# Green Infrastructure Strategy

**Clyst Honiton** 

Neighbourhood Plan

2013 - 2031



Clyst Honiton's St Michaels Church from the Bypass Site

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Clyst Honiton from Mill Lane

#### Introduction

"Green infrastructure (GI) is a network of multifunctional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities." National Planning Policy Framework, 2016. In spring 2017, Clyst Honiton Parish Council (CHPC) appointed Landsmith Associates and Tor Ecology to produce, alongside the Clyst Honiton Neighbourhood Plan (CHNP), a Green Infrastructure Strategy (GIS). The CHNP is being prepared in the context of the East Devon Local Plan 2013-2031 (adopted 28th January 2016).

This strategy provides a framework for how future development across the Parish would be planned and delivered.

The purpose of the GIS is to produce a series of evidence-based proposals to inform and guide the CHNP policies and wider surrounding areas. This strategy is informed by desktop studies and site visits accompanied by Janvrin Edbrooke of Clyst Honiton Parish Council and Simon Bates, East Devon Green Infrastructure Strategy Officer. It was also by past stakeholder and community consultations which highlighted local needs. The strategy is also informed by local, national and international designations, policies and best practice guidance.



Farmland in Holbrook Area

## Aims and Objectives

The aim of this green infrastructure strategy is to create a long-term plan to assist in shaping the future pedestrian and cycle access, enhance biodiversity, diversify landscape, improve the public realm, provide a coherent 'green' edge to the village and surrounding areas, and inform development.

The visions for the CHNP are:

- Clyst Honiton is a happy and healthy community which is inspired by positive change for those living and working in the Area.
- Well-being of our rural and village communities is enhanced by spaces which provide a strong community focus which harness community spirit and an economic focus based on the needs of residents/ community.
- Clyst Honiton aspires to be an attractive, friendly, safe place, encouraging a diverse community to set down their roots and value their rural and river landscapes.
- Residents wish to see the semi-rural

- character of the village promoted through development of houses and green infrastructure making Clyst Honiton an even better place to live now and in the future.
- Clyst Honiton recognises the contribution the rural landscape area (south of the A30) offers to locals and supports opportunities to enrich the areas varied landscape character, sense of place and food production.

The local plan policy, Strategy 10 - Green Infrastructure in East Devon's West End, Clyst Valley Regional Park include objectives are to:

- Provide high quality natural green space
- Ensure natural ecosystems function is accessible for all
- Take recreation pressure away from more environmentally sensitive locations
- Provide new wildlife corridors that enhance the biodiversity of the West End.
- Provide green corridors, open space and biodiversity enhancement areas.
- Conserve and enhance heritage assets and their setting

## Strategic Objectives







Retain semi-rural character and enhance local landscape

The Clyst Honiton GIS provides a framework for the CHNP, its objectives (in line with The Green Infrastructure Strategy for Exeter Area and East Devon Growth Point <sup>[2]</sup>) are:

#### To increase biodiversity network and wildlife sites

Green Infrastructure is an essential part of the future growth within the CHPC boundary and sub-regional area and should underpin decision-making within the parish.

Increasing the biodiversity network by enhancing green corridors within the parish boundary (roadside verges, hedgerows, woodland planting, river corridor, orchards, managing arable field margins), creating green spaces and wildlife sites locally and managing agricultural land for the benefit of wildlife are critical in supporting health and well-being. Future growth will also respond to the NPPF which states that the planning system should "contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible".

# 2. To mitigate and adapt to climate change

This strategy underpins the sustainability of Clyst Honiton and its surrounding areas by increasing its resilience to the effects of and adapt to, climate change and enabling local authorities to meet their duty to conserve biodiversity under the Natural Environment and Rural Communities Act (NERC) 2006. Also, they provide ecosystem services (benefits provided by the natural environment for humankind)<sup>[3]</sup>.



Enhance historic core



Promote and support local food production



Create a viable long term sustainable cycle network



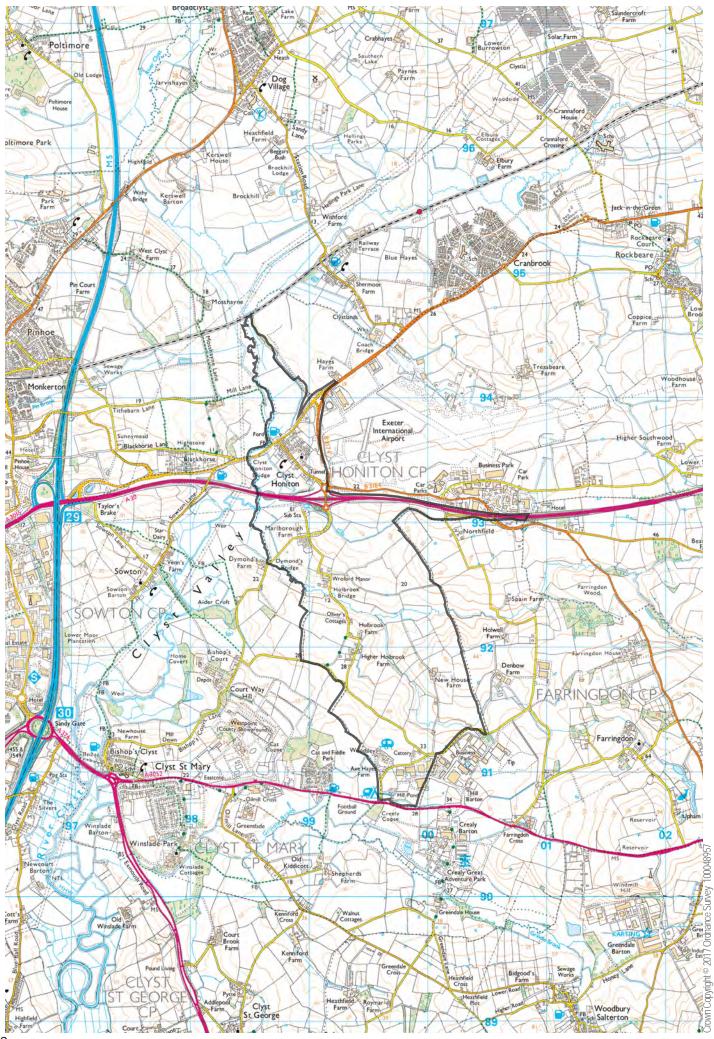
Encourage community local food production and physical activities

# 3. To manage population growth and promote economic development

The GIS provides a framework to guide future development within the CHPC area including Cranbrook Local Growth Areas and aims to create a more walkable neighbourhood. GI is vital for thriving economy, environment and community<sup>[4]</sup>. For example, developers are willing to pay between 3% to 15% more if land is close to open space<sup>[5]</sup>. There is also evidence that green space increases retail profits by 16%, and where there are street trees and parks research shows an increase between 3% to 34% in property values.<sup>[6]</sup>

# 4. To improve the health and well-being of local communities

There is a multitude of links between GI, quality of life and health from creating a more inclusive walkable neighbourhood, attractive cycle networks and 'living' landscape (for example, street trees, parks, public open space, allotments and orchards) and access to the natural environment [7,8]. Research evidence shows that green infrastructure effects people making them healthier and happier, working more productively and having less need for medical intervention. [9]





Clyst Honiton village, view up the River Clyst wetland meadows

#### Location

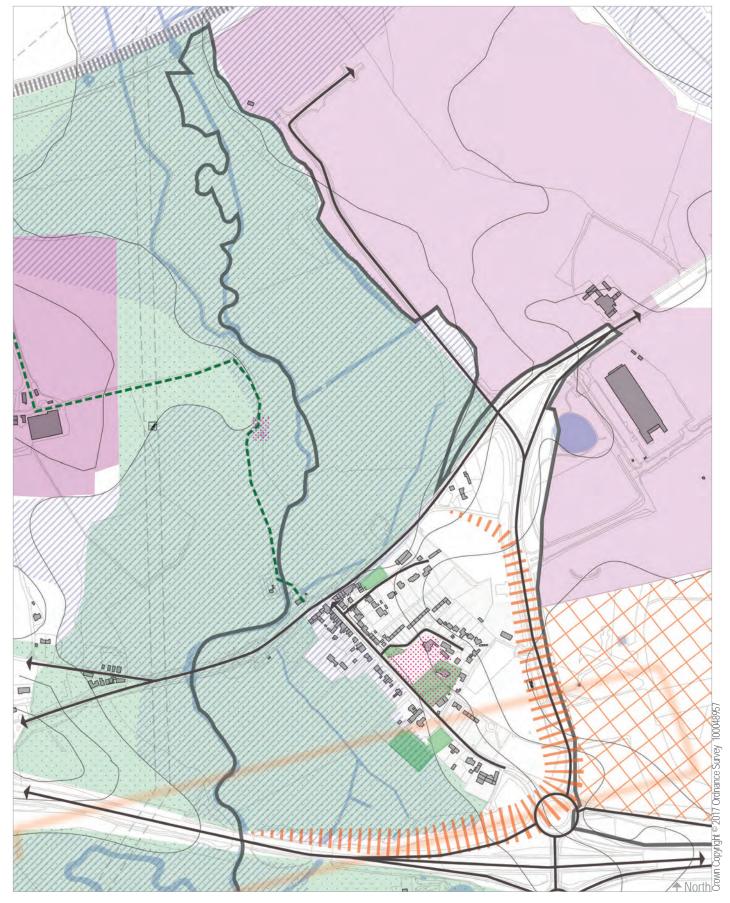
The site is the CHNP boundary (as shown in black on plan above), this forms a narrow wedge, from north to south between Exeter and the new Cranbrook Town.

The natural surrounding environment and historic land use provides the village and parish namesake; Clyst, meaning 'clear stream' and Honiton 'farmstead'. The landscape and rural farming community is embedded in its history and morphology.

The village of Clyst Honiton, positioned to the north of the parish, is surrounded by large scale proposed and recently completed housing and employment development as well as Exeter Airport.

Parts of the site's northern and western boundary overlaps into the Clyst Valley consists of flat wetland meadows and open fields with hedges to the north, part of the River Clyst Valley, approximately 10m above ordnance datum (AOD). Honiton road defines the linear form of the Clyst Honiton Village; the A30 bypass defines its current eastern and south-eastern boundary, Exeter Airport and the A30 to the south of the village.

South of the A30, the landscape visibly changes to rolling arable farmland, divided by the Holbrook, a narrow valley from east to west with a string of residential and agricultural clustered settlements along a country lane. The highest points with CHNP run along the historic parish council eastern boundary and south west corner of the site at approximately 40m AOD.



Existing Site Appraisal - Clyst Honiton Village



## Site Appraisal

Clyst Honiton is the largest urban settlement within the parish boundary. The linear village has two pubs, two main buildings of historical significance located its protective core; St Michael and All Angels Church and former vicarage. There are distinctive red Heavitree stone walls and structures, including the remains of an old smithy within the northern wetlands.

The parish council provide a formal playground and informal play space opposite the church. There are no community facilities in the area, however several small business facilities exist. Exeter International airport and the Clyst Honiton Bypass are directly adjacent to the east of the village, with the A30 creating a linear barrier to the south.

24.6 % population of Clyst Honiton is over 60year old, to increase 15 years to around 45.7 % of the population, as stated in the 2014 Strategic Housing Market Assessment (SHMA); 43.1% are employed over the age of 39. With an aging population, needs for inclusive access, diversity and multigenerational local green spaces is required to help encourage physical activity and social interaction.

The airport and roads are major contributors to noise pollution in the area; Clyst Honiton receives some the highest noise pollution in Devon and Cornwall. The noise pollution received by the village is 57 dB to 69 dB; there are no quiet spaces. There are negative health and well being impact associated to this, as indicated in the WHO guidelines [10]. DEFRA tranquility maps indicate that the wider parish council

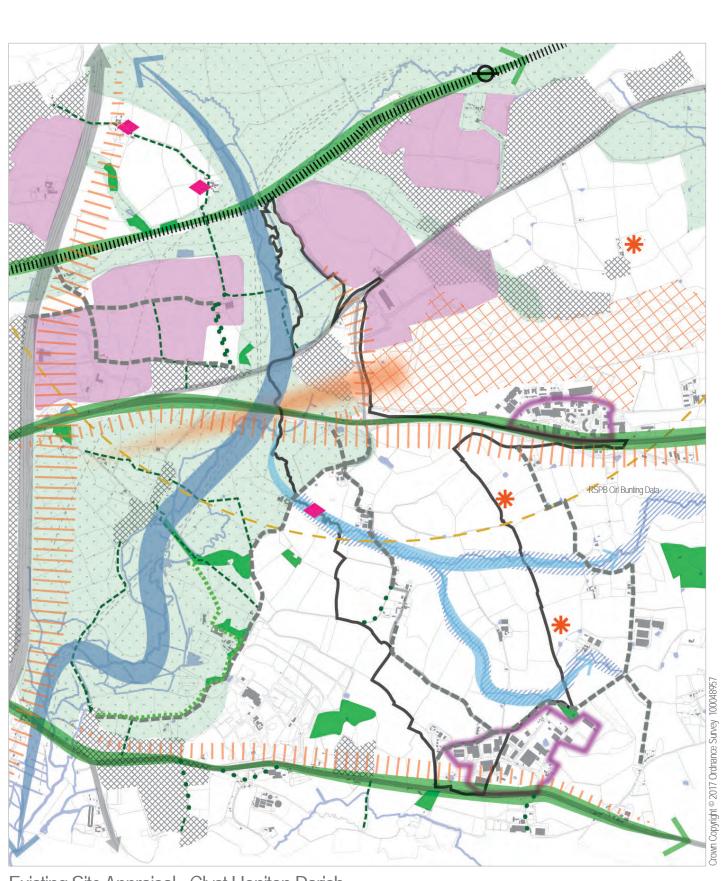
area has very few quiet areas, receiving, on average 55 dB over approximately 80% of the southern part of the CHNP area.

Exeter airport Public Safety Zone and noise contours impose restrictions on the types of development and vegetation height for the whole village, and areas beyond.

The landscape character rapidly changes from wetland meadows and rural farmland to municipal formal landscape associated to the Skypark development to the north east of the village. There are very few street trees, community green spaces, allotments and limited areas of woodland areas. The village and its immediate surrounds offer habitat for a range of protected species including bats, reptiles and amphibians in the form of hedgerow boundaries, semi-improved grasslands associated with fields (some used as grazing pasture and others little managed and rank) and small pockets of woodland (Deciduous and newly planted).

Local linear features provide navigational and dispersal routes for wildlife and blue infrastructure. In particular, the tightly winding tree-lined Holbrook to the south provides habitat for species and a corridor for movement into the wider area.

The parish falls within the Landscape National Character Area profile 148: Devon Redlands. Agriculture has been in evidence within the context of the land use historically (the area is known as the agricultural heart of Devon) and this can be seen within the structure of the landscape to the south of the A30 and Clyst Honiton village with a larger more open field pattern with winding sunken lanes offering habitats for important Farmland Bird assemblages (in particular Cirl Bunting), bats and Hazel Dormouse.



## Existing Site Appraisal - Clyst Honiton Parish



The northern area comprises of wetland meadows, the River Clyst, ditches and minor tributaries, this is a relatively flat landform.

Only a small portion of Landscape Character Type (LCT) 4A - Unsettled Farmed Valley Floors is within the site, associated with the River Clyst and the flood zone. Much of the remaining parish council area consists of rural rolling arable farmland (LCT 4D Lowland Plains) with dispersed farm settlements, narrow valleys formed by wood lined tributaries [11]. The southern tip of the CHNP comprises a business park, a caravan park and borders Crealy Great Adventure Park.

The River Clyst acts as a sub-regional green corridor (linking north to south) and falls predominantly outside of the parish boundary to the south of Clyst village and runs along the parish boundary to the north. Coastal flood plain grazing marsh (UK BAP Priority Habitat) is the predominant habitat along this corridor extending from the south-west of the village throughout the northern aspect of the parish along the western boundary. The river is wooded within the locality of the village, opening up further north and forms a natural corridor for the dispersal of wildlife.

Pockets of Deciduous Woodland are scattered throughout the sub-region but are noticeably lacking within the parish. Pre 19th Century maps indicate linear woodland blocks were located along some of the River Clyst tributaries to the south. Today this land is farmland. Traditional orchards are present within the locality also outside of the boundary.

The East Devon Local Plan [12] and current developments impact on the village of Clyst Honiton, and its surrounding area. The CHNP north extent will become an important green wedge linking:

- The new eastern 'edge' of Exeter, the residential development of Mosshayne and its associated green infrastructure and access network.
- To the west, the proposed employment areas of Intermodal Interchange and Skypark; located within the Cranbrook Plan.

Part of the CHNP southern area is associated with the Local Plan's 'Green Wedge' and the Clyst Valley Regional Park.

Connectivity within a regional context relies on the east to west movement along road and rail networks with very little in the way of north south connectivity within the parish. Local green corridors are concentrated along the key Highways (A30 & M5) and the railway network.

There is a distinct lack of access to the wider countryside; only one public right of way, no accessible footpaths within the village vicinity and no offroad cycleways in the area to encourage cycling. The entrance to the public right of way is just within the CHNP, then continues through the GIS area of the proposed Mosshayne development. Much of the land to the north and west of the village is within the River Clyst Valley and Flood zone. This area frequently floods during winter months which limits access to this existing public right of way and wetland meadows.

The newly built Cranbrook Train station is over 3 km following the current cycleways and road network with several traffic-controlled junctions.



View of Clyst Honiton Village from Marlborough Farm

#### In summary, there is:

- Lack of pedestrian access within the village and throughout the wider area.
- Lacks an interconnected off road cycle network access from the village, throughout the wider area, and to Cranbrook Station.
- Compact historical core at the centre of the village with distinct character
- Noise from the airport, roads and surrounding warehouse and distributors depots.

- Lack of diversity of landscape and biodiversity
- Rapid change of landscape character from wetland, industrial units to rolling farmland
- Lack of locally accessible green space
- Poor north-south infrastructure and connectivity isolating the rich landscape, rural communities and farmland with CHNP



Clyst Honiton's only public right of way footpath, view from Clyst footpath

#### The primary principles are:

- reinforcing local identity and distinctiveness;
- enhancing biodiversity & managing the environment;
- establishing multifunctional accessible green space;
- encouraging sustainable movement network;
- promoting health and well being;
- strengthening community and cohesion.





Local network: Formal path Informal network of pedestrian paths

Acoustic buffer with planting; no berry

plants with height limit at maturity to accord with aviation authority guidance on birdstrike

Bee hives at Bypass site

Village focal point Create a pocket park and arrival space

Wildlife corridor Including woodland planting to assist flood prevention, habitat creation

Reinforce hedgerows and

boundaries

## **Proposals**



Allocation of land for a 'Green Ring' around Clyst Honiton village.

Promoting the village's views in and out, to act as a buffer to avoid coalescence with Cranbrook and Mosshayne.

Create a green circular edge to reinforce and enclose the village.

Provide a 'green' acoustic buffer between Exeter Airport and roads to assist in noise mitigation and improve air quality. This would need to be a combination of acoustic barrier, for example fencing or bunding with suitable nose reducing planting within the air ports restriction requirements, where required. Recent research shows buffering planting can reduce air pollution by 60%.

Promote native tree planting with a minimum of five species, where appropriate, to provide wildlife habitat and flood prevention. No berry producing plants and limits to tree heights within airport restriction zone.



Allocation of Local Green community space leisure & recreation opposite the village.

To assist in increasing biodiversity value and create a local green asset.

Creating a Local Nature Reserve and Local Green Space adjacent to the River Clyst (to the north of Clyst Honiton village) to support net gains for biodiversity and provision of public amenity to support the health and well-being of the community.

Reinforce and encourage community cohesion by creating publicly accessible natural green space.



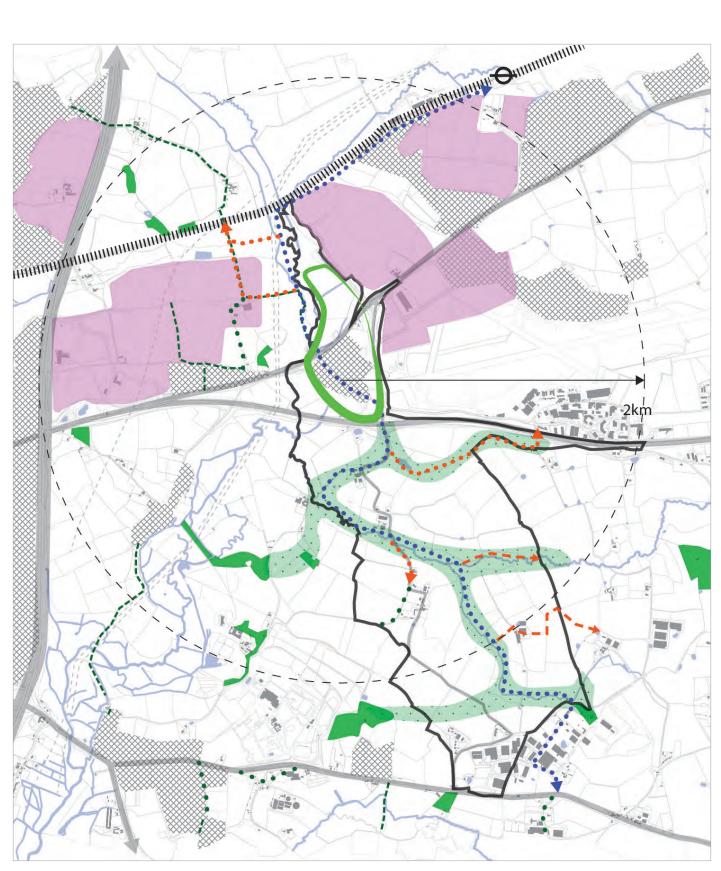
Support development of circular pedestrian networks within the Clyst Honiton village triangular road network.

Local network of pedestrian footpaths provide accessible routes including a circular walks.

Inclusive network of formal paths around the immediate village with a wider informal network of routes through the Local Green Space.

Formal network to accord to BS8300, minimum of 2m wide with inclusive gated access and suitable surface to path that relates to context of area.

Informal network of paths to be established as a mixture of mown grass, bark mulch or hoggin paths.



Green Infrastructure Proposals - Clyst Honiton Parish





Support development that improves biodiversity on the banks of the River Clyst and its associated tributaries.

Supporting the improvement of water quality of the River Clyst and its tributaries via management of the landscape, in particular by working with landowners within the catchment on positive measures that can be taken to reduce the sediment and diffuse pollution impacts [13].

Creating riparian shade (riparian trees and vegetation), with a minimum of five species, along the route of Holbrook to safeguard against future climate change (a rise in temperature) and linking this with a primary network which will vary in character depending on location [14].

Supporting enhancement and improvement of the aquatic habitat within the River Clyst and catchment (via stream bed and bank management and reduction of sediment loads from soil erosion) for the benefit of White-clawed Crayfish [15].



Support development of cycle routes and footpaths to areas beyond the village East: Cranbrook Station, South: Hill Barton, Crealy Adventure Park, Exeter Chiefs and Exeter City Football training grounds North: Broadclyst, Killerton & Ashclyst Forest

A crucial part of creating a sustainable neighbourhood is to create a long term pedestrian and cycle network.

Provide a future extensive network connection to Cranbrook station and Crealy Adventure Park.

Creating and enhancing green corridors throughout the parish ("a journey from doorstep to countryside<sup>[2]</sup>") and beyond.

Primary network: a dedicated and segregated footpath and cycle route that will vary in character depending on location, minimum of 4.5m wide (2m wide footpath and 2m wide cycle path with 500mm wide a grass central strip). All year round access; flood prevention required.

Secondary network: strategic footpath/cycle path forming part of a wide multi-functional green corridor as a shared path, min. 3m wide.



Reconnecting people and nature; Enhance and manage village edges and wider parish area with biodiversity, edible and foraging landscape features.

Enhancement of all hedgerows surrounding the bypass site to encourage wildlife, provide a stronger green corridor and enhance the character of the traditional sunken lane.

Creation of a wildflower meadow verge on either side of footpath down into the village from the new community hall.

Installation of enhancements for biodiversity within any proposals including the creation of "habitat walls" and "living walls" for invertebrates, integrated bat and bird boxes and landscape planting using native species of local provenance.

Championing community engagement within Clyst Honiton and the wider parish for the management of road verges for biodiversity [16].

Reinstating bee hives in the village and the planting of a community orchard for food production and cottage industries.

New edible hedge planting including Wild Plum Prunus domestica, Blackthorn (Sloe), Crab Apple, Wild Pear, and Wild Gooseberry.



# Enhance the biodiversity value of the farm land

Improving soil quality and soil care within the parish by using sustainable systems (i.e. crop type, mixed cropping, crop rotation and associated agronomic conservation management techniques such as contour ploughing, fallowing, grazing management) that have positive impacts on profitability and sustainability [17].

Enhancement of habitat within the parish for Cirl Bunting by using positive farming techniques (i.e. leaving crops to go to stubble after harvest and provide seed food during colder months to planting grass margins at the edge of fields to support habitats for insects and spiders that would act as a summer food source).

Supplementary planting along the River Clyst adjacent to the western extents of the village.



Parklet in Brackenbury Road, London ©Cyclehoop

Public realm improvements to Clyst Honiton Village road, junctions and enhance the historic core

Improvements to streetscape with enhancements with street tree planting and creation of seating areas to uplift the newly cul-de-sac'd main street.

Create a new pocket park and a focal point to reinforce the 'heart' of the village.

Enhancements to the entrance to the village to slow traffic and improve access between village and Local Green Space.

Potential for small scale events such as local produce (food and drink) events, flower and plant sales will help rejuvenate the village, support and create connections with local businesses and attract local visitors.



Enhance the biodiversity and historic character of the parish

Restoration of historic broadleaved woodland and through the restoration and management of characteristic hedges and sunken lanes within the parish.

Recreation of Traditional
Orchards within the parish
through planting schemes and
management techniques in order
to provide a local food source for
the community and to support
sustainability and diverse
biodiversity.

# **Appendices**

## Appendix 1

#### **Evidence and Policy**

The provision of green infrastructure in and around urban areas is now widely recognised as contributing towards creating places where people want to live and work. The concept of green infrastructure is embodied in the Government's Planning Policy Statements (PPS) 1 and 12. It is an essential component of good planning for urban and rural areas, particularly in the face of climate change...... Its design and management should also respect and enhance the character and distinctiveness of an area with regard to habitats and landscape types.

The NPPF states that the planning system should "contribute to and enhance the natural and local environment by ...minimising impacts on biodiversity and providing net gains in biodiversity where possible".

The 2011 UK National Ecosystem Assessment (UK NEA) June 2011 provides a comprehensive account of how the natural world, including its biodiversity, provides us with services that are critical to our well-being and economic prosperity. It concluded that the natural world and its ecosystems are important to our well-being 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'.

The Convention on Biological Diversity in October 2010 where 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.

In June 2011, the UK Government published The

Natural Choice – the first Natural Environment White Paper for 20 years. This responded to the global commitments made at Nagoya. It outlined the Government's vision for the natural environment, shifting the emphasis from piecemeal conservation action towards a more integrated landscape scale approach. It also set 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.

Biodiversity 2020: A strategy for England's wild-life and ecosystem services builds on the Natural Environment White Paper and provides a comprehensive picture of how we are implementing our international and EU commitments. 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.

Statements of Environmental Opportunity within the National Character Area profiles for ecosystem goods and services within the parish promote the management, enhancement and where necessary protection of the diversity of land use and activity which gives the Devon Redlands its distinctive character. Increase the connectivity of key habitats for the benefit of landscape, biodiversity and ecosystem services

Other agreements that UK has significant commitments to - The Ramsar Convention on Wetlands of International Importance and the European Union (EU) Marine Strategy Framework Directive (MSFD).

#### References

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- 14. The Environment Agency is looking at ways of keeping rivers cool and taking action now to prevent, where possible, rivers in England and Wales becoming inhospitable for our freshwater wildlife over the next 60-70 years. Keeping Rivers Cool. http://www.asfb.org.uk/wp-content/uploads/2012/09/Keeping-Rivers-Cool\_Guidance-Manual\_v1.-23.08.12.pdf.
- 15. Devon BAP White-clawed Crayfish. In Devon few rivers have suitable conditions for the species' survival. The only known population, found in the Creedy-Yeo sub-catchment of the Exe, is thought to be free of the crayfish plague Aphanomyces astaci. Historical records show populations once occurred on the Culm, Clyst and Otter (Devon BAP). Stream bed and bank management can destroy or damage habitat, and high sediment loads from soil erosion throughout a river catchment can clog the river bed making it unsuitable for the crayfish.
- Life on the Verge in Devon Headline guidance for communities. Devon County Council, November 2016. https://new.devon.gov.uk/environment/wildlife/ managing-verges-for-wildlife.
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