore, recreate or replace. They include but are not limited to ancient woodlands, ancient and veteran

¹ Although a frequently used term not all are formally 'designated' and it is better to consider these as 'protected' sites (a term that will be used throughout this chapter).

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trees and lowland fens. Whilst examples frequently comprise part of a protected site they also frequently occur beyond these boundaries and can be distributed across the rural and built environments.

- 1.19. Ancient woodland is also given additional protection from [Government's standing advice](#) which only allows its loss where 'wholly exceptional reasons' apply and where a suitable compensation strategy is in place.
- 1.20. Habitats and Species of Principal Importance are defined and listed in s41 of the NERC Act 2006 and represent those features of particular importance for the overall purpose of conserving biodiversity. The list of 56 habitats and 943 species features was carried forward from the UK's Biodiversity Action Plan (BAP), itself a response to the Convention on Biological Diversity in Rio in 1992 but has been adapted, accordingly, along the way.
- 1.21. However, levels of protection can vary widely with some species - for instance great crested newts and all bats - afforded additional protection by the Habitats Regulations, a consequence of their status as 'European species'.

Biodiversity in Three Rivers

- 1.22. Though there are no internationally important protected sites within Three Rivers, it does support a range of other protected sites ranging from nationally designated SSSIs to local identified LNRs and LWSs. These include:

Special Areas of Conservation:

- None within the district (although parts of the district fall within the zone of influence of the Chiltern Beechwoods Special Areas of Conservation)

Sites of Special Scientific Interest:

- Frogmore Meadows
- Sarratt Bottom
- Croxley Common Moor
- Whippendell Woods
- Westwood Quarry

Local Nature Reserves at:

- Oxhey Woods
- Stockers Lake
- The Withey Beds
- Croxley Common Moor
- Prestwick Road Meadows
- Chorleywood House Estate
- Rickmansworth Aquadrome
- Chorleywood Common
- Batchworth Heath

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There are also 139 Local Wildlife Sites located at least partially within the district, part of a county-wide network of almost 2,000 sites that seeks to maintain key components of the county's biodiversity resource.

- 1.23. However, HMWT's [State of Nature Report](#) (2020) identified that in the last 50 years, 76 species had become extinct in the county and, of the species assessed, 20% (or 1,524) of those remaining were identified as being of conservation concern and less than 12% of LWS within Hertfordshire were under beneficial management.
- 1.24. Although destined to be superseded by the LNRS in 2025, the Hertfordshire Biodiversity Action Plan (BAP): A 50-Year Vision for the wildlife and natural habitats of Hertfordshire (2006) remains relevant and identifies three key biodiversity areas in Three Rivers:
 - Mid-Colne Valley - wetlands (gravel pits) and grassland
 - Whippendell Woods and surrounds - woodlands, grasslands and wetland
 - River Chess Valley - river, wetlands, grasslands, woodland and heathland
- 1.25. It is considered likely (although not guaranteed) that these areas will also be highlighted in the emerging LNRS as priority areas for conserving the existing biodiversity resource and the best opportunities for establishing areas of new, high-quality habitats. Consequently, the Council will be likely to refuse applications that have harmful impacts on biodiversity or compromise the effectiveness of the LNRS. In contrast, developments that avoid harmful impacts and make a positive contribution to the aims of the LNRS will be supported.
- 1.26. Developers should have regard to the potential impact of development proposals on biodiversity, including, for instance, trees, watercourses and woodlands from the outset. Applications should be accompanied by sufficient information to assess the impact of the proposed development on any protected species, trees, watercourses, woodlands or priority habitats. Where not exempt from BNG, there must also be acceptable baseline habitat surveys or assessments to properly inform subsequent BNG calculations using the Statutory or Small Sites Metric (as of 2025). Where it is considered that a habitat/species protected under European or domestic statutory legislation could be affected by development, the Council will require adequate survey information to be submitted at the time of the application together with an assessment of the potential impacts and appropriate mitigation/compensatory measures, these should be integrated into schemes and shown on submitted plans. The surveys should be undertaken and carried out by competent persons and at appropriate times of the year. Surveys and assessments should all follow established CIEEM best practice.
- 1.27. In accordance with national policy on biodiversity and geology the Council will conserve and, where possible, enhance:
 - Sites of Special Scientific Interest
 - Local Nature Reserves
 - Local Wildlife Sites
 - Protected Species
 - Trees and Ancient Woodlands, and

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- Geological and physiographical features.

1.28. When considering development proposals, the Council will take full account of contemporary and rapidly emerging legislation, policy and guidance and other relevant information to:

- Assess the importance of a habitats and species
- Consider the potential impact of development
- Identify ways to conserve and enhance biodiversity in Three Rivers
- Improve connectivity between habitats through establishment and expansion of the LNRS and Green Infrastructure corridors.

1.29. The Council will support measures identified in management plans (including the Thames River Basin Management Plan) and related status reports for Sites of Special Scientific Interest, Local Nature Reserves and other wildlife sites that seek to conserve, enhance and restore biodiversity. Where subject to BNG, developers will be required to contribute to improvements in biodiversity as part of their proposals in addition to providing compensation for impacts on protected species, under licence where necessary.

1.30. It's important that development does not fragment wildlife habitat because fragmentation breaks large, connected ecosystems into isolated patches. This makes it harder for animals to find food, migrate, repopulate, and increases the risk of local extinctions. Connected habitats support healthier ecosystems, greater biodiversity, and more resilient wildlife populations.

Swift Bricks

1.31. The NPPF specifically refers to swifts when setting out that planning policies should contribute and enhance the natural and local environment, including incorporating features which support priority species. The use of swift bricks is particularly important because swifts rely on urban cavities for nesting. Nest boxes can provide important habitat for other species as well as swifts, such as starlings and sparrows. Specific support for the selection and installation of swift bricks can be found in the British Industry Standard BS 42021:2022 the Future Homes Hub Homes for Nature Guidance, and the RSPB's Guide to Nestboxes.

Green and Blue Infrastructure

1.32. In a wider context, biodiversity also represents a key element of Green Infrastructure (networks of green spaces and natural elements including open spaces, waterways, gardens, woodlands, green corridors, wildlife habitats, street trees, natural heritage, heritage assets, earth science interests and open countryside). The Green and Blue Infrastructure Policy identifies key assets for Green and Blue Infrastructure and the existing and potential linkages. It also sets out policy to seek a net gain in the quality and quantity of Green and Blue Infrastructure through the protection and enhancement of assets and the provision of new green spaces.