JOINT LOCAL PLAN

EVIDENCE DOCUMENT







Biodiversity Network Creation Process 2017

Contents Page Number

1. Introduction....3

2. Biodiversity in Plymouth and South West Devon....3

3. Needs Assessment....4
   - Biodiversity 2020: A strategy for England's wildlife and ecosystem services....4

4. National Policy Context....5
   - National Planning Policy Framework....5
   - National Planning Policy Guidance....7

5. Legislative Context....7
   - Natural Environment and Rural Communities Act 2006....7

6. Methodology....7
   - Development of the Plymouth and South West Devon Biodiversity Network....7
   - Biodiversity Network Update 2015....9
   - Joint Local Plan Biodiversity Network 2016....9

7. Conclusion....9

1. Introduction

1.1. The purpose of this document is to explain the process that was undertaken in creating the Plymouth and South West Devon biodiversity network. This document forms part of the evidence base for the Joint Local Plan developed by Plymouth City Council, South Hams District Council and West Devon Borough Council.

1.2. The biodiversity network is an essential part of the future of the sub-region given that there are plans for ambitious growth in housing and employment. A map of the network is within Appendix 1.

2. Biodiversity in Plymouth and South West Devon

2.1. Plymouth is located in a glorious natural setting at the mouth of the Rivers Tamar and Plym which open out onto Plymouth Sound. Much of this 'blue resource' designated as a European Marine Site making it the most highly protected area in the city.

2.2. The diverse geology and soils of the area provide a varied canvas for a range of wildlife to thrive in Plymouth. Some plant species prefer specific types of soils, while other plants are more adaptable and can thrive in most areas. Many invertebrates are associated with their favourite host plant species or habitats. Habitats in Plymouth, include coastal cliffs, rivers, reefs, saltmarshes, mudflats, limestone grassland, ancient woodlands, heaths and marshes. These habitats provide opportunities for many different animal species as well as access and recreation opportunities for local residents.

2.3. Over 40% of Plymouth is greenspace with 20% covered by woodland. We have 10 Local Nature Reserves covering over 250 hectares, over 40 wildflower meadows covering 100 hectares, nine Special Sites of Scientific Interest and 28 County Wildlife Sites.

2.4. There are a great variety of species that can be spotted in and around Plymouth. On land, Plymouth is home to the Critically Endangered Horrid Ground Weaver spider (*Nothophantes horridus)* and the rare Plymouth Pear tree. In the air, you may be able to spot one of the 14 bat species recorded in Plymouth or catch a glimpse of charismatic bird species such as avocet, little egret, peregrine falcon, cirl bunting and nightjar. Offshore, protected species include pink sea fan, the common dolphin, two species of sea horses and the basking shark.

2.5. The European Marine Site extends northwards up the Tamar Estuary along the western boundary of West Devon as far as New Bridge, and also covers the Yealm Estuary within the South Hams.

2.6. Extending away from the Tamar Estuary habitats are steep valley sides often covered in broadleaved woodland or conifer plantation. Despite the woodland cover, not all management has benefited species reliant upon them – the heath fritillary butterfly has significantly declined within the valley due in part to a reduction in coppicing management techniques. As varied as the biodiversity in the Tamar Valley AONB is its geology, which can be seen from the internationally recognised mining history within the valley. Hedgerows and orchards are a fantastic biodiversity resource within the Tamar Valley, and the vast variety of daffodils present within spring reflects the strong local market gardening heritage.

2.7. To the east of Plymouth lies the South Devon AONB, which almost falls within the South Hams. Bordered to the west by Plymouth Sound, the AONB contains the five estuaries of the Yealm, Erme, Avon, Salcombe-Kingsbridge and Dart, and has a shoreline of 323km, 154kms of this are coastal and 169kms are estuarine. The AONB supports both internationally and locally important habitats and species. Marine habitats include seagrass, sandbanks and rocky foreshores, with vegetated sea cliffs, shingle and saltmarsh near to the shoreline, with a network of Devon hedgebanks, orchards and flower rich meadow and pasture inland. The South Devon AONB is renowned for supporting 13 of the 18 species of British bats including the Greater Horseshoe Bat; other local highlights include the horned mining bee, cuckoo bee, Mediterranean and short necked oil beetles, hornet robberfly, and, of course, the cirl bunting.

2.8. Heading inland, West Devon incorporates 45% of the western part of Dartmoor National Park, with the southern part falling within South Hams. Parts of the special moorland and woodland habitats are protected as Special Areas of Conservation, with qualifying features including heathlands, blanket bogs and oak woodlands. These habitats support such species as southern damselfly, high brown and pearl bordered fritillary butterflies. Dartmoor supports nationally declining bird species including snipe, skylark, curlew and lapwing, while providing strongholds for meadow pipit and stonechat.

2.9. To the north of Dartmoor, the landscape and biodiversity are largely influenced by the river valleys, including those associated with the Okement Rivers, the River Taw and the Lew, which themselves fall partly within the UNESCO North Devon Biosphere Reserve and Northern Devon Nature Improvement Area. The area is known for its culm grassland and the marsh fritillary butterflies that rely upon it.

3. Needs Assessment

Biodiversity 2020: A strategy for England's wildlife and ecosystem services

3.1. Biodiversity is the variety of all life on Earth. It includes all species of animals and plants – everything that is alive on our planet. Biodiversity is important for its own sake, and human survival depends upon it.

3.2. The groundbreaking UK National Ecosystem Assessment (NEA) published in June 2011 provides a comprehensive account of how the natural world, including its biodiversity, provides us with services that are critical to our wellbeing and economic prosperity. However, the NEA also showed that '***nature is consistently undervalued in decision-making and that many of the services we get from nature are in decline'***. Over 40% of priority habitats and 30% of priority species were declining in the most recent analysis.

3.3. Our challenge is to halt this decline – for the benefit of this and future generations. In October 2010, over 190 countries signed an historic global agreement in Nagoya, Japan to take urgent and effective action to halt the alarming global declines in biodiversity. This agreement recognised just how important it is to look after the natural world. It established a new global vision for biodiversity, including a set of strategic goals and targets to drive action.

3.4. In June 2011, the UK Government published The Natural Choice – the first Natural Environment White Paper for 20 years. This responds to the global commitments made at Nagoya. It outlines the Government's vision for the natural environment, shifting the emphasis from piecemeal conservation action towards a more integrated landscape scale approach. It also sets out how we can better value the natural environment in decision-making and thereby unlock growth in the green economy and reconnect people with nature.

3.5. Biodiversity 2020 sets the strategic direction for biodiversity policy for the next decade on land (including rivers and lakes) and at sea. It builds on the successful work that has gone before, but also seeks to deliver a real step change. The mission is: ***to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people***.

4. National Policy Context

National Planning Policy Framework

4.1. The UK Government published the NPPF in 2012 which sets out the following policies in relation to biodiversity:

- 99. Local Plans should take account of climate change over the longer term, including factors such as flood risk, coastal change, water supply and changes to biodiversity and landscape. New development should be planned to avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure.

- 109. The planning system should contribute to and enhance the natural and local environment by:
  - protecting and enhancing valued landscapes, geological conservation interests and soils;
  - recognising the wider benefits of ecosystem services;
  - minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

- 114. Local planning authorities should:
  - set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure;

- 117. To minimise impacts on biodiversity and geodiversity, planning policies should:
  - plan for biodiversity at a landscape-scale across local authority boundaries;
  - identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation;
  - promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan;
  - aim to prevent harm to geological conservation interests

- 118. When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:
  - if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
  - proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest;

● development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;
● opportunities to incorporate biodiversity in and around developments should be encouraged;
● planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss; and
● the following wildlife sites should be given the same protection as European sites: – potential Special Protection Areas and possible Special Areas of Conservation; – listed or proposed Ramsar sites; and – sites identified, or required, as compensatory measures for adverse effects on European sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

- 143. In preparing Local Plans, local planning authorities should:
  ● put in place policies to ensure worked land is reclaimed at the earliest opportunity, taking account of aviation safety, and that high quality restoration and aftercare of mineral sites takes place, including for agriculture (safeguarding the long term potential of best and most versatile agricultural land and conserving soil resources), geodiversity, biodiversity, native woodland, the historic environment and recreation.

National Planning Policy Guidance

4.1. Further policy guidance was published by the UK Government in 2014.

5. Legislative Context

Natural Environment and Rural Communities Act 2006

5.1. Unit 40 of the Natural Environment and Rural Communities Act 2006, which places a duty on all public authorities in England and Wales to have regard, in the exercise of their functions, to the purpose of conserving biodiversity. A key purpose of this duty is to embed consideration of biodiversity as an integral part of policy and decision making throughout the public sector, which should be seeking to make a significant contribution to the achievement of the commitments made by Government in its Biodiversity 2020 strategy.

6. Methodology

Development of the Plymouth and South West Devon Biodiversity Network

6.1. The Biodiversity Network first came into being in Plymouth in 2007 when Plymouth City Council (PCC) commissioned Devon Biodiversity Records Centre (DBRC) to carry out surveys of Plymouth's biodiversity. The driver for this was the Core Strategy adopted April 2007. Policy CS18 which stated that PCC would identify 'a network of strategically and locally important Greenscape Areas' and Policy CS19 which stated that PCC would maintain 'a citywide network of local wildlife sites and wildlife corridors, links and stepping stones between areas of natural green space.'

6.2. This resulted in a series of sites that were designated as County Wildlife Sites because of their notable species/habitats assemblages and a network of connecting sites.

6.3. All priority one habitats, except those that were too small (woodlands less than 2 ha and grasslands less than 0.5 ha) were selected as potential County Wildlife Sites (pCWS). These were surveyed in due course. Priority one sites that were not selected as pCWS were selected as Key Network Features.

6.4. Key Network Features are the best habitats within Plymouth's Biodiversity Network, and also include sites that were surveyed, but did not reach CWS standard. They also include Priority 2 habitats such as secondary woodland, semi-improved grassland and replanted ancient woodland.

6.5. All Priority 3 habitats, e.g. conifer and mixed plantation woodlands, improved grassland, allotments and amenity grassland became Network Features. These habitats still have value for wildlife, and can allow them to move between areas of better habitat (wildlife corridors and stepping stones). They also provide vital 'green space' within the city, and can help buffer and protect the statutory and non-statutory sites from development. Wildlife corridors, such as watercourses and railways were included in the network as they are known to provide valuable wildlife links.

6.6. In 2014 the Plymouth's Biodiversity Network was updated by DBRC, removing areas that had been developed, incorporating recent County Wildlife Site designations and using Ordinance Survey MasterMap data to accurately map site boundaries.

6.7. In West Devon and South Hams, the Devon Nature Map identifies the best areas in Devon to maintain and expand the most important terrestrial wildlife habitats. These areas include river corridors and Strategic Nature Areas (SNAs). The Devon Nature Map is a tool that can be used to target conservation effort, however the matrix of habitats (such as hedges, woods, grasslands and ponds) within the rest of the countryside is also critical to the survival of our wildlife and supports rare species such as greater horseshoe bats, dormice and cirl buntings. This matrix also needs to be protected, enhanced and appropriately managed.

6.8. The Devon Nature Map has evolved from, and replaced (in Devon), the 2005 South West Nature Map (which is now out of date). It uses best available information, local expert knowledge and is based (with some tweaks) on the methodology set out in Rebuilding Biodiversity in the South West, technical manual.

Biodiversity Network Update 2015

6.9. In 2015 Plymouth's Biodiversity Network was reviewed and enhanced in line with Professor Lawton's principles outlined in his paper 'Making Space for Nature' (2010). This identified the need to do more, bigger, better and joined-up.

6.10. All land within the Plymouth City boundary was considered for inclusion in the network regardless of ownership. Playing pitches and gardens were excluded from the network. Playing pitches have very little wildlife value and whilst gardens can have great wildlife value, it is not appropriate for a biodiversity network policy to apply to gardens.

6.11. Key network features were replaced by 'Core Sites' to fall in with the terminology set by Lawton. The 2015 Network automatically categorises European Sites, Sites of Special Scientific Interest, Ancient Woodland, Local Nature Reserves, County Wildlife Sites, Registered Park and Gardens, Registered Common Land and Regionally Important Geological Sites as Core Sites.

6.12. Restoration or 'Future Core Site' areas were identified where future measures are planned to create high value areas. In Plymouth, these are the three strategic Green Infrastructure Sites within the city boundary – Central Park, Derriford Community Park, Saltram Countryside Park and Sherford Community Park along with a few other locations.

6.13. Interconnecting areas on the network were identified as either Corridors or Stepping Stones. Corridors are areas that connect sites and tend to be linear sites whereas Stepping Stones are isolated sites that connect the rest of the network.

Joint Local Plan Biodiversity Network 2017

6.14. Plymouth's Biodiversity Network has been combined with that of South Hams and West Devon. Lawton's terminology has been applied to West Devon and South Hams as follows:

- **Core Sites** – European Sites, Sites of Special Scientific Interest, Ancient Woodland, National Nature Reserves, Marine Conservation Zones, Local Nature Reserves, County Wildlife Sites and RIGS.

- **Future Core Sites**: Cirl Bunting Enhancement Zones, Greater Horseshoe Bat Sustenance Zones.

- **Corridors** or **Stepping Stones** – These include Strategic Nature Areas, Other Sites of Wildlife Interest (OSWI), river corridors and the B-lines corridors (which were created by a collaboration between South Hams District Council and Buglife and identify key corridors for pollinators) and Greater Horseshoe Bat strategic flyways.

7. Conclusion

7.1. The Joint Local Plan Biodiversity Network represents a robust approach to biodiversity protection, enhancement and restoration in line with Lawton 'Making Space for Nature' principles.

Appendix 1: Map of the biodiversity network

