

Bioamrywiaeth a Datblygiad Biodiversity and Development

Canllawiau Cynllunio Atodl | Supplementary Planning Guidance



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NB: Words shown in *italics* within the document are defined in the Glossary.



1 Introduction

SPG Aims and Purpose

- 1.1 This Supplementary Planning Guidance (SPG) sets out how the Council will seek to ensure **development within Swansea maintains and enhances the County's biodiversity and delivers long term ecosystem resilience**. This aim is in line with the Council's enhanced biodiversity and resilience of ecosystems duties under Part 1, Section 6 of the *Environment (Wales) Act 2016* (hereafter 'the S6 duty') and the Resilient Wales Goal of the *Well Being of Future Generations (WCFG) Act 2015*. Figure 1.1 provides a summary of these duties.
- 1.2 The SPG will be taken into account as a material consideration in the determination of planning applications submitted to the Local Planning Authority.
- 1.3 The Environment (Wales) Act represents a fundamental shift in approach that must be reflected in the Planning system. All those involved in the planning process must move away from the presumption that damage or loss to biodiversity is acceptable where we can provide mitigation or compensation. We need to recognise that recreating habitat takes time and resources, and is not possible to achieve in many cases. The approach of "mitigate and compensate" for any negative impacts, must therefore now be replaced with one which delivers better quality development which works alongside nature to secure a more biodiverse and resilient environment.

Figure 1.1: "The S6 duty"

The **Environment (Wales) Act 2016** sets out the requirement for the sustainable management of natural resources. It includes (Part 1 section 6) a new Biodiversity and Resilience of Ecosystems Duty (strengthening the NERC Act duty).

The duty requires that public authorities, including Swansea Council, "**must seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and in so doing promote the resilience of ecosystems**."

In exercising this duty Swansea Council "**must take account of the resilience of ecosystems**, [see Figure 1.3 below]. The S6 Duty provides a statutory basis in Wales for the implementation of the Ecosystems Approach advocated in international policy.

- 1.4 Planning Policy Wales (PPW) recognises that delivering *the S6 duty* is a key influence on planning decision making in Wales, with the potential to provide multiple environmental, cultural and economic benefits for both people and wildlife¹. PPW also recognises the importance of applying an *ecosystem approach*, as part of the wider objective of achieving *sustainable development* and delivering on the goals of the *WBFG Act*. Specific guidance is set out in PPW on how *the S6 Duty* can be delivered through the planning system and how it should be considered alongside other key principles at plan making and application stages.
- 1.5 At the local level, the Council's commitment to delivering *the S6 Duty* is embedded within the *Local Well Being Plan*², and it is also identified as one of the Council's corporate priorities³.
- 1.6 The purpose of this *SPG* is to confirm how national guidance and legislation requirements should be considered at the local level, specifically by explaining how the policies of the *Swansea Local Development Plan (LDP)* will be applied.
- 1.7 The *SPG* aims to ensure applicants, statutory consultees, local residents and all other stakeholders involved in the development process have access to clear and consistent advice and guidance. It signposts applicants and their appointed ecologists to other guidance and codes of practice⁴.
- 1.8 The guidance emphasises that matters relating to *biodiversity* should not be considered in isolation, and instead should be recognised as a key component of providing and sustaining '*Green Infrastructure*', which is integral to good placemaking. Further details on matters relating to Green Infrastructure are set out in the Key Terms and Definitions Section below.
- 1.9 The *SPG* will help applicants to understand how best to identify and assess the biodiversity and ecological resilience of a planning application site. It sets out how to follow the '*Stepwise approach*' to maintaining and enhancing *biodiversity* required by planning policy, and ensures that this approach is embedded into each stage of the development management process. Specifically, the *SPG* will support applicants by setting out the means by which the requirements of legislation and LDP policy relating to maintaining and enhancing *biodiversity* can be met. It provides the framework to enable applicants to demonstrate that all reasonable steps have been taken to avoid development resulting

¹Planning Policy Wales, Para 6.4.21: *to maintain and enhance biodiversity and build resilient ecological networks by ensuring that any adverse environmental effects are firstly avoided, then minimised, mitigated and as a last resort compensated for. Enhancement must be secured wherever possible*".

² Swansea Public Services Board Local Well-being Plan

³ Swansea Corporate Plan – Objective 5

⁴ BS 42020:2013 British standard for Biodiversity – Code of Practice for Planning and development. (BSI, 2013); Ecological Impact Assessment (EclA) Checklist <https://cieem.net/resource/ecological-impact-assessment-ecia-checklist> The checklist ensures that decisions adequate information in accordance with Clauses 6.2 and 8.1 of BS 42020

in adverse effects on *biodiversity*. Where avoidance is not possible, the *SPG* will guide the process of demonstrating that all opportunities have been explored to minimise, mitigate and/or compensate for any identified harm. This includes the requirement to demonstrate that there is no alternative location for the development. It also provides guidance on how to achieve biodiversity enhancement.



Burry Inlet Ramsar/Carmarthen Bay and Estuaries European Marine Site (CBEEMS)

Importance of the Natural Environment in Swansea

1.10 The natural environment of the City and County of Swansea is of outstanding quality and beauty. It makes up over 80% of the County's total land area. Its diversity of landscapes and habitats, including upland moorlands, coastal cliffs, sandy beaches, woodlands, wetlands, river valleys and estuaries, all combine to make it one of the most attractive and ecologically rich counties in the UK.

1.11 Given this diversity, it is unsurprising that over half the County's area is of significant ecological importance, with a number of areas protected by International or National Designations. These include:

- 2 Ramsar Wetlands of International Importance
- 7 Special Areas of Conservation (SACs)
- 2 Special Protection Areas (SPAs)
- 35 Sites of Special Scientific Interest (SSSI)
- Gower AONB – IUCN Category V protected landscape



Crymlyn Bog - Ramsar, SAC, SSSI and NNR

1.12 These International and National designations represent some of our very best ecological assets, but they do not encompass all that is irreplaceable within the County. Furthermore, the designated sites by themselves cannot maintain biodiversity and ecosystem resilience. The County's 6 *Local Nature Reserves (LNRs)* and numerous *Sites of Importance for Nature Conservation (SINCs)* combine with more common habitats, urban wildlife sites, residential gardens, churchyards, green pockets and spaces, to provide an important network of semi-natural sites that the Council will seek to maintain and enhance. Together these

areas make a cumulative contribution to the quality and extent of the County's biodiversity and ecosystem resilience. Further details on the statutory and non-statutory designated sites of ecological importance within Swansea are set out in Chapter 2⁵.

Key Terms and Definitions

- 1.13 There are a wide range of terms associated with biodiversity and its related concepts. A number of these are set out below and those shown in *italics* within the *SPG* are further detailed in the **Glossary**.
- 1.14 *Biodiversity* underpins the structure and functioning of ecosystems. The term *biodiversity* refers to the diversity of living organisms, whether at the genetic, species or ecosystem level. An *ecosystem* is made up of *animals, plants, fungi and single celled organisms* in conjunction with their non-living environment, air, water, minerals and soil, and all the diverse and complex interactions that take place between them.⁶
- 1.15 Our economy, health and well-being are dependent on the extent to which ecosystems are able to provide us with our food, clean water and air, and the raw materials and energy for our industries, as well as protecting us against hazards such as flooding and climate change. These are referred to as *ecosystem services* (See *Figure 1.2*). Changes in the distribution and abundance of plants, fungi, animals, and microbes

affect ecosystem functions and the capacity of those functions to deliver ecosystem services. Loss of species from ecosystems affect their ability to resist invasion by other species, affect production and nutrient cycling, and affect the resilience, reliability and stability of ecosystems. Therefore, *biodiversity* is essential to sustaining healthy, functioning ecosystems that provide the vital services our lives depend on.

⁵ Changes to the EU Habitats Regulations 2017, published Jan 1st 2021 – available at: <https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017>

⁶ Planning Policy Wales, Para 6.4.1

Figure 1.2: Ecosystem services diagram

source:metrovancover.org



1.16 *Ecosystems* that are more biodiverse are generally more resilient and better able to adapt to pressures and changes, such as impacts from development and climate change. This aspect is referred to as *ecosystem resilience* and is a key element of sustainable *placemaking*. Indeed, humans can be

considered as species within their own *ecosystem*, and *placemaking* therefore serves to create resilient human habitats as well as wildlife habitats.

1.17 *The Environment Act (Wales) 2016* established the principle of *Sustainable Management of Natural Resources (SMNR)* which is “using natural resources in a way and at a rate that maintains and enhances the resilience of ecosystems and the benefits they provide. In doing so, meeting the needs of present generations of people without compromising the ability of future generations to meet their needs, and contributing to the achievement of the well-being goals in the Well-being of Future Generations Act.”⁷

1.18 Key principles of the *SMNR* include thinking about:

- the complex relationships between nature and people over the long term.
- the benefits that we get from natural resources now and in the future, recognising the ways they support our well-being.
- ways of making our ecosystems more resilient.

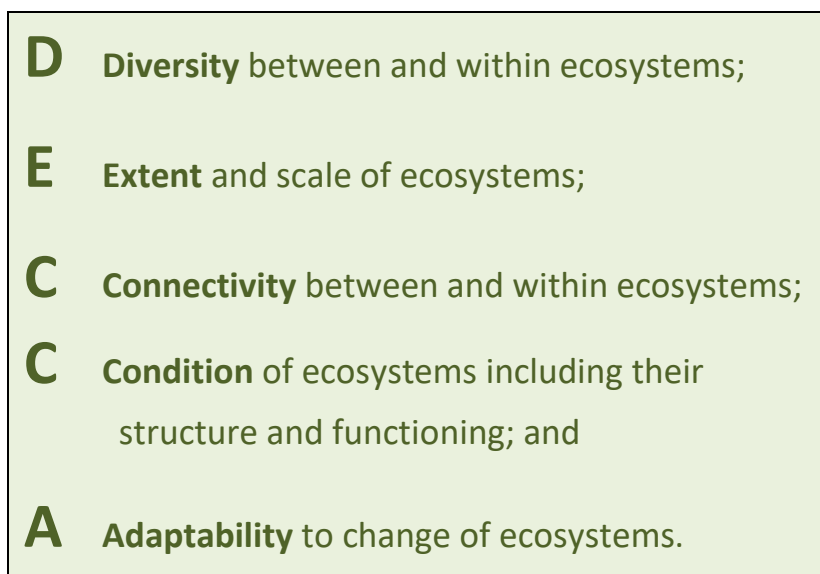
1.19 If we are to achieve this then we must think differently about how we can ensure that the planning process plays its part in ensuring that biodiversity and ecosystem resilience is maintained and enhanced. In this context “*Enhancement*” is where improved management of ecological features or provision of new ecological features result in a net benefit to biodiversity. This benefit is unrelated to negative impact and should

⁷ <https://naturalresources.wales/media/678063/introducing-smnr-booklet-english-final.pdf>

be clearly distinguished from the results of actions to mitigate/compensate.

- 1.20 The five principles⁸ set out in Figure 1.3 below provides a broad framework for maintaining and enhancing biodiversity and building resilience through the planning system⁹.

Figure 1.3: The 5 Attributes of Ecosystem Resilience (DECCA)



- 1.21 Taking this holistic and integrated *ecosystem approach* facilitates a broader consideration of compliance with LDP policies and national legislation, including a wide

range of related issues such as air and water pollution, climate change, drainage and trees.

- 1.22 There is a particularly close and symbiotic relationship between biodiversity, ecosystem resilience and Green Infrastructure (GI) i.e. the network of natural/semi-natural features, green spaces and green corridors. This *SPG* supports the delivery of green infrastructure as being a central facet of placemaking. Good quality GI enables the greatest multi-functionality and enhanced connectivity of the GI network, in order to maximise the number, quality and intensity of benefits.
- 1.23 This approach to the provision of GI is inextricably linked with the ecosystem approach. Both involve implementation of a holistic and integrated approach to the sustainable management of natural resources (SMNR). It is important therefore that development decisions take into account the needs of biodiversity alongside the needs of other GI benefits and ecosystem services (such as open space provision and surface water management) and vice versa.
- 1.24 Figure 1.4 sets out the key ecological features which should be maintained and enhanced in order to contribute to the resilience of local biodiversity in Swansea. Each is considered a highly significant green infrastructure asset, and together they comprise Swansea's Green Infrastructure Network.

⁸ Principles of resilience as set out in the Environment (Wales) Act 2016

⁹ Planning Policy Wales Para 6.4.9.

Figure 1.4: Key Ecological Features

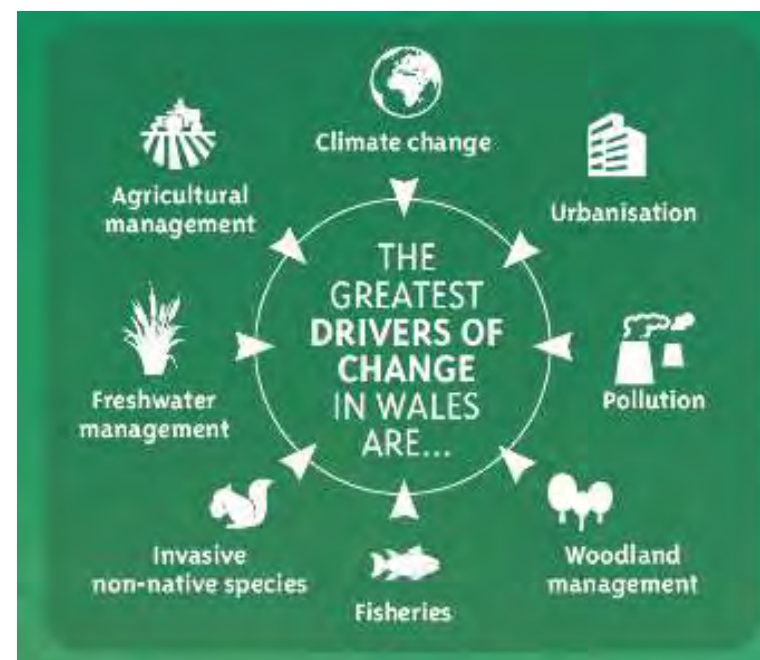
- ♣ **International and National Designated Sites** Ramsars, SACs, SPAs, NNRs
- ♣ **Priority habitats and Priority species** (section 7 of the **Environment (Wales) Act 2016**) (the S7 list)
- ♣ **Habitats** that provide **green corridors** or **stepping-stones** across the landscape and urban area, such as pocket woodlands, hedgerows or networks of ponds. Ecological connectivity allows species to forage, migrate, colonise new areas and respond to habitat and climate change.
- ♣ **Locally designated sites** designated for their nature conservation importance (SINCs/LNRs)
- ♣ **The wider landscape**, that can provide important complementary habitat and act as a buffer protecting priority habitats from the adverse impacts of developed areas and associated activities and have potential for biodiversity enhancement or habitat creation. They are also important in maintaining habitat connectivity.
- ♣ **Trees, Hedgerows and Woodland** This includes both the trees themselves and species and habitats that comprise hedgerow and woodland ecosystems (See Trees, Hedgerows and Woodland on Development Sites SPG)

1.25 At the national level, the State of Natural Resources Report Wales (SoNaRR) sets out what are considered the greatest drivers of change in Wales, as illustrated in Figure 1.5 below:¹⁰ Invasive *Non-Native Species (INNS)* are identified as one of these drivers, and as

¹⁰ nbn.org.uk/wp-content/uploads/2019/09/State-of-Nature-2019-Wales-English-version-27-09-19.pdf

such their management on planning application sites is an important way to maintain and enhance ecosystem resilience. *INNS* are a major threat to biodiversity at the global level and represent a serious impediment to conservation and sustainable use of global, regional and local biodiversity, as well as having a significant adverse impact on *ecosystem services*¹¹.

Figure 1.5: SoNaRR, Greatest Drivers of Change



¹¹ See Assessment of the impacts of Invasive Alien Species (IAS) in Europe and the EU (Institute for European Environmental Policy (IEEP), Technical Support to EU Strategy on IAS.

Document Structure

1.26 Following this introductory Chapter, the remaining document is structured as follows:

1.27 **Chapter 2: Provides an outline of the duties and requirements of applicants and the Council itself**, having regard to the relevant legislative and policy framework. Further details and extracts relating to these are provided on the Council's website¹². Chapter 2 explains how adopted *LDP* policies will be implemented and outlines how compliance with these policies will assist in demonstrating how development proposals accord with *the S6 Duty and other relevant legislation*. It provides specific guidance in relation to designated sites, including international, national and local designations. The full extent of protected sites, habitats and species in the County is listed in Appendix 1.

1.28 **Chapter 3: Provides a step-by-step guide to how the Council will administer the development management process in order to ensure that biodiversity is maintained and enhanced in all planning decisions.** The Chapter introduces the 'Stepwise approach' advocated by PPW¹³ which aims to build the consideration of *biodiversity* into the development management process at the earliest possible stage, in order to achieve the best possible outcome for biodiversity and minimise delays and costs to applicants. The focus of Chapter 3 is to provide guidance on how *biodiversity* requirements will be

implemented on all scales of development from minor householder applications, through to large scale major developments. This Chapter provides best practice guidance on the timing, scale, nature and content of ecological surveys and assessments of habitats, sites and species. It is supported by Appendix 1 which provides *Ecological Survey Checklists and details of Survey Seasons*. Detailed information and guidance on the process of *Environmental Impact Assessment (EIA)*, *Habitats Regulations Assessment (HRA)*, *Protected Species and Development Licences*, *Preliminary Ecological Assessment (PEA)* is provided on the Council's website.

1.29 **Chapter 4 explains in more detail the principles of the Stepwise Approach**, and sets out how the Council will ensure that any adverse environmental effects are firstly avoided, then minimised, mitigated and as a last resort compensated for. Guidance is also provided on how the requirement in national guidance to secure enhancement "wherever possible" will be implemented through the planning system, having particular regard to the extent to which enhancement is proportionate to the scale of the proposals. The Chapter also provides guidance on how the relevant ecological survey information will support this process.

1.30 **Chapter 5 provides a glossary of key terms** and a link to a separate document of **Appendices is provided at Chapter 6.**

¹² See Guidance re Environmental Legislation www.swansea.gov.uk

¹³ PPW Para 6.4.21: "to maintain and enhance biodiversity and build resilient ecological networks by ensuring that any adverse environmental effects are firstly

avoided, then minimised, mitigated and as a last resort compensated for. Enhancement must be secured wherever possible". ."

2 Legislation and Policy Context

International and National

- 2.1 Local policy and guidance relating to *biodiversity* is derived from International, UK and Welsh Government policy, guidance and legal requirements. International *biodiversity* policies provide the context for Wales' national *biodiversity* policies, which in turn are reflected in Swansea's own local strategies and adopted policies.
- 2.2 Infringement of legislation invariably results in delays, additional costs and in many cases prosecution. By following the guidance in this *SPG*, (as well as the best practice guidance signposted within it and any additional advice from a suitably qualified ecologist), applicants can be more confident that proposals will be in accordance with national and international legislation and policy requirements. Ultimately this will serve to reduce delays to the planning process and reduce the likelihood of unexpected costs being incurred.
- 2.3 Applicants should be aware that legislation is independent of the planning system and that they (and in some instances any contractors/third parties working with them) remain responsible for compliance with the legislation, both outside of the planning system and once planning permission has been granted.
- 2.4 Appendix 1 of this *SPG* provides an outline of the relationship between international, UK, Wales and local legislation and policy. Tables are also included giving

examples of how the policy framework relates to the *biodiversity* assets found in Swansea, and the implications for development.

- 2.5 This *SPG* does not seek to repeat all the national legislation and policy that applies to the consideration of *biodiversity* matters in relation to development. Extracts and summaries of the range of relevant policies and legislation are provided on the Council's website¹⁴. They give rise to various obligations, requirements and principles relating to biodiversity and sustainable management of the natural environment.

2.6 **In order to comply with the relevant legislation and policy, planning decisions made by the Council must:**

- ♣ Protect and promote the long-term conservation of protected habitats, species and designated sites. (See Appendix 1)
- ♣ Comply with the Council's S6 duty under the Environment (Wales) Act 2016 to seek to maintain and enhance biodiversity.
- ♣ Apply the ecosystem approach. Integrate management of land, water, air and living resources into development design and layout. Balance maintaining and enhancing biodiversity against, sustainable use and the equitable utilisation of ecosystem services¹⁵.

¹⁴ See Guidance re Environmental Legislation www.swansea.gov.uk

¹⁵ Environment (Wales) Act 2016

- ♣ Take account of all relevant information relating to the sustainable management of natural resources, including having regard to the SMNR Framework (SoNaRR, Natural Resource Policy, Nature Recovery Action Plan for Wales, Area Statements).
 - ♣ Ensure measures are in place to address the presence of invasive non-native species (INNS) on the planning application site
 - ♣ Consider how development contributes to achievement of the “Resilient Wales” Well Being Goal in the Well Being of Future Generations Act.
- 2.7 When considering planning applications, the Council will have specific regard to how the proposal complies with the requirements set out in PPW, including the need to follow the stepwise approach.
- 2.8 By following a stepwise approach to maintaining and enhancing biodiversity, development can build and sustain resilient ecological networks by:
- ♣ Putting appropriate mechanisms in place to avoid, mitigate and/or compensate negative effects and secure enhancement that deliver a net benefit for biodiversity and ecosystem resilience wherever possible.
 - ♣ Creating ecosystem resilience by applying the 5 principles of ecosystem resilience. (See DECCA figure 1.3).
- 2.9 Consideration of how biodiversity and the wider GI benefits are integrated into new developments is key to

demonstrating compliance with national and local policy and guidance. This process is supported by the checklists provided at Appendix 1.

- 2.10 PPW makes clear that all reasonable steps must be taken to maintain and enhance biodiversity and promote the resilience of ecosystems, and that these should be balanced with the wider economic and social needs of business and local communities. It also emphasises that planning permission should be refused where adverse effects on the environment cannot be avoided or mitigated¹⁶
- 2.11 As well as the above, the following legislation has a particular bearing on the requirement for development to ensure biodiversity is maintained and enhanced:
- 2.12 The **Well-being and Future Generations Act, 2015** provides an obvious link to the resilient Wales and globally responsible Wales wellbeing goals. There are also clear and proven links between the impacts of exposure to the natural environment on physical and mental health. Maintaining and enhancing biodiversity in development is an important way to demonstrate how a development has considered and addressed the “healthier Wales well-being goal.
- 2.13 The importance of **Sustainable Drainage Systems (SuDS)** in providing opportunities to achieve biodiversity net benefit and ecosystem resilience is recognised in the Flood and Water Management Act and supporting SUDS Wales Standards. Further

¹⁶ PPW – Section 6.4

guidance on achieving biodiversity in SUDS is provided on the Council's website¹⁷.

- 2.14 There is a wide range of legislation, plans and guidance that applies to the sustainable management of the **Marine, Coastal and Estuarine areas of Wales**. Applicants proposing development within or adjacent to marine, coastal or estuarine areas should refer to the survey checklists at Appendix 1. See also guidance on the Marine Planning process on the Council's website¹⁸.

Local Policy

- 2.15 **The adopted Swansea LDP** provides the statutory local policy framework against which all planning applications must be determined. The *LDP* provides a detailed, evidence based framework for making effective and consistent planning decisions in the public interest. The policies have been formulated to recognise that biodiversity is a key part of achieving *sustainable development* through placemaking. LDP policies aim to reconcile the benefits of development and investment with the need to maintain and enhance biodiversity and ecosystem resilience.

- 2.16 The key *LDP policies* supported by this *SPG* are;

ER 6 Designated Sites of Ecological Importance, regarding the effects of development upon sites of international, national and local nature conservation interest.

ER 8 Habitats and Species, regarding the effects of development on the resilience of protected habitats and species.

ER 9 Ecological Networks and Features of Importance for Biodiversity, regarding the effects of development on the connectivity of ecological networks and features of importance for biodiversity.

- 2.17 These policies are supported, and complemented, by a range of other strategic and topic specific policies. These include:

<i>ER 1: Climate Change</i>	<i>PS 1: Sustainable Places</i>
<i>ER 3: Strategic Green Infrastructure Network</i>	<i>PS 2: Placemaking and Place Management</i>
<i>ER 4 Gower AONB</i>	<i>SI 1 Health and Well Being</i>
<i>ER 7 Undeveloped Coast</i>	<i>SI 5 Protection of Open Space</i>
<i>ER 11: Trees, Hedgerows and Development</i>	<i>SI 6 Provision of New Open Space</i>
<i>RP 1: Safeguarding Public Health and Natural Resources</i>	<i>RP 3 Air and Light Pollution</i>

¹⁷ See Guidance re SuDS and Biodiversity www.swansea.gov.uk

¹⁸ See Guidance re SuDS and Biodiversity www.swansea.gov.uk

RP 2: Noise Pollution

*RP 4 Water Pollution and
the Protection of Water
Resources*

- 2.18 The range of LDP policies that apply clearly demonstrates that the impacts of development on biodiversity cannot be considered in isolation. Appendix 5 provides relevant extracts from LDP policies. The policies can be read in full at www.swansea.gov.uk/ldp
- 2.19 This *SPG* provides details of the County's designated sites and protected habitats and species, and augments the information in the *LDP* (see *LDP Appendix 7*). Reference to the *SPG* will enable a more informed consideration of sites, and help applicants identify early on the extent to which Policies ER 6 and ER 8 apply to a planning application site. It will also assist in identifying opportunities to maintain and enhance ecological networks and features of importance for *biodiversity* (Policy ER 9), including on non-statutory, locally designated sites.
- 2.20 Locally designated sites of importance for biodiversity are a significant element of Swansea's biodiversity. PPW recognises that such sites can make a vital contribution to delivering an ecological connectivity network for protected species and habitats between designated sites and can help to ensure the resilience of ecosystems. It is important to recognise that a non-statutory designation will support protected and /or priority habitats and species which need to be given

appropriate protection in accordance with S7 of the Environment (Wales) Act 2016¹⁹.

- 2.21 Within Swansea there are two types of locally designated sites, both of which are shown on the LDP Constraints and Issues Map²⁰. These are:
- ***Sites of Importance for Nature Conservation (SINCs), and***
 - ***Local Nature Reserves (LNR)***
- 2.22 ***SINCs:*** A SINC is designated because of its significant nature conservation value. TAN 5 requires the selection of such sites to be based upon rigorous national criteria²¹, but recognises that some local amendments may be necessary to reflect the local biodiversity resource. The process of designation of SINCs in Swansea has followed this approach.
- 2.23 All sites identified as SINCs in Swansea are shown on the LDP Constraints and Issues Map²² and will be subject to Policy ER 6. The Constraints and Issues Map does not form part of the statutorily adopted LDP and is permitted to be updated at intervals throughout the Plan period. The SINC boundaries defined on the Map may therefore be subject to change during this period. Any changes to the boundaries will be based on the latest available evidence base and survey data, and will follow appropriate stakeholder consultation.
- 2.24 There may be other sites that meet SINC criteria but are not shown on the LDP Constraints and Issues Map which will still support priority habitats and/or species,

¹⁹ Planning Policy Wales - 6.4.20.

²⁰ <https://www.swansea.gov.uk/ldp>

²¹ Wildlife Sites Guidance Wales: A guide to develop local wildlife systems in Wales.

²² <https://www.swansea.gov.uk/ldp>

which will need to be given appropriate protection, having regard to the provisions of S7 of the Environment Act (and the Local Biodiversity Action Plan). Additionally, or alternatively, these sites may address gaps in connectivity, which PPW advises should be taken into account. Conversely, the Council will consider whether evidence submitted as part of an application demonstrates a site no longer meets SINC criteria. Such evidence will be taken into account as part of the process undertaken to review designated SINC boundaries on the LDP Constraints and Issues Map.

- 2.25 **LNR:** There are 6 LNRs in Swansea, all of which are situated within, or near, urban areas. These were established following consultation with Natural Resources Wales (NRW) under the National Parks and Access to the Countryside Act 1949. For a site to become an LNR it must have natural features of special interest to the local area, and be accessible to local people. The local authority must either have a legal interest in the land or have an agreement with the owner to manage the land as a reserve. The Council considers LNR designations useful not only as part of its responsibilities to protect habitats and wildlife but also to increase people's awareness of their environment and identify places where children can learn about nature.
- 2.26 LDP policies also refer to the requirements for applicants to undertake appropriate ecological surveys, in order to inform and support development proposals

(Policy ER6). This *SPG* provides guidance on the nature, content and timing of such surveys to assist in the process of assessing the impact of development. Where avoidance of harm is not possible, this *SPG* provides guidance on the information required to inform the early design of the proposal, the opportunities for creating connections to the wider *GI/ecological network*, and the need for and nature of any conditions or planning obligations necessary to secure *biodiversity* mitigation, compensation and enhancement. Where mitigation or compensation is required, the *SPG* provides further guidance on the steps that the Council will take throughout the planning application process to determine appropriate measures, in order to meet the requirement to secure a net benefit for biodiversity.

- 2.27 The LDP has been informed by an assessment of ecological connectivity across the whole of the County. As well as mapping the existing ecological connectivity network in Swansea, this assessment also identifies locations where ecological connectivity has the potential to be enhanced. The latest version of the Swansea Ecological Connectivity Assessment will inform the implementation of LDP policies and should be referenced where relevant in the application of this SPG²³.

Other Supplementary Planning Guidance

- 2.28 LDP Policy is supported by a suite of SPG that are material considerations for decision making on planning applications²⁴. A number of these have direct

²³ Swansea Ecological Connectivity Assessment www.swansea.gov.uk

²⁴ www.swansea.gov.uk/spg

relevance to biodiversity matters, including the following:

- *Placemaking Guidance for Residential Development*
- *Placemaking Guidance for Householder Development*
- *Placemaking Guidance for Infill and Backland Development*
- *Trees, Woodlands and Hedgerows on Development Sites*
- *Placemaking Guidance for development in the Gower AONB*

2.29 The *Placemaking Guidance for Residential Development SPG* provides important additional detail about how consideration of biodiversity and ecosystem resilience will form part of the wider design process. The main focus of the guidance is on schemes of ten or more dwellings or proposals on sites of 0.5 ha or more, however it is relevant as a material consideration for all proposals for new residential development.

2.30 The *Placemaking Guidance for Householder Development and Infill & Backland Development SPGs* sets out how net benefit for biodiversity will be secured on small scale and householder applications. These Placemaking Guidance documents support the approach of securing appropriate measures or interventions wherever possible, including on minor applications, as part of a cumulative approach to ensuring that planning decisions contribute to the wider *green infrastructure network and biodiversity gain*.

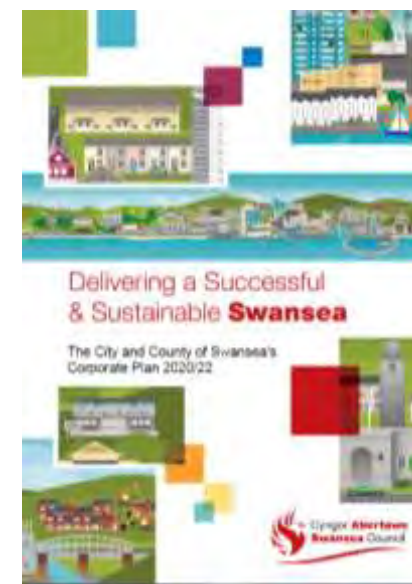
2.31 The *Trees, Hedgerows & Woodlands on Development Site SPG* provides specific advice on the role of trees, hedgerows and woodlands in enhancing biodiversity, both in their own right and as part of the wider green infrastructure network, and their role in contributing to *ecosystem resilience*. It is supported, and complemented, by the Council's '*County Tree Strategy*' which a material consideration for decision making in relation to proposals affecting trees on land owned by the Council.

2.32 A *Green Infrastructure Strategy and Green Infrastructure (GI) SPG* will also bring together a series of issues relating to specific GI benefits and ecosystem services, and enables their consideration by the LPA in a comprehensive and coordinated way.

Other Local Strategies and Plans

2.33 When considering development proposals the Council will also have regard to a range of local Strategies and Plans, and will consider how proposals deliver on the requirement for maintaining and enhancing biodiversity.

- ♣ **Swansea Public Service Board’s (PSB) Well Being Plan:** The partners of the Swansea PSB have a set of 4 objectives, one of which is *“working with nature to improve health, enhance biodiversity and reduce our carbon footprint”*.
- ♣ The Council has a set of 8 **Corporate Objectives**, one of which is *“maintaining and enhancing Swansea’s natural resources and biodiversity”*.²⁵
- ♣ **Local Biodiversity Action Plan (LBAP)** and emerging **Nature Recovery Action Plan (NRAP)** - These documents provide the local tier of the SMNR policy framework.
- ♣ **Gower AONB Management Plan:** Produced by the Gower AONB partnership this 5 year plan for the management of the AONB recognises Biodiversity special qualities of the AONB and sets out a specific vision, policies and objectives relating to conserving and enhancing the biodiversity within the AONB designation.



²⁵ www.swansea.gov.uk/corporateimprovementplan

3 The Stepwise Approach

Overview

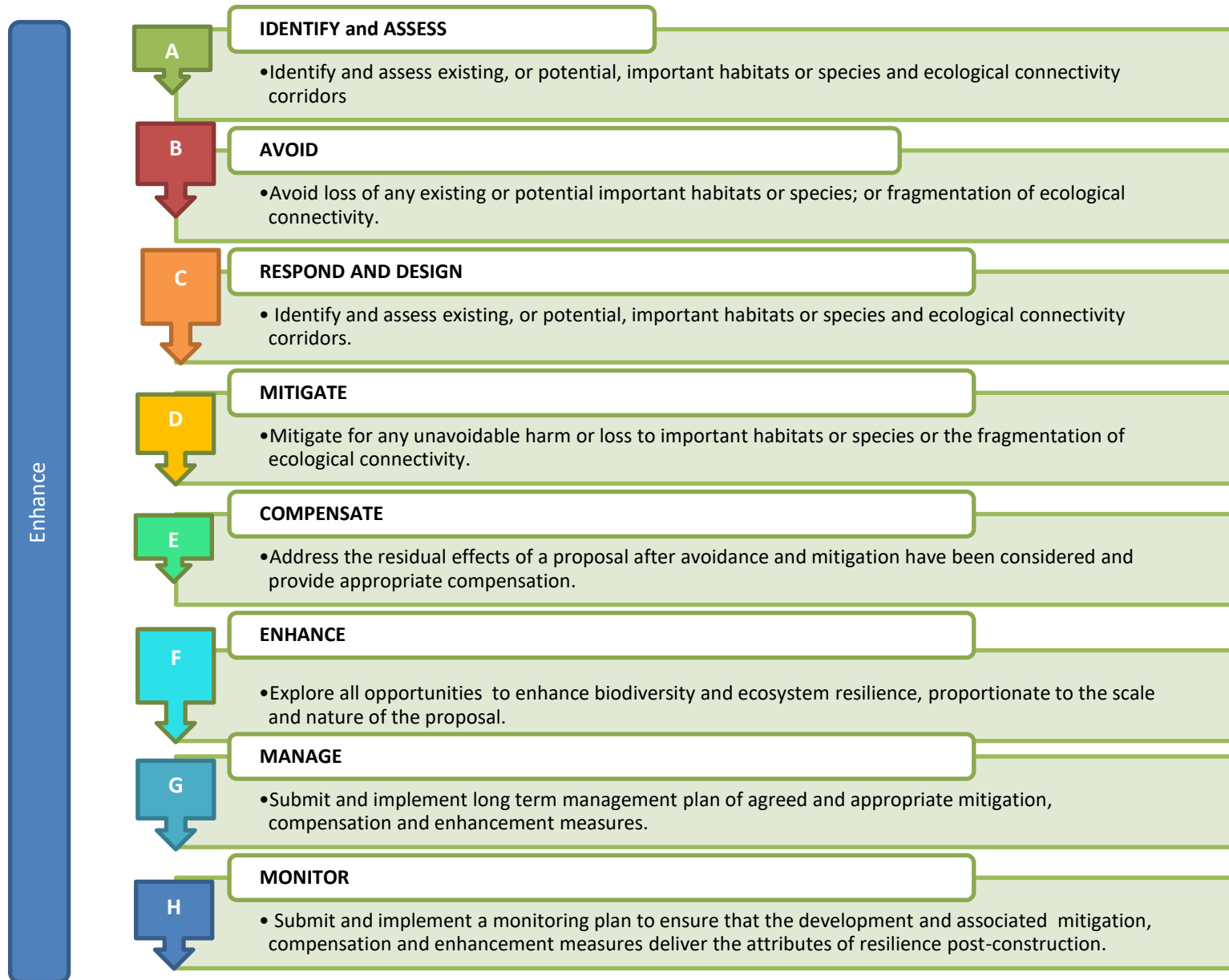
- 3.1 PPW makes clear that, when making planning decisions, the Local Planning Authority must follow a *stepwise approach*. Such an approach ensures that planning decisions maintain and enhance biodiversity and build resilient ecological networks. This approach also serves to ensure adverse environmental effects of development are first avoided, then minimised, mitigated and, as a last resort, compensated for²⁶. The same National Guidance states that enhancement of biodiversity must be secured wherever possible.
- 3.2 Figure 3.1 (overpage) provides a simple guide to the stepwise approach. The figure identifies the key steps outlined in PPW and explains how the Council will consider biodiversity throughout the lifespan of a planning application. The figure also provides a guide to how, and when, applicants should consider biodiversity. Further explanation of each step of the process is provided later in this Chapter.



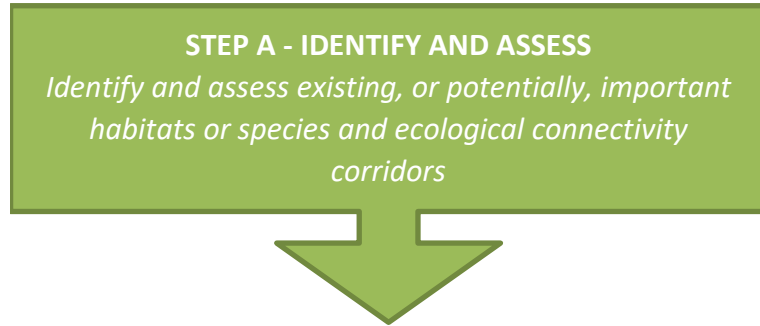
- 3.3 The S6 duty seeks to maintain and enhance all biodiversity. Therefore, where the stepwise approach refers to “important” species or habitats this means that the Council will follow a process to reach a judgement about the biodiversity present on the site, having regard to legal protections, statutory and non-statutory designations and all the other relevant considerations to determine ecological value (see figure 3.1 below).
- 3.4 Chapter 4 explains how the stepwise approach is integrated throughout the relevant stages of the Council’s Development Management processes. This is illustrated in the diagram at Figure 4.1.

²⁶ PPW 10, Para 6.4.21

Figure 3.1 Guide to the stepwise approach.



Steps A – H of the Stepwise Process



- 3.5 The first principle of the stepwise process is the early and accurate identification of designated sites, and/or protected habitats and species that are present on a site and/or wider area. This is essential to understanding the significance of biodiversity issues and ascertain the potential ecological impacts and opportunities of a development proposal. It is also crucial to establish the site's location in relation to ecological connectivity corridors.
- 3.6 Ecological survey data, together with information provided relating to the resilience of ecosystems on and around a site, will be critical in informing the extent and nature of mitigation, compensation and enhancements that will be sought in each application. The attributes of *ecosystem resilience* should be used to provide baseline data about the current resilience of a site²⁷. The Local Environmental

²⁷ PPW 10, Para 6.4.9

Records Centre can provide valuable data to inform a baseline site analysis. The Council supports the best practice approach of sharing of ecological survey data with the Local Environmental Records Centre to secure the continuous improvement of baseline data as promoted in the Environment Act. Further detail of how the Council will work with Applicants to achieve this is set out in Chapter 4.

- 3.7 In the case where surveys and assessments do not identify a requirement for compensation/mitigation, the Council still has a duty to maintain and enhance the biodiversity and ecosystem resilience of the site. The Council will therefore seek to secure biodiversity enhancements which deliver a net benefit for biodiversity in all developments where possible, having regard to the scale and nature of the development and the biodiversity and ecosystem resilience value of the site.
- 3.8 **In circumstances where the necessary biodiversity enhancement cannot be achieved as part of a planning application, it may be necessary to refuse permission.** The Welsh Government emphasise that *“where biodiversity enhancement is not proposed as part of an application, significant weight will be given to its absence, and unless significant material considerations indicate otherwise it will be necessary to refuse permission²⁸”*. This re-enforces the importance of being able to demonstrate how biodiversity and ecosystem resilience considerations have been taken into account

²⁸ Biodiversity enhancements: guidance for heads of planning <https://gov.wales/biodiversity-enhancements-guidance-heads-planning>

and that a scheme is based upon a full ecological understanding of the site.

3.9 In complying with the S6 duty to seek to protect and enhance biodiversity, appropriate regard will be given to the protection and enhancement of SINC's in the determination of planning applications. Where a planning application site contains a designated SINC, applicants will be:

- encouraged to consult the Council's planning ecologist to establish the features and values for which the site was designated²⁹
- required to make an assessment, undertaken by a suitably qualified ecologist, of the biodiversity impacts of the proposal on their site against the features and values of the SINC.

3.10 Appendix 1 provides checklists to support the process of identification and survey of sites, species and habitats and connectivity networks, both terrestrial and marine. Applicants are also advised to refer to the County Ecological Connectivity Assessment³⁰ which identifies locations where fragmentation of existing connectivity should be avoided and where ecological connectivity has the potential to be enhanced.

²⁹ <https://www.swansea.gov.uk/biodiversity>

³⁰ Swansea Ecological Connectivity Assessment www.swansea.gov.uk

STEP B: AVOID

Avoid loss of any existing or potentially important habitats or species; or fragmentation of ecological connectivity



- 3.11 The principle of avoidance is embedded into LDP Policies ER 6, 8 and 9, which require that the applicant must justify the need for the development in that location and demonstrate that there are no satisfactory alternative locations for the development. It is important to distinguish between the principle of avoidance at the strategic plan making stage, and avoidance during the detailed planning application process. Specifically, in the case of sites allocated for development in the adopted LDP, the process of establishing appropriate need for the development and considering alternative locations was undertaken as an integral part of LDP preparation.



John Hooper Bat Conservation Trust

- 3.12 The primary biodiversity objective in the early stages of the development design process should be the retention and maintenance of ecological features. For example, if a planning application site includes a pond, wildflower meadow, woodland, hedgerow or veteran tree³¹, every effort should be made to incorporate these features into the layout. Priority should be given to the retention and/or integration of habitats and features which are most difficult or impossible to recreate, such as ancient woodlands, which are irreplaceable and cannot be compensated for. A list of S7 protected and priority species and habitats found in Swansea is provided on the Council's website.³²
- 3.13 Where negative impacts have been identified, the *Preliminary Ecological Appraisal (PEA)* will be a key supporting document to demonstrate how the applicant has worked through the stepwise approach.

³¹ Further information is provided in the Council's *SPG* re Trees, Hedgerows and Woodland on Development Sites

³² See Guidance on Swansea's s7 List www.swansea.gov.uk

- 3.14 Where it has been concluded that residual biodiversity loss will be inevitable, the *PEA* should clearly explain why loss cannot be avoided, the process of considering alternative sites and reasons why alternative sites cannot be found. The *PEA* should also provide full justification for, and details of, proposed biodiversity offsetting/compensation and enhancement measures and must have regard to how the proposed mitigation and compensation measures will deliver the 5 principles of ecosystem resilience (See DECCA Figure 1.3). See also Guidance on *PEA* requirements on the Council's website.
- 3.15 Where there is no loss, or where loss has been avoided, then planning law is clear that it is not reasonable to secure enhancements as a condition of development. However, no site is devoid of opportunities for ecological enhancements to be integrated into the design of the development. The Council will therefore explore with the developer opportunities to achieve ecological enhancements within the design and layout of a site (see Step C), or a contribution to off-site enhancements, which address evidenced opportunities to improve the diversity, connectivity, scale, condition or adaptability of local ecosystems. (see Step E and DECCA Figure 1.3).
- 3.16 Applicants are advised to refer to the County Ecological Connectivity Assessment³³ which identifies locations

where fragmentation of existing connectivity should be avoided and where ecological connectivity has the potential to be enhanced.

- 3.17 SINC's play an important role in local ecological connectivity. Development affecting SINC's will be considered against Policy ER 6 which follows the stepwise approach. It should be noted that for sites allocated for development in the LDP that contain SINC's, the process of establishing appropriate need and considering alternative locations was undertaken as an integral part of LDP preparation. Therefore, development proposals on allocated LDP sites that contain SINC's are not required to undertake the specific task of identifying appropriate need or justifying why alternative locations are not available. Whilst the need for the development and justification of its location has been established for LDP allocated sites by virtue of the Plan's adoption by the Council, Stages A to F of the Stepwise Approach will still therefore apply in order to maintain and enhance biodiversity and the resilience of ecosystems. This can be achieved through sensitive design and site layout, mitigation, compensation and enhancement.

³³ Swansea Ecological Connectivity Assessment www.swansea.gov.uk

STEP C: RESPOND AND DESIGN

Identify and assess existing, or potential, important habitats or species and ecological connectivity corridors.



- 3.18 Gaining a detailed understanding of the biodiversity and GI qualities of a site at an early stage will highlight opportunities to maximise the retention, enhancement or further creation of natural assets on a site. Examples of new biodiversity features that could be provided through site design are, landscaping, habitat creation/enhancement, SuDs, and green infrastructure, living roofs and facades. This evidence led approach enables development to be designed with biodiversity benefits as an integral part. This will embed such matters into the placemaking approach that is advocated by the Council, as described in the adopted LDP.
- 3.19 Ongoing dialogue with the Council will ensure that modifications to proposals take appropriate account of additional biodiversity and ecosystem resilience information, as it emerges, throughout the development process. This will ensure that the most appropriate mitigation, compensation and enhancement measures are agreed at the time of permission.



STEP D - MITIGATE

For any unavoidable harm or loss to important habitats or species or the fragmentation of ecological connectivity.

- 3.20 Where it has been established that avoidance is not possible, then the design of a development proposal should aim to mitigate any detrimental effects by minimising, as far as possible, the negative impacts on biodiversity. This could include amending the design or timing of operations. Enhancements will be sought over and above the mitigation specified. CIEEM guidance recommends that wherever possible mitigation should be “by design”, i.e. embedded into the design and layout of a proposal. This is often a more beneficial approach than developers responding to LPA requests at a later stage and can provide greater certainty for the LPA that the mitigation will be delivered. For many species, particularly those with legal protection, there is published guidance that describes appropriate approaches to mitigation³⁴. In some cases, it will be necessary to design new approaches to mitigate an effect, and the advice of relevant experts and statutory and non-statutory consultees should be sought. If standard methods are not being used, this will need to be explained and justified. Examples of the types of mitigation measures that may be appropriate to address the specific effects of a range of

³⁴ . See links to site, species and habitat specific guidance provided at Section 6 of the CIEEM Guidance

development types and locations are provided on the Council’s website³⁵.



³⁵ GUIDANCE on Council Website– Examples of Mitigation, Compensation and Enhancement Measures

STEP E- COMPENSATE

Addressing the residual effects of a proposal after avoidance and mitigation have been considered.

- 3.21 Compensation should always be regarded as the last stage, after all other stages of the stepwise approach have been considered.
- 3.22 In some circumstances, it will not be possible to fully avoid, compensate or mitigate for certain ecological features on a site. Where all other options have been exhausted, off-site compensation for unavoidable damage will be sought.
- 3.23 Compensation describes measures taken to offset residual effects resulting in the loss of, or permanent damage to, ecological features, despite mitigation. Compensation must first be proposed on site. Off-site measures will only be considered where they are supported by evidence that there are no appropriate opportunities for on-site measures to be achieved.
- 3.24 It is also important to note that compensation It is not a substitute for enhancements required to deliver a *net benefit for biodiversity*.
- 3.25 Wherever possible compensation should be focused on replacing similar types of ecological features as those affected and equivalent levels of ecological resilience. The extent or size of any replacement area should be similar in terms of ecological features and ecological functions that have been lost or damaged, or with appropriate long term management have the ability to reproduce the functions, diversity and condition of those original ecological features.
- 3.26 Compensation should be provided as close as possible to the location where losses have occurred and benefit the same habitats and species as those affected³⁶.
- 3.27 Replacement ratios of compensatory habitat greater than one-to-one will be required. This is because of the uncertainty inherent in compensation, (particularly in cases which require ecological restoration, habitat creation or translocation of species or habitats) including the length of time needed for replacement habitat to provide the same level of ecosystem services as those lost. The scientific basis for deriving appropriate ratios is not exact and will vary depending on the habitat or species concerned. Increased replacement ratios can also help take account of the time lag in delivering compensation.
- 3.28 An ecosystem approach should be adopted when considering compensation proposals and applicants should be able to demonstrate how the five key ecosystem resilience attributes have been taken into account. (See

³⁶ PPW 10, para 6.4.21 4c "Where compensation for specific species is being sought the focus should be on maintaining or enhancing the population of the species within its natural range.

This approach might also identify locations for providing species-specific compensation further away from the site."

DECCA Figure 1.3). This approach ensures that the compensation is appropriate in terms of the wider ecological functions/ecosystem services it will provide.

- 3.29 The Council will take a pragmatic approach to considering the scale and nature of compensation appropriate to be considered to provide a net benefit. The identification and assessment of biodiversity features and assets at Stage A will be essential in understanding the opportunities for securing net benefit. Further details of the principles of enhancement together with examples of enhancement measures are provided on the Council's website.³⁷



³⁷ See Guidance re Enhancement Measures www.swansea.gov.uk

STEP F- ENHANCE

Explore all opportunities to enhance biodiversity and ecosystem resilience proportionate to the scale and nature of the proposal

- 3.30 Arguably Step F is not a sequential step in itself but an overarching principle that is fundamental to meeting the duty to maintain and enhance biodiversity. It is important not to confuse enhancement with mitigation and/or compensation. Enhancement will be sought over and above mitigation and compensation to achieve net benefit for biodiversity and maintain ecosystem resilience. The identification and assessment of biodiversity features and assets at Stage A will be essential in understanding the opportunities for securing enhancements. The attributes of ecosystem resilience (Figure 3.1) identified at this stage and those of the proposed enhancement should be used as a guiding principle in considering whether a net benefit will be achieved. Wherever possible, the Council will seek to secure enhancements by applying the principles of good placemaking and GI. Where on-site enhancements are not feasible/cannot be incorporated into the site design the Council may seek a contribution from the developer to off-site measures. For example, to support identified projects for maintaining or creating habitats. This could be secured through an appropriate legal mechanism.
- 3.31 The ways in which enhancement can be achieved will vary from site to site and should be proportionate to the scale,

nature and location of the development involved and have regard to evidence submitted relating to the biodiversity and resilience of ecosystems on and dependant/interrelated ecosystems adjacent to the site.

- 3.32 The Council will determine whether it is appropriate, reasonable and necessary to use a planning condition to secure biodiversity enhancement, with reference to the tests set out in the Welsh Government Circular 'The Use of Planning Conditions for Development Management' (Circular 016/2014). The Council's general approach is to require that biodiversity enhancements are shown on proposed plans, and that an appropriate condition be applied to the permission to approve the development in accordance with the submitted plans. Further suggestions for biodiversity enhancements will be included as an informative within the ecological consultation response. The Community Infrastructure Levy Regulations 2010 also state that it is not reasonable to include a Planning Obligation on as part of a development on the basis of contributions which are not directly related to the development.
- 3.33 Smaller scale developments could enhance local biodiversity through simple measures. For example, the installation of bird or bat boxes, or the improvement of existing *green corridors* through planting of native species. Larger scale developments could consider the creation and management of a woodland, wildflower meadow, wetland or other specific habitat of value to wildlife, or filling gaps in connectivity corridors as part of the development, or off site if there is limited scope within the development site. Chapter 4 provides further detail on how

the requirement for enhancement will be implemented for different types of development.



STEP G – MANAGE

Submit and implement long term management plan of agreed and appropriate mitigation, compensation and enhancement measures.



STEP H – MONITOR

Submit and implement a monitoring plan to ensure that the development and associated mitigation, compensation and enhancement measures deliver the attributes of resilience post-construction



- 3.34 Appropriate ongoing management arrangements must be put in place in order to secure the long lasting benefits of of retained and/or newly created habitats and features.
- 3.35 As with previous steps, integration of management requirements into the design of mitigation, compensation and enhancement schemes is strongly advised.
- 3.36 The guiding principle will be to ensure that management and monitoring proposed is proportionate both to the scale and impact of the project. This will ensure that the varying Management and monitoring needs from site to site will be taken into account.

Figure 3.2: Recommended Best practice for Management and Monitoring Plans

- Include criteria to measure success, such as a population of an indicator species reaching a certain size.
- Identify specific actions required for good management and include phasing where necessary.
- Identify the organisations and personnel responsible for implementing the plan
- Confirm that the implementation of the Plan will be overseen by a suitably qualified and experienced ecologist/Ecological Clerk of Works (ECOW) who will be required to liaise with the Council's Planning Ecology Officer and submit relevant ecological monitoring reports to the LPA.
- Specify the duration of monitoring. The time frame should be proportionate to the scale of the proposal, the species and habitats involved and the extent of the impact of the development. In some cases, particularly where relocation/translocation of species is involved, a longer timeframe may be required so that the species and habitats become established and to ensure that the long term management objectives for the site have been achieved.
- For larger developments and those that affect European Protected Species, applicants may need to provide a monitoring strategy and a mechanism for remediation measures in the event that it becomes apparent that mitigation, compensation and enhancement measures are not working. This will also be required by NRW as part of a European Protected Species (development) licence. The management and monitoring

plan should also include a forward projection of costs, and the means by which these costs will be secured for the future.

- For small scale development it may not be necessary for long term monitoring to be undertaken, rather just confirmation that the necessary avoidance / mitigation / compensation or enhancement measures have been delivered (e.g. the provision of bird or bat boxes). As suggested in the British Standard, a brief statement confirming that the agreed measures have been implemented, and signed by a competent ecologist, may be all that is necessary in such cases to demonstrate compliance with the planning consen



4 The Development Management Process

Overview

- 4.1 This Chapter provides step-by-step guidance on how the *stepwise approach* set out in Chapter 3 applies to each stage of the Council's Development Management (DM) decision making process. **Figure 4.1** overpage, illustrates the interrelationships that exist between the two processes.
- 4.2 The stepwise approach is applicable to all types and scales of development, from minor applications and householder development through to major applications. However, this guidance makes clear that the actions required to be undertaken should be proportionate to the scale, nature and location of the proposal and the potential impact of the development on biodiversity and ecosystem resilience.
- 4.3 This Chapter provides a general outline of the DM process which applies a broad framework to be followed for all development. Detailed guidance on how the process should be applied for specific scales and types of development is provided in Appendix 2 and 3, namely:

Stepwise for Major Development [see Appendix 2]

- 4.4 Major development is defined as any application that involves:
- mineral extraction
 - waste development
 - floorspace over 1000sqm/an area of 1 ha or
 - a residential site providing 10+ dwellings/over 0.5 ha. In the case of residential applications, Appendix A should also be read together with the Residential Design Guide SPG.

Stepwise for Minor Development [see Appendix 3]

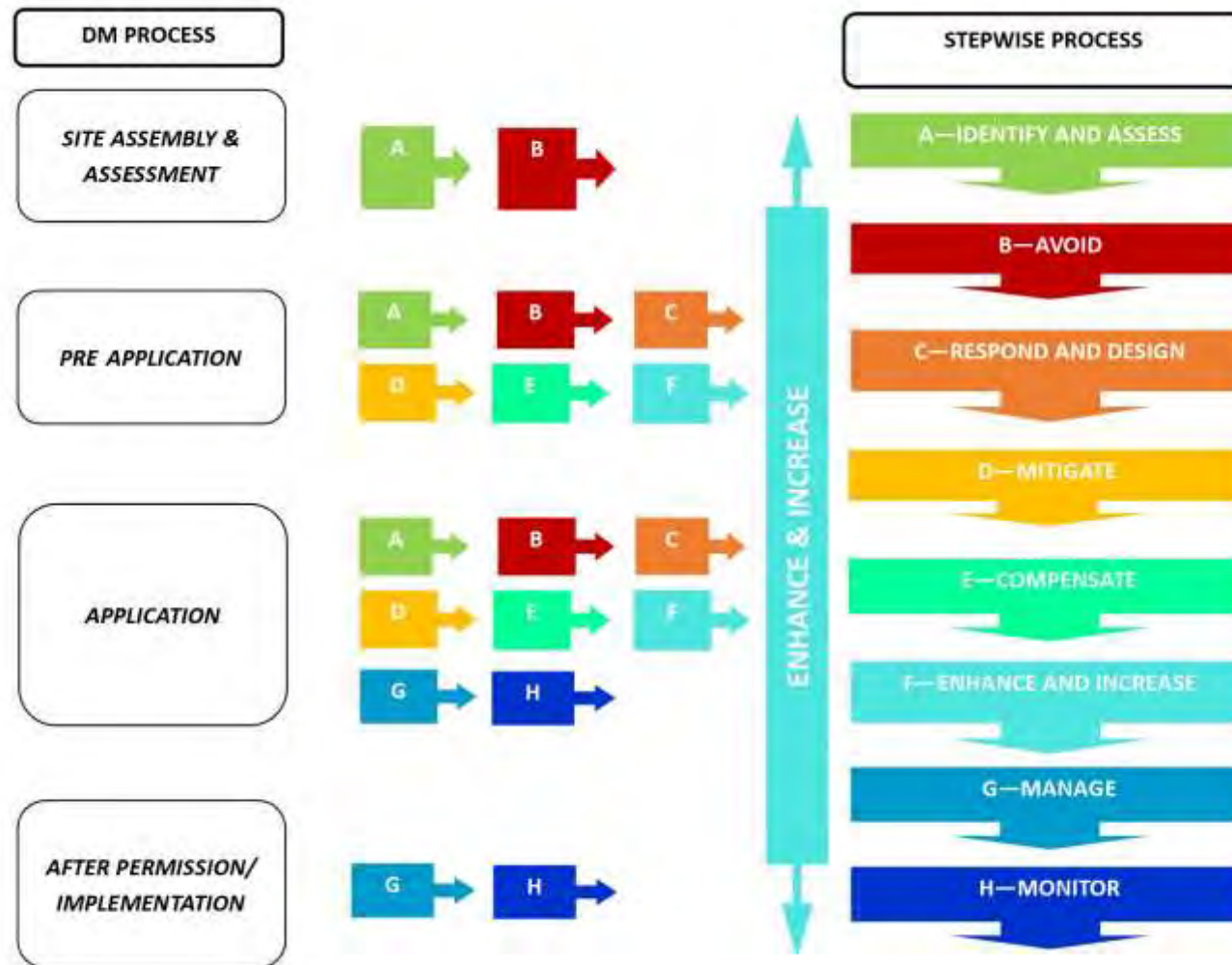
- 4.5 Minor development refers to applications which do not meet the criteria for major development, or proposals that are classed as 'other development'.
- 4.6 Other development includes changes of use, householder development, advertisements, listed building and conservation area consents, and certificates of existing or proposed lawful development.

Marine and Coastal Development

- 4.7 All development affecting marine, coastal or estuarine areas should refer to the Survey checklists in Appendix 1³⁸.

³⁸ See Guidance re Marine Planning www.swansea.gov.uk

Figure 4.1: Relationship between Development Management Process and the Stepwise approach



4.8 This Chapter signposts best practice contained in the **British Standard for Biodiversity (BS 42020:2013)**³⁹ and supporting **CIEEM Guidance**⁴⁰. These provide detailed guidance on ecological appraisal and the information that should be submitted as part of a planning application (including methodology and timing of any ecological surveys and assessments required). Site survey and assessment data is essential to effectively establish the potential impact of a proposal, provide evidence to guide the reasonable implementation of the stepwise approach, and identify the opportunities to achieve biodiversity enhancements which deliver a net benefit to ecosystem resilience.

4.9 The key overarching principles set out in this Chapter, in terms of the Council's approach to biodiversity and development management are:

- Applicants are strongly advised that **biodiversity and ecosystem resilience should be considered at the earliest possible stage of a development**, as part of an integrated and holistic approach to design of the development, to demonstrate a full understanding of the biodiversity value of a site, its ecosystem resilience and its function within the wider green infrastructure network.
- Integration of biodiversity and ecosystem resilience measures within a development are

part of good placemaking and green infrastructure principles, and are essential for the creation of locally responsive, healthy and well connected places.

- Submission of timely and appropriate ecological information is essential. In particular, where the Council's Planning Ecologist has identified that a *Preliminary Ecological Assessment (PEA)* must be submitted with an application along with any additional species surveys identified in the PEA. Failure to submit the required information could lead to the application being refused. The Council will refer to the relevant CIEEM guidance in determining whether submitted ecological information has been carried out by an appropriate ecological consultant following the appropriate ecological reporting methodologies.
- All applicants should consider where Invasive Non-native Species (INNS) surveys and assessments are required.
- Survey information is essential to inform the avoidance or minimisation of impact or loss of protected species or habitats, and the negotiation of appropriate mitigation. Applicants are required to demonstrate how the proposal and associated biodiversity measures has responded to the ecological information.

³⁹ BS 42020:2013 British standard for Biodiversity – Code of Practice for Planning and development. (BSI, 2013)

⁴⁰ Ecological Impact Assessment (EclA) Checklist <https://cieem.net/resource/ecological-impact-assessment-ecia-checklist> The checklist ensures that decisions adequate information in accordance with Clauses 6.2 and 8.1 of BS 42020

- The Council will only consider negotiating compensation measures where it has been clearly and robustly demonstrated that avoidance and mitigation cannot be achieved.
- Compensation will not be acceptable for irreplaceable habitats (e.g. ancient woodlands).
- The Council will seek to achieve a net benefit for biodiversity in all developments, proportionate to the scale of the development and having regard to the submitted evidence regarding biodiversity and resilience of ecosystems both within and adjacent the site.
- Where approval from the SuDS Approval Body (SAB) is required,⁴¹ early and parallel engagement with the SAB process is strongly advised. This will maximise opportunities to achieve an integrated and multifunctional design and layout of all elements of green infrastructure within a site to meet national and local planning policies and the WG Sustainable Drainage Standards for Wales⁴² which require the design of SuDS to take into consideration water quality and biodiversity. The Council's Planning Ecologist is a consultee on all SAB applications and can provide advice on ecological measures required. The Planning Ecologist is also a consultee on planning applications and will advise on the information required from


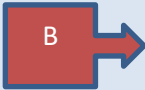
applicants to demonstrate how the planting and maintenance of Sustainable Drainage Systems (SuDS) proposals will maintain and enhance biodiversity and ecosystem resilience. Evidence will also be required of the impact of the proposal on the existing connectivity of ecosystems and opportunities to provide enhancements. See also Council Website re examples of biodiverse SuDS measures.⁴³

⁴¹ See <https://swansea.gov.uk/sustainable-drainage> for further information on SAB process.

⁴² <https://gov.wales/sites/default/files/publications/2019-06/statutory-national-standards-for-sustainable-drainage-systems.pdf>

⁴³ See Guidance re Enhancement Measures and also re SuDS and Biodiversity www.swansea.gov.uk

Integration of Stepwise Approach into the DM Process

DM STAGE 1: PRE-APPLICATION	RELEVANT STEPWISE STEPS	
<div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center;"> Site Assembly and Assessment </div>		
	Assess	Avoid

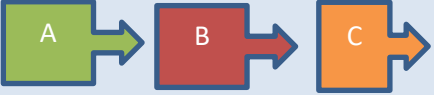
4.10 The potential for biodiversity and ecological features to be affected by a development must be considered at the earliest stage of any proposal. **Failure to do so may lead to delays in the planning process or refusal of an application.** It is therefore advisable to gain a clear understanding of the biodiversity features and GI assets and ecosystem resilience of a site at the earliest possible stage of any development project. This will improve the quality of initial site designs, provide valuable information to guide initial discussions with the Council and ensure that issues are considered and addressed from the outset, to achieve the best outcome for biodiversity and avoid additional costs or delays to a development. This advice is applicable to all types and scales of development.

4.11 The following steps can provide an early indication of the potential impacts and opportunities presented by a site, and ensure that proposals have appropriate regard to the relevant environmental and legislative context (See

Chapter 1, Appendix 1 and section 4.13 below for relevant sources of information):

- Assess the site to identify any international, national or local designations.
- Assess the site to identify the presence of a habitat and or species protected under International, UK or Welsh Gov legislation (e.g. the list of protected species in *S7 of the Environment Wales Act*). **Presence of a protected species is a material planning consideration** when a planning authority is considering a development proposal which, if carried out, would be likely to result in disturbance or harm to the species or its habitat, and will seek to ensure that the range and population of the species is sustained (see 6.4.22 PPW 10 for further guidance on protected species).
- Assess the site to identify the presence of any Invasive Non-native Species (*INNS*) of flora listed in Schedule 9 Part II section 14(2) of the Wildlife and Countryside Act 1981 (as amended).
- Assess the site to identify sites of importance in terms of habitat and/or connectivity.



DM STAGE 1: PRE-APPLICATION	RELEVANT STEPWISE STEPS
<div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center;"> PRE-APPLICATION – Understanding your site </div>	
	<div style="display: flex; justify-content: space-around; text-align: center;"> Assess Avoid Design </div>

4.12 Ideally, a baseline understanding of the impacts and opportunities presented by a development will have been undertaken at Stage 1. Any proposal presented to the Council at the pre-application stage should therefore be informed by a basic ecological knowledge of the site.

Sources of initial survey and assessment data

- 4.13 **SEWBRcC:** Screening to determine the presence of protected species and habitats should be carried out on the basis of data provided by the South East Wales Biodiversity Record Centre (SEWBRcC)⁴⁴. SEWBRcC provides detailed and confidential data to inform surveys carried out by competent ecologists at cost.
- 4.14 **LDP Constraints and Issues Map:** provides overview of the spatial location of the County's

statutory and non-statutory designated sites. Appendix 7 of the LDP lists all protected sites.

- 4.15 **Connectivity Mapping** – See Swansea Ecological Connectivity Assessment⁴⁵.
- 4.16 **Appendix 1:** provides a list of sites, habitats and species in the County in relation to the policy context; and a Survey checklist of species and habitats most likely to be affected by specific types of development, surveys required and the appropriate survey seasons.
- 4.17 The LPA will co-ordinate appropriate engagement of the Council's planning ecologist on biodiversity issues at the pre-application stage. There are considerable benefits in seeking professional ecological advice before making an application, including:
- It gives you the opportunity to understand how policies and guidance will be applied to your proposed development,
 - It can identify at an early stage where there is need biodiversity surveys and assessments, It will ensure that project timescales have appropriate regard to the **seasonal nature** of the ecological surveying and avoid lengthy delays⁴⁶.
 - Where there is a need for specialist input, (ecologists, landscape architects, sustainable drainage engineers)
 - It can avoid potential breaches of environmental protection legislation.

⁴⁴ www.sewbrec.org.uk

⁴⁵ www.swansea.gov.uk

⁴⁶ See Appendix 1 re guidance on Survey Seasons

- It may lead to a reduction in time spent by your professional advisors in working up proposals, identifying issues to be addressed and opportunities to be explored for biodiversity protection and enhancement to be integrated into wider green infrastructure designs at the earliest possible stages, before an application is submitted.
- It may indicate that a proposal is completely unacceptable, saving you the cost of pursuing a formal application
- Provides opportunities to identify shared solutions for SuDS and biodiversity
- It will ensure that you provide all the necessary information and drawings to enable the application to be registered and validated.
- It will ensure that all ecological surveys required in support of a planning application are valid at the time of submission. **Ecological Surveys are generally considered to be valid for a period of 2 years** after which time, updated surveys will be required.⁴⁷

4.18 The range of impacts of development on biodiversity and ecosystem resilience will vary in both scale and nature. For example, a development could result in:

- direct loss of habitats or important species on site;

- fragmentation or loss of connectivity between habitats or species populations either on site, or off-site connectivity to the wider ecological network;
- alteration of regimes such as hydrology that an ecosystem is reliant upon.
- air, noise and light pollution
- disturbance from recreation and or predation for pets.

4.19 Understanding the specific issues relating to both the type of development and its location is therefore essential.

4.20 Early engagement with the Council's planning ecologist will identify the need for and potential content of a **Preliminary Ecological Appraisal (PEA)**⁴⁸. A PEA of a proposed development should identify any biodiversity features which may be affected by a proposed development, and should identify any further surveys which will need to be undertaken. Applications likely to affect any designated sites or priority habitats or species must include a survey and assessment for the relevant habitats and species. The initial survey and any additional detailed surveys form constituent parts of the PEA, in accordance with guidelines for ecological reports set out in the British Standard 42020 and in

⁴⁷ CIEEM Advice Note – On the lifespan of ecological reports and surveys
<https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>

⁴⁸ [CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, \(Updated Sept 2019\)](#)

Further information [CIEEM Technical Guidance Series Guidance for Preliminary Ecological Appraisals](#) (Chartered Institute for Ecology and Environmental Appraisals, 2013)

the CIEEM guidelines. See also Guidance on Councils website re PEA process.⁴⁹

- 4.21 Appendix 1 of this SPG provides a Survey Checklist. This assists in identifying applications that will need survey work, and details of the information that will need to be considered during the design stage and submitted with the planning application. Applications that involve one or more of the development types listed in column 1 of the Survey Checklist must include the relevant species survey(s) as indicated in the table.
- 4.22 Applicants should also be aware that additional information may be requested. The Council can direct the applicant to supply any further information which is considered reasonably necessary for the purpose of determining the planning application.
- 4.23 Applicants required to submit ecological information with their planning application, will need to employ a suitably qualified ecological consultant⁵⁰. The Council supports the best practice approach of sharing ecological information with SEWBReC. This approach improves the quality of information for future applications. Applicants are therefore strongly advised to discuss with their ecological consultant the inclusion into their contracts the clause provided at Figure 4.2 below.

Figure 4.2 – Suggested draft contract clause re Ecological Survey Data

“Applicants or their consultants agree to proactively share with South East Wales Biodiversity Records Centre (SEWBReC) any biological records made during the process of ecological appraisal at the same time as report submission to the LPA (advice on preferred data formats is available via the SEWBReC website

The Council considers all parts of ecological reports submitted to it as part of the planning process which are not specifically marked as sensitive, to be in the public domain. “

- 4.24 Applicants should also include within survey and assessment specifications identification of the presence of any Invasive Non-native Species (INNS) of flora listed in Schedule 9 Part II section 14(2) of the Wildlife and Countryside Act 1981 (as amended).
- 4.25 In some cases, there may not be a reasonable likelihood for a wildlife feature to be affected by development and survey work will not be needed.
- 4.26 Impacts on biodiversity can extend beyond site boundaries in unexpected ways, for instance through noise or light pollution, surface water run-off, or predatory behaviour of domestic pets. Relatively small developments can also have larger impacts on the wider landscape, for example, removing a hedgerow or line of trees could break up a bat-

⁴⁹ See Guidance re Survey and Assessment Process www.swansea.gov.uk

⁵⁰ See Chapter 6 Glossary for links to CIEEM Guidance

foraging or commuting route, negatively affecting a breeding colony some distance from the planning application site.

- 4.27 A development may also have an adverse impact on biodiversity either during the construction phase or during the operational phase, or both, and the survey work needs to fully consider the possible impacts of both.
- 4.28 Additional surveys, assessments or licences may be legally required. When undertaking surveys and assessments for a planning application, the applicant should also determine whether the following are required⁵¹:
- a. **Environmental Impact Assessment (EIA)** the proposal would trigger the need for an EIA and if the submission of a 'screening opinion' is necessary;
 - b. **Habitat Regulations Assessment (HRA)** the development proposed would contravene the protection afforded to a European Protected Site (EPS) and whether there is therefore a need to submit a report to inform an HRA under the Habitats Directive⁵². (It is important to note that legislation covering EPS may apply even where an EPS has been detected outside the boundary of the site) and/or;
 - c. **NRW Protected Species Licence** the proposals triggers the need to apply to Natural Resources Wales for the below licences. The

consideration and granting of licences is separate from the process of applying for planning permission. However the LPA must take account of the legislation throughout the development management process.

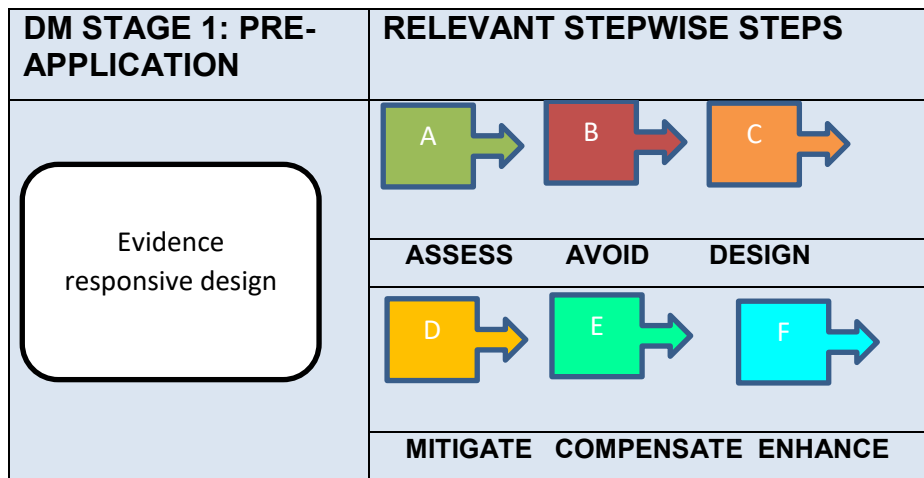
- **European Protected Species (EPS) Development Licence to disturb** NRW issues Protected Species licences for any development that would affect a EPS protected under the Conservation of Habitats and Species Regulations 2017; or
- **UK Protected Species Licence:** NRW issues development licences for species protected under the Wildlife and Countryside Act 1981, for example, Reptiles (all UK species) and Water Voles. NRW is also responsible for issuing licences under the Protection of Badgers Act 1992 where it is necessary to interfere with badger and/or their setts in the course of development.

- 4.29 Applicants and their consultants are also advised to consider the policy framework for the *Sustainable Management of Natural Resources in Wales* for an indication of potential issues and opportunities. The framework includes:
- *NRW SoNaRR Report,*
 - *NRW Area Statements,*

⁵¹ See Guidance re Survey and Assessment Process www.swansea.gov.uk

⁵² See PPW 10 para 6.4.23 which advises on the process relating to proposals for which development works would contravene the protection afforded to EPS,

- *Section 7 List of Habitats and Species in Wales (Env Act 2016),*
- *Swansea’s Local Biodiversity Action Plan (LBAP)*
- *Nature Recovery Action Plan (NRAP) (under preparation).*



- 4.30 The pre-application stage is the most appropriate stage to consider how the proposal will address the impacts identified in the PEA and any additional species surveys carried out.
- 4.31 Specifically, the applicant should seek to establish at the pre-application stage how the proposal will maintain and enhance biodiversity, ecological connectivity and resilience .
- 4.32 It is therefore important that the findings of any ecological surveys are taken into careful consideration

during the design stage to ensure that biodiversity and ecosystem resilience are fully integrated into the early designs of proposals as part of the wider placemaking approach.

- 4.33 For major applications, a multi-disciplinary design team should be engaged at the earliest possible stage and include a suitably qualified ecologist. The design team should have a sound understanding of the ecological survey work and produce design solutions which respond to the identified opportunities to secure biodiversity enhancements and integrate ecosystem resilience into the development having regard to the 5 principles of resilience. Best practice principles of placemaking and green infrastructure demand that these issues are no longer retrofitted into the established/standard designs and layouts of development companies, but are a driving influence from an early stage.

'Ecological Constraints and Opportunities Plan' ECOP

- 4.34 It is strongly recommended that design teams provide an 'Ecological Constraints and Opportunities Plan' (ECOP), as set out in the British Standard. The ECOP is an efficient and effective way to communicate the key issues raised in the detailed technical ecological reports. This can be a simple traffic light plan which communicates the location of issues and design responses. Where appropriate it can signpost to detailed sections of survey reports. If prepared at an early stage, the ECOP is a useful tool to inform both pre-app discussions and updated designs at subsequent stages of the development

design and planning process. It provides a useful way to demonstrate how the design process has taken into account the most valuable natural assets and that developments result in a net benefit for biodiversity.

- 4.35 Information from the ECOP may usefully be incorporated into green infrastructure (GI) and SuDS proposals plans to evidence delivery of biodiversity and connectivity as part of GI and GI strategies in accordance with LDP Policies ER2 re Green Infrastructure and RP4 re SUDS.
- 4.36 The LDP promotes a holistic approach to placemaking, and the creation of places which maintain and enhance biodiversity forms part of the plan's wider placemaking approach (see LDP Policy PS 2 (xiv, xv)). The Council will therefore expect proposals to demonstrate how designs:
- *respond to all available evidence relating to identified biodiversity and green infrastructure qualities: and*
 - *have evolved in line with the stepwise approach.*
- 4.37 Where no biodiversity issues have been identified, the Design and Access Statement (DAS) should contain a clear statement of the steps taken to establish biodiversity and ecosystem resilience of the site and an explanation of why no further measures are considered necessary. For example, the applicant should provide evidence of completion of a SEWBREC desktop search by provision of the relevant case reference number or correspondence

evidencing consultation with either privately engaged ecologists or the Council's ecologist.

- 4.38 Where avoidance is not feasible, then the design should aim to mitigate any detrimental effects by minimising them as far as possible. For example, if the development is designed to include an existing pond, a certain amount of mitigation for the developed area would be achieved by ensuring that the pond is physically connected to terrestrial habitat and not isolated by the development.
- 4.39 Ongoing dialogue with the Council throughout the design process will ensure that modifications to proposals take appropriate account of biodiversity information as it emerges throughout the development process.
- Other recommended Pre-application discussions**
- 4.40 Pre-application discussion with statutory consultees such as NRW is also recommended, together with non-statutory consultees, where appropriate.
- 4.41 **NRW:** have an environmental regulatory function and information on the NRW website provides details of consents, licences and permissions which applicants may need to obtain⁵³.

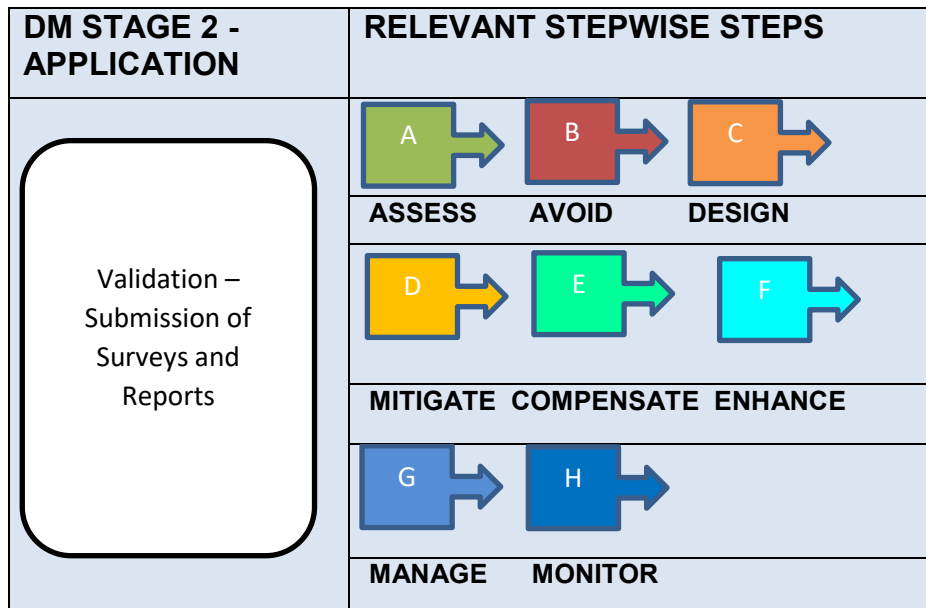
⁵³ <https://naturalresourceswales.gov.uk/permits-and-permissions/>

4.42 **SAB Pre-Application:** Where a pre-application submission is made under the SAB process, it is advisable to carry this out in parallel with the planning pre-app process in order that all opportunities for achieving biodiverse SuDS solutions can be fully explored.



Above - Pond and grassland habitat mosaic. Below SuDS pond: Source: <https://www.susdrain.org/case-studies>



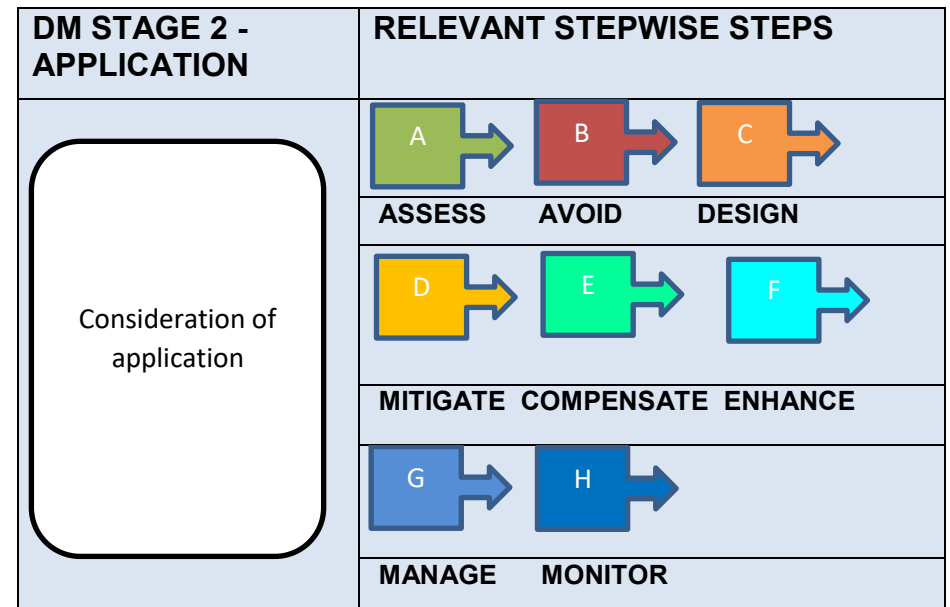


4.43 By the time a planning application is ready for submission the ecological features present on the site should have been fully considered and the stages of the Stepwise approach carefully followed. Any identified impacts should have been avoided, minimised or mitigated in the design of the proposal presented and fully justified in the application.

4.44 Any relevant ecological survey or assessments required should be submitted along with the application. The ecologist employed by the applicant or their agent should always work to the relevant

recognised survey and mitigation guidelines and industry standards, and should give an evidence-based justification for any deviation from these guidelines.⁵⁴

4.45 Where applications are submitted without ecological information, they may be validated but cannot be determined until any necessary ecological reports have been submitted to, and approved by, the Local Planning Authority (LPA). Where surveys and reports are submitted which recommend further survey work is carried out, and this is not submitted to the LPA, the LPA may refuse the application.



⁵⁴ See Appendix 1 and Appendix 6 re guidance on Surveys and Assessments

- 4.46 The Ecological report submitted to support an application will be assessed to ensure that it:
- **Is up to date** – see *CIEEM advice note re valid timeframes for survey reports*⁵⁵ *Ecological Surveys submitted in support of planning applications are generally considered to be **valid for a period of 2 years**, after which time, updated surveys are likely to be required.*
 - **Is clear enough to allow the Council:**
 - to assess the biodiversity and ecosystem resilience of the proposed development before making a planning decision.
 - to understand the particular avoidance, mitigation and compensation measures proposed as part of the development scheme.
 - **Provides full and clear justification of the implementation of the stepwise approach**, and specifically that any compensation proposed is residual, having first fully considered avoidance, minimisation and mitigation of identified negative effects.
 - **Describes how the proposed biodiversity enhancements will achieve ecosystem resilience** in accordance with the 5 attributes of resilience (See DECCA Fig 1.3).

- 4.47 To ensure decisions are based upon adequate information in accordance with BS42020 the Council will consider the information submitted against the Ecological Impact Assessment (EclA) checklist⁵⁶. The checklist signposts to all relevant CIEEM and NRW guidance relating to carrying out surveys.
- 4.48 The Council will also assess the application and supporting information submitted to establish:
- compliance with the relevant legislation and policy with reference to this *SPG*.
 - the current ecosystem resilience of the site which PPW requires must be maintained and enhanced post development⁵⁷
 - the appropriateness of mitigation and compensation measures proposed.
 - the appropriateness of enhancement measures proposed. Effective use of the pre-application process should have established by this stage what enhancement measures will be required.
 - the integration of biodiversity measures as part of good placemaking and the provision of quality GI.
 - the need for *Planning Obligations* to secure biodiversity measures and interventions (further detail below).
 - the need to attach conditions to a consent in order to make the development acceptable.

⁵⁵ CIEEM Advice Note – On the lifespan of ecological reports and surveys
<https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>

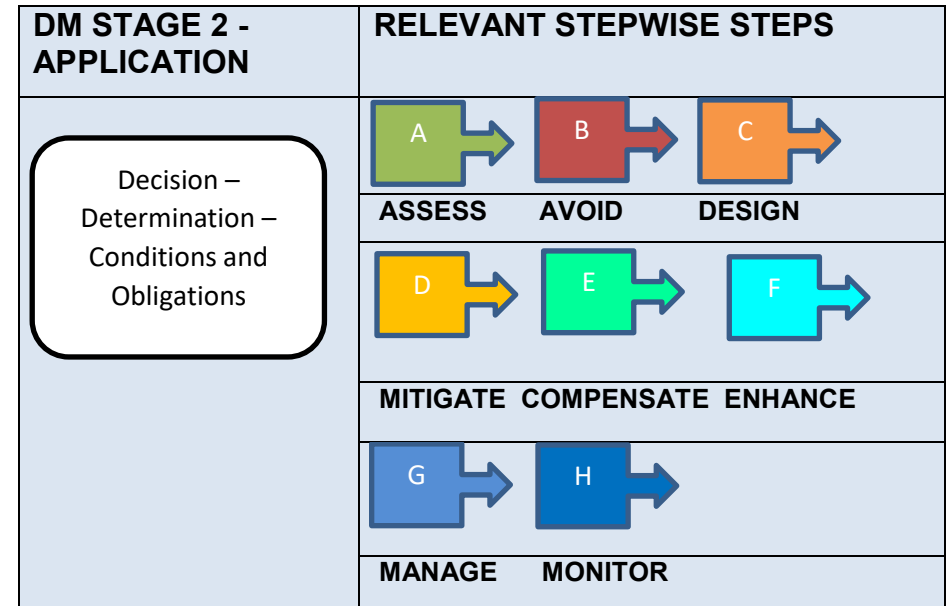
⁵⁶ <https://cieem.net/resource/ecological-impact-assessment-ecia-checklist/>

⁵⁷ PPW paras 6.4.9 and 6.4.20 4d

These might include for example, restrictions on certain operations at particular times of year, good practice during construction, or appropriate future management and maintenance.

- The need to attach informatives to a consent⁵⁸.

4.49 **Sustainable Drainage Systems Approval:** The details of any parallel SAB approval will be taken into account.



4.50 As stated above in Chapter 3, any biodiversity measures agreed should be incorporated into the design of the development at the earliest stage and shown on all plans submitted for approval. Consent will be conditional upon approval in accordance with approved plans. Delivery of enhancements will not be secured through separate conditions on the consent as this is not compliant with the relevant CIL regulations.

4.51 Welsh Government have clarified that where biodiversity enhancement is not proposed as part of an application, significant weight will be given to its

⁵⁸ Standard list of informatives www.swansea.gov.uk/planning

absence, and unless other significant material considerations indicate otherwise, it will be necessary to refuse permission⁵⁹. **The Council considers that the lack of ecological evidence of a negative effect on biodiversity or ecosystem resilience which is directly related to the development to be a significant material consideration in this respect.**

- 4.52 Where the Council concludes that it is reasonable, proportionate, or feasible to require mitigation, compensation, or enhancement measures, and this cannot be integrated into the design of the development or created on site, it may still seek to secure these measures **off-site** (this is generally more likely to occur on major sites).
- 4.53 **Enhancement:** In accordance with PPW (6.4.5), and the S6 duty, the Council will seek to ensure that development provides a net benefit for biodiversity. The Council will therefore explore with the applicant what opportunities exist within or outside the development to provide enhancements to biodiversity and ecosystem resilience, having regard to the SMNR framework and any up to date ecological surveys submitted with the application. Enhancements may be expressed through advisories or informatives attached to a consent which provide guidance on potential steps that can be taken to increase local biodiversity and ecosystem resilience and contribute to the Council's wider strategic aspirations to green the County and make positive steps to mitigate for

and adapt to climate change. This will particularly be the case in smaller scale developments and is in line with the wider principle that all developments at all scales will present opportunities to reverse biodiversity loss and mitigate against the impacts of climate change. Though such interventions may be minor, they will have a significant cumulative effect.

S106 Agreements and Conditions

- 4.54 The Council may recommend approval subject to section 106 Agreement/planning obligations. Planning Obligations are legally binding agreements between the developer and the Planning Authority or a unilateral agreement by the developer enforced by the Planning authority under S106 of the Planning Act 1990, which involve a commitment to address the impacts of a development that will make it acceptable in planning terms, where otherwise it might be refused. Such obligations will normally be required where off-site compensation provisions are necessary or financial contributions are needed to ensure that there are no detrimental impacts on biodiversity.
- 4.55 Swansea Council does not condition protected species surveys and would not consider doing so for any scheduled development works. In accordance with the stepwise approach, survey work should be undertaken at the earliest possible stage in order that measures to maintain and enhance biodiversity are integrated into the design of the development.

⁵⁹ Biodiversity enhancements: guidance for heads of planning
<https://gov.wales/biodiversity-enhancements-guidance-heads-planning>

- 4.56 Where an invasive non-native species (*INNS*) of flora listed in Schedule 9 Part II section 14(2) of the Wildlife and Countryside Act 1981 (as amended) is present on a planning application site, (e.g. Japanese Knotweed) an invasive non-native species *INNS* (flora) condition will be placed upon that application.
- 4.57 See also Appendix 4 for further guidance on s106 Agreements and Conditions.



DM STAGE 2 - APPLICATION	RELEVANT STEPWISE STEPS
<div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center;"> Management and monitoring during construction and aftercare </div>	
	<div style="display: flex; justify-content: space-around; font-weight: bold;"> MANAGE MONITOR </div>

- 4.58 By this stage, the planning consent and associated conditions will have established the management and monitoring measures required following consent, before during and after construction. The preparation and implementation of the appropriate management and monitoring plan will usually be agreed as part of the plans required to be submitted to grant consent. However, in some cases, it may be appropriate to condition the preparation and implementation of a management and monitoring plan after consent.
- 4.59 The plan will detail management objectives for habitats and species present, both retained and created, and will include details for ongoing management and monitoring prescriptions as required. The plan will often include an 'Ecological Constraints and Parameters Plan' (ECOPP) which will demonstrate that appropriate ecological features are integrated into the development. Applicants should note that larger developments, particularly those subject to an Environmental Impact Assessment, will require a *CEMP*. 'Construction Industry Research and Information Association' set out guidance for

methods and measures of working a development site where biodiversity is present, including suggested contents for 'Construction Environmental Management Plans' and 'Risk Assessments', details on setting out no-go zones, protective fencing and other practical measures.⁶⁰

- 4.60 Monitoring is intended to both check compliance with conditions or planning obligations and to establish whether the measures undertaken are effective and are successfully delivering the intended outcomes. The Council will either request a monitoring fee as part of a s106 Agreement and monitor in-house, or include within planning conditions a requirement for the applicant to cover the cost for ongoing monitoring.
- 4.61 During construction, the management of the site should follow appropriate guidelines for protection of habitats and species⁶¹, including trees and ecological features to be retained on site which will form part of the overall management and monitoring plan. Where appropriate, protection will be in the form of development licences granted by NRW.



⁶⁰ https://www.ciria.org/CIRIA/Topics/environmental_management

⁶¹ See Chapter 6

5. Glossary of Terms

Adaptive Environmental Management Plan	An AEMP sets out the management strategy where an adaptive environmental management approach is considered to be appropriate. The aim of adaptive management must be to avoid unacceptable effects. It is a systematic and iterative approach of “learning by doing and adapting as you learn”. Adaptive management should only be used to allow projects to proceed where there is still uncertainty despite having completed a robust environmental assessment, or where the environmental baseline is likely to change.		resource to enhance mental and physical health and well-being.
Biodiversity	The whole range of living things and systems on this earth, it includes animals, plants, microbes and their genetic variations and underpins the health and resilience of all of our ecosystems. In turn, these ecosystems support all life on Earth. This means that taking positive action for biodiversity and ecosystem resilience in Swansea will enhance the natural resources the public utilise such as clean water, air and food production including pollination services. The natural environment is also a vital	Biodiverse	Having a high level of biodiversity.
		Conserve	Has the same meaning as maintain, to protect from harm or destruction.
		Construction Environmental Management Plan (CEMP)	<p>Provides details and specifications for practical measures intended to avoid or minimise adverse effects on biodiversity during the construction process. Normally such reports are prepared in support of a planning application where the LPA requires management as a formal requirement e.g. for biodiversity mitigation, compensation or enhancement purposes.</p> <p>The CEMP may form a part of the information originally submitted with the application (e.g. as part of the EclA) or its provision and delivery may be secured through planning conditions or obligations. Preparation of the CEMP should, where appropriate, follow the general guidance set out in Section below.</p> <p>The appropriate content of such a report is set out in BS42020 clause 10.2.</p>

Compensation	Offsetting unavoidable harm caused by development.
Ecology	The interrelationship between organisms and between organisms and their environment.
Ecological feature	An element of the environment that is of biodiversity value, including sites designated for their nature conservation importance; priority habitats; priority species; habitats that provide corridors or stepping-stones across the landscape and urban area; and the wider landscape.
Ecosystem	A community made up of living organisms and non-living components such as air, water, and mineral soil.
Ecosystem Resilience	The ability of ecosystems to cope with pressures, disturbances and change – either by resisting them, recovering from them or adapting to them. Achieving <i>ecosystem resilience</i> is about working at larger scales, promoting functional connections between natural places, ensuring they have high natural diversity, are in good condition and increasing their extent. Biodiversity is an essential underpinning element of all resilient ecosystems. All functioning and resilient ecosystems have a

	characteristic healthy and often rich biodiversity.
Ecosystem Services	The multitude of resources and processes that are provided by natural ecosystems and utilised by humans. These include clean air and water provision, flood control, carbon sequestration, food production including pollination services and recreational and cultural benefits such as enhancing mental and physical health and well-being.
Ecosystems approach	The ecosystem approach provides a framework for the integrated management of land, water and living resources that promotes conservation and sustainable land use in an equitable way. National Legislation requires that the ecosystem approach must be applied to the consideration of all new development. The Environment (Wales) Act 2016, together with the Well-being of Future Generations Act 2015, ensures that the Ecosystem Approach (advocated in international policy) is given a statutory basis in Wales. The ecosystem approach must therefore be applied to the consideration of all new

	<p>development. The approach integrates the management of land, water, air and living resources and aims to reach a balance between the maintaining and enhancing biodiversity, sustainable use and the equitable utilisation of ecosystem services. Under S6 of the Environment (Wales) Act 2016, the Council has a duty to seek to maintain and enhance biodiversity and in so doing promote the resilience of ecosystems. This is often referred to as the S6 Duty.</p>		<p>time will be informed by periodic 'Ecological Monitoring Reports' (see above under 'Survey and Research Reports').</p> <p>The strategy may form a part of the information originally submitted with the application (e.g. as part of the EclA) or its provision and implementation may be secured through planning conditions or obligations. Preparation of the strategy should, where appropriate, follow the general guidance set out in Section 5 below.</p> <p>The appropriate content of such a report is set out in BS42020 clause 11.2.3.4</p>
<p>Ecological Monitoring Plan</p>	<p>(Effectiveness or Early Warning Monitoring)</p> <p>(As distinct from a monitoring report – see above)</p> <p>Provides detailed and structured proposals for the preparation of a monitoring strategy, in advance of the commencement of development, which will be used to establish whether proposed mitigation, compensation and enhancement measures have been effective over a specified period. The strategy may also be used to provide early warning of when contingencies and/or remedial measures will be 'triggered' in the event that ecological objectives are not being achieved. Implementation of the strategy over</p>	<p>Ecological Monitoring Report</p>	<p>(As distinct from a monitoring plan – see below)</p> <p>Provides the results of post-construction monitoring for a development project as a 'snap shot' at a particular period in time, as required by a planning condition/obligation or by a protected species licence. The report will include a description of the methods used as well as the detailed results of the survey, and interpretation/ assessment of the results.</p>

	<p>Preparation of the monitoring report should, where appropriate, follow the guidance on report structure set out in Section 5 below.</p> <p>The appropriate content of such a report is set out in BS42020 clause 11.2.3.4.</p> <p>A monitoring 'report' is distinct from an ecological monitoring 'plan'. The former provides only the methods and results of monitoring, along with their interpretation (often collected at prescribed periods after the completion of works). Whereas, the full strategy provides an agreed set of aims and objectives for monitoring and comprehensive details about how monitoring will be undertaken and reviewed (see 'Ecological Monitoring Strategy' below under 'Other Common Types of Ecological Report').</p>
Enhancement	Improved management of ecological features or provision of new ecological features, resulting in a net benefit to biodiversity, which is unrelated to a negative impact or is "over and above" that required to mitigate/compensate for an impact. (CIEEM 2018)
Fungi	Fungi are a group of living organisms which are classified in their own

	kingdom. Fungi are found throughout the Earth including on land, in the water, in the air, and even in plants and animals. They vary widely in size from microscopically small to the largest organisms on Earth at several square miles large. There are more than 100,000 different identified species of fungi.
Green Infrastructure	The network of multi-functional green space, encompassing both land and water (blue space). The Green Infrastructure areas include existing and new (created) features in both rural and urban areas. The Green Infrastructure network delivers a wide range of Ecosystem Services including environmental and quality of life benefits for local communities.
Habitat	The place where an organism or a community of organisms live, including all living and non-living factors or conditions of the surrounding environment.
Invasive Non-Native Species	Any non-native animal or plant that has the ability to spread causing damage to the environment, the economy, health and the way people live. A list of INNS is provided in schedule 9 of the Wildlife and Countryside Act 1981.

“important” species or habitats/biodiversity	Where the stepwise approach refers to “important” species or habitats this means that the Council will follow a process to reach a judgement about the biodiversity present on the site, having regard to legal protections, statutory and non-statutory designations and all the other relevant considerations to determine ecological value (see figure 3.1 below).
Landscape and Ecological Management Plan (LEMP)	Provides details and specifications for the management of habitats and other features of biodiversity interest. Normally such reports are prepared in support of a planning application where the LPA requires management as a formal requirement e.g. for biodiversity mitigation, compensation or enhancement purposes. The LEMP may form a part of the information originally submitted with the application (e.g. as part of the EclA) or its provision and delivery may be secured through planning conditions or obligations. Preparation of the LEMP should, where appropriate, follow the general guidance set out in Section 5 below.

	The appropriate content of such a report is set out in BS42020 clause 11.1
Maintain	No net biodiversity loss.
Mitigation	Action taken which minimises potential impacts on any wildlife features.
Natura 2000 site	A network of protected areas covering Europe's most valuable and threatened species and habitats. It is the largest coordinated network of protected areas in the world, extending across all 28 EU countries, both on land and at sea. The sites within Natura 2000 are designated under the Birds and the Habitats Directives and Ramsar Convention
Natural heritage	In the context of this SPG, natural heritage refers to biodiversity, natural beauty and amenity. It embraces the relationships between landform and landscape, habitat and wildlife, and their capacity to sustain economic activity and to provide enjoyment and inspiration. It includes statutorily designated sites, urban areas, the countryside, the coast and open water features.
Plants	This includes (i) lower plants which include bryophytes (mosses and liverworts),

	lichens, and algae (including diatoms), and (ii) higher plants or vascular plants which include trees, shrubs, flowering herbs and ferns etc.
SMNR	Management of land, water, soil, plants and animals, with a particular focus on providing nature based solutions which deliver improved quality of life for both present and future generations by maintaining biodiversity value and ecological resilience (stewardship).
Placemaking	Is both a process and a tool to collectively design and manage the public realm to create quality places that people want to live and work in, that are appealing, accessible, safe and support social interaction and amenities.
Priority habitats and species	Those included in the list of habitat and species identified under section 7 of the Environment (Wales) Act 2016
The Council	Swansea Council
Suitably qualified ecological consultant	This guidance is unable to make individual recommendations on ecological consultants. The Chartered Institute of Ecology and Environmental Management (CIEEM, www.cieem.net) is one of the main

	bodies in the UK to promote good practice and professionalism in ecology and membership of this organisation is a good indication that the person is suitably qualified to carry out ecological surveys to a high standard of competence. The website has a directory of members that can be searched by region and specialism and also provides Guidelines for Ecological Report Writing https://cieem.net/i-need/finding-an-eem/ CIEEM (2017) <i>Guidelines for Ecological Report Writing</i> . https://cieem.net/resource/guidelines-for-ecological-report-writing/ CIEEM (2018) <i>Guidelines for Ecological Impact Assessment. Updated 2019</i> https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/
Sustainable Development	Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.

Acronyms

Abbreviation	Full Term
AONB	Area of Outstanding Natural Beauty
CBEEMS	Carmarthen Bay and Estuaries European Marine Site
CEMP	Construction Environmental Management Plans
CIEEM	Chartered Institute of Ecology and Environmental Management
CIL	Community Infrastructure Levy
DAS	Design and Access Statement
DECCA	Diversity, Extent, Condition, Connectivity and Adaptability Framework
DM	Development Management
EcIA	Ecological Impact Assessment
ECOP	Ecological Constraints and Opportunities Plan
ECOW	Ecological Clerk of Works
EIA	Environmental Impact Assessment
EPS	European Protected Site
GI	Green Infrastructure
HRA	Habitats Regulations Assessment
IAS	Invasive Alien Species

Abbreviation	Full Term
IEEP	Institute for European Environmental Policy
INNS	Invasive Non-Native Species
LBAP	Local Biodiversity Action Plan
LDP	Local Development Plan
LEMP	Landscape and Ecological Management Plan
LNR	Local Nature Reserves
NERC	Natural Environment Research Council
NNR	National Nature Reserve
NRAP	Nature Recovery Action Plan
NRW	Natural Resources Wales
PEA	Preliminary Ecological Assessment
PPW	Planning Policy Wales
PSB	Public Service Board
SAB	SuDS Approval Body
SAC	Special Area of Conservation
SEWBRec	South East Wales Biodiversity Record Centre
SINC	Sites of Importance for Nature Conservation

Abbreviation	Full Term
SMNR	Sustainable Management of Natural Resources
SoNaRR	State of Natural Resources Report Wales
SPA	Special Protection Area
SPG	Supplementary Planning Guidance
SSSI	Sites of Special Scientific Interest
SuDS	Sustainable Drainage Systems
TAN	Technical Advice Note
WBFG Act	Well Being of Future Generations Act
WG	Welsh Government

6. Appendices

See Development and Biodiversity SPG Appendices at www.swansea.gov.uk/spg



