

CHAPTER 10: ECOLOGY

6.1 INTRODUCTION

6.1.1 This chapter of the ES Addendum Statement has been produced by Matthew Johns CEnv MCIEEM to review and, where necessary, update the original assessment and findings of the *Ecological Impact Assessment* and the conclusions presented in the original *Ecology* ES chapter.

6.2 CONFIRMATION OF AND UPDATES TO BASELINE ENVIRONMENT

Changes in the Legislative Context

6.2.1 Since the submission of the OPA in 2020, the UK has introduced several legislative changes to enhance its ecological and environmental policies. These changes reflect the country's commitment to biodiversity, climate action, and sustainability. Key legislative developments that embrace the proposals include the following.

Environment Act 2021

6.2.2 The Environment Act 2021 is one of the most comprehensive pieces of environmental legislation in recent UK history. It sets a framework for environmental governance post-Brexit, ensuring that environmental protections previously covered by EU laws are maintained and enhanced.

6.2.3 Key provisions of relevant to the OPA are:

- Legally Binding Targets: Introduces targets for air quality, water resources, waste reduction, and biodiversity.
- Biodiversity Net Gain (BNG): Requires new developments to achieve a 10% increase in biodiversity, aiming to halt and reverse biodiversity loss. This has been developed further through a suite of secondary legislation.

Agriculture Act 2020

6.2.4 This act reforms agricultural policy in the UK following Brexit, moving away from the EU's Common Agricultural Policy (CAP). Key provisions are:

- Environmental Land Management (ELM) Schemes: Introduces new funding mechanisms for farmers, focusing on sustainable farming practices, environmental protection, and enhancement of biodiversity.
- Sustainable Farming Incentive (SFI): Provides payments to farmers who adopt environmentally friendly farming practices.

Tree Strategy for England (2020)

6.2.5 This outlines the Government's plans to increase tree planting and woodland creation in England. Key provisions are focused on tree planting targets to combat climate change and enhance biodiversity. It also provides funding for tree planting initiatives and support for landowners and local authorities.

Changes in the Planning Policy Context

National Planning Policy Framework (NPPF)

6.2.6 The NPPF has been revised several times, with the most recent revision being in December 2023.

6.2.7 The December 2023 revision of the National Planning Policy Framework (NPPF) introduced changes concerning biodiversity and BNG since the December 2020 version. The key changes are considered to be:

- **Mandatory 10% BNG:** From late 2023, the NPPF mandates that all developments must achieve at least a 10% net gain in biodiversity, calculated using the latest biodiversity metric (currently version 4.0) developed by Natural England (Biodiversity Net Gain). This requirement applies to all planning applications submitted after 12th February 2024..
- **Statutory Framework and Metric:** The statutory biodiversity metric is used to measure the pre-development and post-development biodiversity value of habitats. The calculation includes habitat type, size, distinctiveness, condition, and location (GOV.UK). This standardised approach ensures consistent evaluation across developments.
- **Exemptions and Irreplaceable Habitats:** Certain small developments and those impacting irreplaceable habitats like ancient woodland, lowland fens, and limestone pavements are exempt from the BNG requirement.

- **Offsetting and Biodiversity Credits:** If on-site biodiversity gain is not feasible, developers can use biodiversity offsetting by purchasing biodiversity credits. These credits are set at high prices to encourage on-site solutions and support habitat creation and enhancement elsewhere.
- **Local Nature Recovery Strategies (LNRS):** The revision introduces Local Nature Recovery Strategies to encourage habitat creation and enhancement in strategic areas. These strategies will be geographically specific and developed by responsible authorities (as BNG)
- **Conservation Covenants and Enforcement:** Conservation covenants and Section 106 Obligations are primary mechanisms to secure long-term biodiversity gains. Developers must ensure that gains are maintained for at least 30 years. Local planning authorities are responsible for enforcing compliance through these covenants and obligations.
- **Implementation and Monitoring:** The implementation of BNG will be monitored and enforced by local planning authorities. They are encouraged to update their enforcement plans to reflect the new BNG requirements, ensuring effective monitoring and management of biodiversity gains over the long term.

6.2.8 These changes aim to integrate biodiversity considerations more deeply into the planning process, ensuring that developments contribute positively to the natural environment and promote sustainable development.

Eastleigh Local Plan

6.2.9 Since 2020, changes have been made to the Eastleigh Local Plan, particularly concerning biodiversity policies. The most notable changes include the following:

- **Adoption of the Local Plan 2016-2036:** The Eastleigh Borough Local Plan 2016-2036 was adopted on April 25, 2022. This plan includes several updated policies focused on sustainable development, biodiversity, and environmental protection to guide future development until 2036.
- **Biodiversity and Green Infrastructure Policies:** The updated Local Plan emphasizes the protection and enhancement of biodiversity and green infrastructure. It includes requirements for developers to demonstrate how their projects will conserve and enhance local biodiversity. This aligns with the national push for BNG, which mandates that new developments must result in a net improvement in biodiversity.

- **Inspector's Modifications:** During the examination of the Local Plan, the Inspector recommended several modifications to ensure the plan was sound and legally compliant. These modifications included enhancements to policies related to biodiversity, ensuring stronger protection and promotion of local wildlife and habitats.
- **Habitats Regulations Assessment (HRA):** An addendum to the Habitats Regulations Assessment was included, highlighting the need for thorough assessments of potential impacts on protected sites and species. This ensures that any development does not adversely affect the integrity of these habitats.
- **Supplementary Planning Documents (SPDs):** Several SPDs have been adopted or updated, providing detailed guidance on implementing the Local Plan policies. These documents include measures to support biodiversity, such as guidelines on green infrastructure, sustainable urban drainage systems (SuDS), and landscape enhancements.

6.2.10 These changes reflect Eastleigh Borough Council's commitment to integrating biodiversity considerations into planning decisions, aligning with broader national and international environmental goals.

Changes in Survey Standards

Bat Conservation Trust Survey Guidelines

6.2.11 The 2023 Bat Conservation Trust's "Bat Surveys for Professional Ecologists: Good Practice Guidelines" introduced several significant changes compared to previous editions:

- **Categorization of Trees:** The classification of trees based on their suitability for bat roosts has been updated. Trees are now categorized as PRF-I (suitable for individual bats or small numbers) and PRF-M (suitable for multiple bats, including potential maternity colonies). PRF-I trees, deemed to have low roost suitability, do not require further surveys, whereas PRF-M trees, with high suitability, require at least two surveys between May and August.
- **Dusk and Dawn Activity Surveys*:** The guidelines have eliminated the routine need for dawn re-entry surveys due to the risk of missing early-returning bats. Dusk emergence surveys are now emphasized for assessing bat activity.
- **Hibernation Surveys:** The period for conducting hibernation surveys has been extended to include December, in addition to January and February. This provides more flexibility for

scheduling surveys and can be adjusted based on specific site conditions and bat behaviour.

- **Night Vision Aids:** The use of night vision aids (NVAs), such as infrared and thermal imaging cameras, is now recommended to improve the accuracy of nocturnal bat activity observations.
- **Timing Between Surveys:** The minimum interval between surveys has been extended from two weeks to three weeks. This change aims to ensure more reliable and representative data on bat activity during the survey period

6.2.12 These updates reflect a combination of advancements in technology, increased understanding of bat behaviour, and feedback from ecological consultants, aiming to enhance the accuracy and reliability of bat surveys and conservation efforts.

Implications of These Changes on the Robustness of the Ecological Baseline

6.2.13 The ecological baseline presented in Chapter 10 of the OPA ES in 2020 reflected the culmination of a number of years of continual and detailed baseline surveys and evaluation, informed by preliminary walkover surveys, historical data, consultation and professional judgement from suitably qualified and experienced ecologists. It also built on ecological baseline surveys completed a number of years earlier for previous planning applications for part of the OPA site.

6.2.14 The survey scope and approach was, and continues to be, guided by best practice technical methods available at the time, the specific ecological context of the site and consulted on through the EIA Scoping process, through the Biodiversity Steering Group set up for the initial phases of the scheme (that included ecologists from Eastleigh Borough Council, Natural England, the Environment Agency and others).

6.2.15 Survey scope extended across botany/habitat, trees, watercourses, otter, water vole, bats, reptiles, amphibians, badger, dormouse and other mammals, with consideration also given to birds and invertebrates. Because of the robust, spatially and temporally extensive character of the ecological baseline work reported in the ES, it is considered that the subsequent changes in legislation, policy and best practice methods do not undermine or reduce the appropriateness of the previously reported baseline, conclusions made in Chapter 10 of the ES, and its suitability to determine the OPA planning application.

6.2.16 Although not yet a statutory requirement, the OPA included consideration of a net gain for biodiversity (BNG) from the outset and Appendix 10.13 of the ES reported on the quantum of

change in habitat areas, function and quality. The ES Chapter also firmly concluded no negative significant effects on biodiversity/habitats would arise from the proposals alone or in combination, with numerous positive effects also arising.

Evaluation of the Adequacy of the Ecological Baseline

Committed Development

6.2.17 A review of the committed development supports the opinion of Johns Associates that there is no new or evolving committed Development sites which would need to be (re-)considered or which may impact the assessment undertaken and reported to date.

Ecological Baseline

6.2.18 Paragraph 6.2.13 reports on the robust approach taken to define the ecological baseline reported in the OPA EA. Further to this, ongoing ecological presence on site has been provided by Johns Associates, Ecosa, Eastleigh Borough Council and others.

6.2.19 Johns Associates has undertaken annual update walkover surveys across the whole OPA boundary, reporting back on any notable changes (none have been reported other than the incremental delivery of approved development and its associated landscape and ecological measures).

6.2.20 Johns Associates and Ecosa have undertaken further surveys, monitoring and Ecological Clerk of Works supervision of a range of initial development in relation to protected species licenced work (bats, dormouse and great crested newts) habitat management and enhancement (woodland, ponds, grassland, watercourses and trees) and associated landscape planting. Similarly, onsite surveillance has been undertaken in relation to the delivery of non-licensable ecological method statements and Landscape and Ecological Management Plan reporting including in 2024.

6.2.21 Johns Associates also undertook further habitat surveys in 2023 and 2024 to refresh the original Phase 1 habitat survey to the now required UKHAB surveys (including habitat condition) and the riverine MORPH survey component to support the robust and ongoing assessment of BNG in accordance with the latest statutory biodiversity metric.

6.2.22 Members of the Johns Associates team have been involved in understanding, assessing and monitoring biodiversity at OHH since 2017 and therefore provide a robust level of continuity through periods of change as the different phased elements are delivered.

Conclusions in Relation to the Ecological Baseline

6.2.23 Taking the information presented in Section 6.2 into careful consideration, Johns Associates concludes the ecological baseline remains robust and in line with that reported in the OPA ES, and as such remains appropriate, does not affect the outcome of the assessment and remains suitable to support the determination of the OPA planning application.

6.3 REVIEW OF PREVIOUS ASSESSMENTS AND CONCLUSIONS

- 6.3.1 A careful review of Chapter 10 of the OPA ES and its appendices has been completed by Johns Associates, together with the substantial supporting information developed since its submission.
- 6.3.2 The Proposed Development has not materially changed since the production of the ES Chapter in 2020 and Section 6.2 supports the conclusion that the baseline remains appropriate, therefore the overall consideration of likely significant effects on ecological receptors as set out in the ES Chapter and accompanying appendices will also not have changed and remains appropriate.
- 6.3.3 Chapter 10 of the ES covered a very wide range of receptors, pathways and potential effects through enabling/construction phase works and operation/occupation of the site. It considered potential in-combination effects from other environmental aspects associated with the scheme e.g. From changes in air quality generated by traffic, changes in nutrient generation and offsite water quality effects, noise, vibration, lighting, construction pollution, and recreational effects on sensitive and legally protected sites including more distance locations associated with the Solent coast and the New Forest. The implication of the proposals in relation to future climate change was also considered.
- 6.3.4 It also considered these potential effects in-combination with other agreed committed developments.
- 6.3.5 In the interim period, substantial further work has been completed in relation to further reducing and evidencing how nutrient generation, sediment runoff and accidental pollution can be avoided/reduced, and mitigation can be delivered. This has been complemented alongside robust mechanisms to deliver appropriate mitigation for recreational impacts on European Sites (notably the New Forest). This work, included as supporting evidence in this ESA Technical Note, reinforced the validity of the conclusions made in the OHH ES.
- 6.3.6 Notwithstanding this, it is considered that in principle, no additional mitigation, compensation and enhancement measures are required.

- 6.3.7 No additional ecological mitigation measures are proposed beyond those which are inherent within the scheme design (noting the recent detailed work that has been undertaken on nutrients and recreation).
- 6.3.8 Taking into account the conclusions that no significant effects are predicted in Chapter 7 (Air Quality), Chapter 11 (Hydrology), Chapter 12 (Noise and Vibration) and Chapter 14 (Landscape and Visual) and the corresponding parts of this ESA Technical Note, together with the adopted and additional ecological mitigation and enhancement set out in Chapter 10: Ecology (Tables 10.7 and 10.11 of that Chapter), and the associated monitoring, management and (if necessary intervention) set out in Table 10:25 of Chapter 10: Ecology, the detailed assessment of effects in isolation has concluded that there will only be a 'negligible', 'very low' or 'low' magnitude of change predicted for all construction or operational ecological effects. Consequently, no significant construction or operation/occupation related effects are predicted for any of the ecological receptors being considered either in isolation, in combination or as inter-related effects.

6.4 ASSESSMENT SUMMARY

- 6.4.1 Based on the recent review work undertaken to inform this ESA technical note, it is considered reasonable to conclude that no significant construction or operation/occupation effects on ecology could occur.
- 6.4.2 Going beyond the findings of the OHH ES, the scheme will also deliver biodiversity net gain either within or outside the boundary of the Wider OPA Site (or a combination of the two), which will provide a notable additional benefit to biodiversity that was not formally part of the original conclusion.
- 6.4.3 Consequently, the OPA is considered to continue to meet all relevant legislative and policy based requirements associated with ecology. In the interest of brevity, summary tables 10.23, 10.24 and 10.25 relating to the Wider OPA Site in the OHH ES have not been duplicated in this document.