

A Green Infrastructure Strategy for Cornwall

A strategic framework

Transport, Waste and Environment

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Foreword

Green infrastructure is a vital component in shaping the health, wealth and identity of our communities through the demonstration of the multiple benefits that emanate from investing in, restoring, enhancing and integrating natural systems.

This strategic framework provides a clear plan to guide the future planning and delivery of green infrastructure in Cornwall.

Cornwall stands apart from other areas in the south west and the country through the sheer number and type of existing green infrastructure assets which are integral to our heritage, identity and economy.

Today we face a number of complex and interrelated challenges in how we can best plan, deliver and ultimately invest in our green infrastructure for both current and future generations. Our developing understanding of the socio-economic value of green infrastructure will enable us to better quantify the benefits both in the short and longer term and the returns that any new investment can potentially bring.


Planning for green infrastructure is also increasingly being seen as a smarter alternative to retrofitting and upgrading grey infrastructure (roads, sewerage, energy etc), but it will also require deliberate actions and approaches to the reshaping of our existing built environment.

Many cities in the United States and across Europe have been working on moving their planning approach from grey solutions to green solutions to deal with environmental problems such as surface water run off and overheating including the establishment of tree cover, increasing the permeability of surfaces, reinstating floodplain and reconnecting fragmented habitats. This provides us with our cue and enables us to build a compelling argument of the need to invest and realise the benefits of the greater scope this brings in terms of developing local renewable energy systems, community food growing and alternatives to road transport.

This is not all though, investment in planning and developing our green infrastructure will enable Cornwall to reinforce its competitive identity as a place that counts.

No longer can we afford the luxury to work on achieving outcomes that deliver either for the economy or for the environment or for health and well-being. We have to adopt an integrated approach which understands the interrelationship between these activities. Cornwall, as a Unitary Authority, is perhaps in a better situation than many to develop this concept on a strategic scale.

That is why this strategy and the framework that it provides for the ongoing coordination of green infrastructure on the ground in Cornwall is so important. It allows for the coordination of activities, the pooling of resource, the adoption



of agreed joint priorities and the level of political leadership that are required in realising that it is both possible and realistic to deliver integrated outcomes which deliver benefits for our economy, for our communities and our environment from the provision of attractive, fully functioning and reconnected green infrastructure.

Alec Robertson, Leader of the Council and Party Group Leader -
Conservative

A Green Infrastructure Strategy for Cornwall

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1. Introduction

1.1 What is Green Infrastructure?

Green Infrastructure in Cornwall includes:

- **Green Places** – Historic, natural, semi-natural and designed areas such as parks, woodlands, informal open spaces, allotments, street trees, multi use trails, churchyards and other publicly accessible open rural and urban spaces
- **Blue Places** – rivers, waterways, canals and lakes
- **Yellow Places** – beaches

In Cornwall, as part of its unique mining heritage it also includes historical post industrial landscapes.

The term 'Green Infrastructure' covers a wide range of environmental assets that are either natural, historic and/or man-made, such as (but not solely):

- School playing fields
- Allotments
- Natural green space (including woodland, grassland etc)
- Parks and gardens (including private gardens)
- Rivers, riverbanks and wetlands
- Cemeteries
- Beaches and coast
- Verges (road and rail corridors)
- Market squares

Green infrastructure is a strategically planned and delivered network of high quality green spaces and other environmental features. It should be designed and managed as a multifunctional resource, capable of delivering a wide range of environmental and quality of life benefits for local communities (Natural England, 2011).

Green infrastructure can be found in both urban and rural areas. It includes assets that may be high quality or degraded as a result of their current or past use.

Green infrastructure is a vital element of sustainable communities and for many people is the reason for living, working, visiting and investing in Cornwall. Therefore, good quality, well planned and appropriately located green infrastructure is critical to Cornwall's future. Not only does it help us to live

more sustainably and self-sufficiently, but it also helps to increase resilience and adaptation to climate change.

The key to green infrastructure is the functionality of the assets as places which shape our current and future quality of life. Traditionally the functions and value of natural and man-made assets have mainly been looked at in isolation (for example as an ecological resource or as a space for recreation). Green infrastructure planning provides a mechanism to consider how individual elements work together to provide an overall 'system'.

Although it is not necessary for green infrastructure assets to be connected, additional value can be gained through the creation of a 'network'. For example, connecting new settlements with existing open space can deliver health and well-being outcomes for residents or linking isolated habitats through wildlife corridors can help species maintain critical thresholds or migrate in response to, for instance, climate change.

In addition, green infrastructure planning can, and will, operate in Cornwall at a range of spatial scales. From a very local scale, such as the provision of allotments for food growing to taking a catchment level approach to enable larger scale solutions to be delivered. An example of this catchment scale approach to green infrastructure is the planting of native floodplain woodland and changing land management to increase hydraulic roughness. This has been shown to reduce water velocity by 50% and raise the flood level in the woodland to enable it to cope with a 1 in 100 year flood as well as increase biodiversity benefits and provide spaces to play and study (Nisbet and Thomas, 2004).


This strategy will operate at a Cornwall wide level and will set out our commitments to the highest level of planning in order to deliver strategic green infrastructure initiatives. As a unitary authority, Cornwall is particularly well placed to achieve this aim.

Separate delivery plans will be developed to take forward the actions identified setting out key principles, responsibilities and timetables for action.

1.2 Contents and Purpose of the Green Infrastructure Strategy

The purpose of this strategy is to guide and shape the planning and delivery of Cornwall's green infrastructure up to 2030. The Green Infrastructure Strategy for Cornwall is an attempt to take a positive and proactive approach to the management and enhancement of Cornwall's natural assets in particular when associated with the level of growth identified in the Core Strategy – Preferred Approach.

The Green Infrastructure Strategy should not be constrained by administrative boundaries. There is a need for adopting a cooperative approach with neighbouring authorities (Plymouth and Devon and the Isles of Scilly).



Cornwall Council has prepared the Green Infrastructure Strategy for Cornwall in partnership with a range of stakeholder organisations that have an interest in planning, managing or using Cornwall's green infrastructure. In particular they include:

- Natural England
- the Environment Agency
- the Cornwall and Isles of Scilly Primary Care Trust
- the Woodland Trust
- Cornwall Wildlife Trust
- The National Trust

and a wide range of consultees in order to:

- Set the vision for green infrastructure across Cornwall
- Determine how future investment in green infrastructure will be secured and priorities for investment
- Identify strategic programme themes
- Identify areas where further work is needed

The Green Infrastructure Strategy will provide a single point of reference, enabling a strategic framework to be developed that will identify how green infrastructure developments at a local level and on a catchment basis complement or support each other and how they link to other plans or programmes in Cornwall.

This Green Infrastructure Strategy provides a mechanism to support the implementation of local planning policies contained within the Core Strategy and as such identifies key areas that will add value to and increase investment and interventions.

This strategy also aims to:

- Complement national and south west approaches to promote, maintain and enhance green infrastructure
- Understand the socio-economic value of green infrastructure in Cornwall
- Support the Council's and other organisations' environment strategies
- Establish Cornwall's current green infrastructure priorities for investment
- Provide a mechanism through which planning and infrastructure development incorporates green infrastructure in both design and build

For the main towns in Cornwall, detailed information has been gathered to inform the delivery and implementation of these aims through local green infrastructure provision via evidence gathering for Town Frameworks. The purpose of Town Framework Plans is to develop locally based strategies, which establish a vision and objectives for the towns, as well as set out directions for

growth and ensure important infrastructure is related to proposed growth. More detailed delivery mechanisms for green infrastructure will form a central element of the Frameworks.

The future development of River Catchment Green Infrastructure Plans (explained further in chapter 4) will also form an important further source of evidence and delivery.

Green infrastructure differs from conventional and current approaches to management of green spaces as it:

- bases its approach on strategic and coordinated planning
- focuses on delivering multiple functions and benefits

In addition green infrastructure is not about seeking new resources for delivering the strategy but the reorientation of budgets to deliver joint and shared priorities.

1.3 An Introduction to Cornwall

Place:

Cornwall is a predominantly rural area covering approximately 3,563km² and in 2012, the Office for National Statistics (ONS) estimated the population of Cornwall to be approximately 535,300.

Key findings from Understanding Cornwall (Cornwall Council, 2011) include:

- **Cornwall's population is continuing to grow** - Cornwall's population has been growing steadily since the 1960s and is amongst the fastest growing areas in the UK.
- **Young people are choosing to stay in Cornwall or come to study** - The expansion of the higher education infrastructure and better employment prospects has led to reductions of younger people leaving Cornwall. These trends are neither fixed or guaranteed, and are fragile.
- **Cornwall's population is ageing** - The population is changing demographically. In line with national trends Cornwall's population is getting older as average life expectancy continues to rise.
- **There are geographical variations in the age and characteristics of the population** - Some places exhibit significant differences in their age structure and other characteristics, for example, most of the neighbourhoods with higher proportions of young people are within towns where as areas with higher populations of older people are predominantly on the south coast and in more affluent rural villages. Service planning however, does not always reflect these differences.

Settlements throughout Cornwall are dispersed and the size, role and function of towns and villages within Cornwall all vary significantly ranging from the 'strategically significant' towns, to small towns, to very small villages and hamlets.

Cornwall contains the following key towns:

Town	Office for National Statistics mid year population estimate 2010
Camborne/Pool/Redruth	56,600
St Austell	34,500
Falmouth/Penryn	32,500
Truro & Threemilestone	23,600
Penzance	21,500
Newquay	20,600
Saltash	16,300
Bodmin	14,700
Helston	11,500
Launceston	11,400
St Ives	11,200
Bude	10,100
Hayle	9,500
Liskeard	9,500
Torpoint	8,300
Wadebridge	7,900
Callington	5,600
Looe	5,400
Millbrook	4,200
Perranporth	4,100
St Agnes	3,900
Padstow	3,800
St Columb Major	3,600
Lostwithiel	3,100
Camelford	3,000
Fowey	2,900
Porthleven	2,600

Source: Cornwall Council, 2012

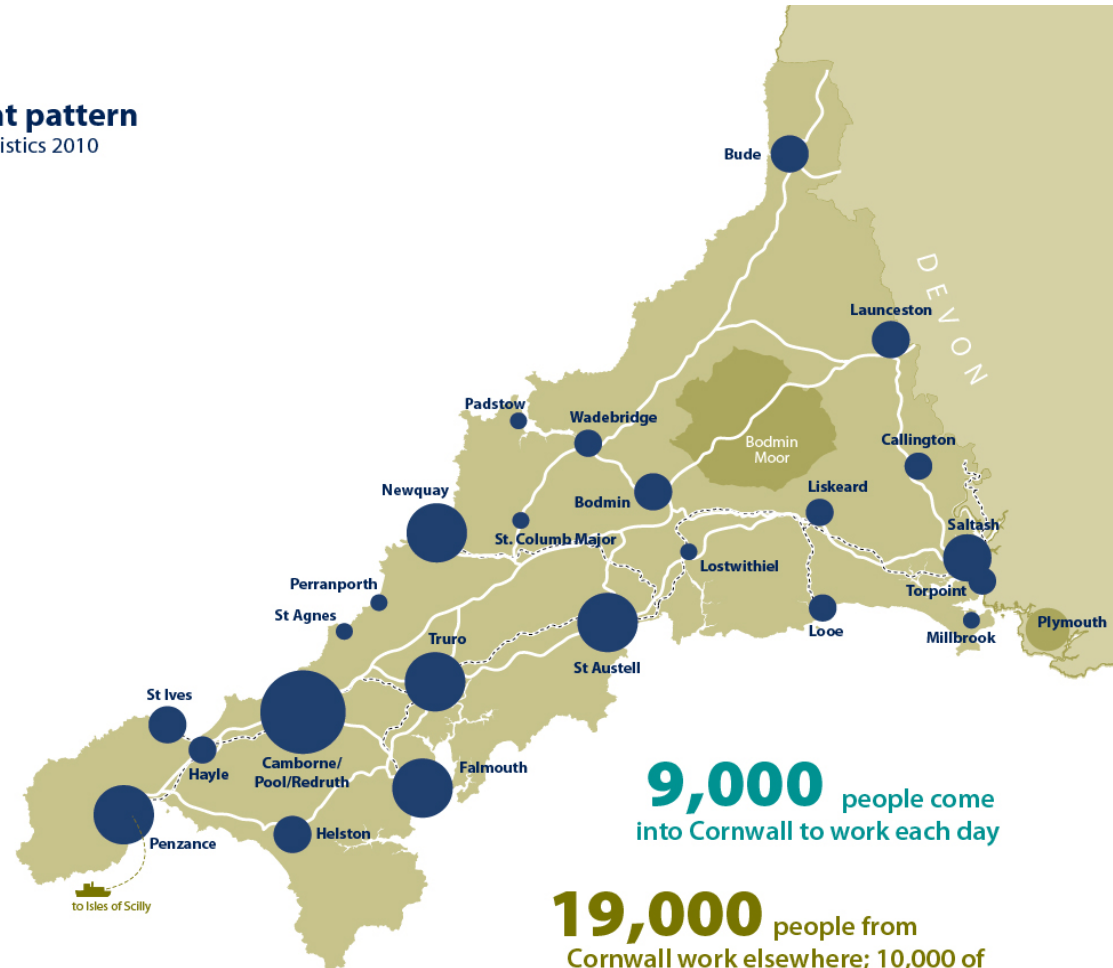
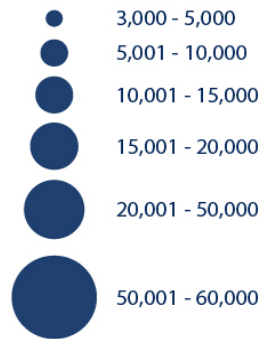
54 % of the total population of Cornwall live in the twenty main towns

There are also a range of smaller market and coastal towns which are locally significant and contain a range of housing, employment, and community facilities and services.

Figure 2.1 – Map of Cornwall Towns (settlement patterns)


Cornwall settlement pattern

Source: Office for National Statistics 2010



9,000 people come into Cornwall to work each day

19,000 people from Cornwall work elsewhere; 10,000 of them commute to Plymouth each day



In recent years, development and services have often been centralised in the larger towns rather than in more dispersed smaller settlements. However, the emerging ['Core Strategy - Planning Future Cornwall'](#) emphasises the importance of developing resilient, self-sufficient communities. This may help to reduce the reliance on larger urban areas and in doing so increase social inclusion, reduce emissions relating to travel and improve the overall future sustainability of these smaller settlements.

Small settlements can often function together, sharing services and facilities, and having a collective role similar to that of larger settlements. There are opportunities to enhance the way small settlements share facilities and have a collective function. This could create rural communities and economies which are more resilient, adaptable and self-reliant.

Local functions and services are extremely important for sustainability, so that people can meet enough of their everyday social and economic needs locally without having to travel far. Transport and the distribution of housing and jobs are also particularly important to increase the self sufficiency of smaller settlements and reduce their reliance on larger urban area.

People:

When looked at as a whole, Cornwall is an area of considerable contrast, with both areas of significant visible and hidden poverty and deprivation as well as areas of visible wealth. Around 52,000 people (10% of the population of Cornwall) live in 'deprived' communities. Many people living in these areas will experience issues associated with lower incomes, higher unemployment rates, ill health, child poverty, low qualifications, poorer housing conditions and higher crime rates.

A significant number of these communities are in town areas, there are however, also likely to be people experiencing issues associated with deprivation in rural areas who are not identified by any indices of deprivation. It is widely accepted that access to green space is important for improving quality of life and that the lack of green infrastructure may contribute to compounding the effects of deprivation.

Health:

Health is important to everyone and it is now known and recognised that many of the wider determinants of health are beyond the traditional reach of the NHS. On average people in Cornwall live longer than the national average, but this hides some big gaps – even in Cornwall's numerous villages people who are poorer or who have lower levels of education may have a shorter life expectancy than their more affluent neighbours.

Data collected between 2005 – 2009 shows the difference between the most and least deprived areas that there are life expectancy variations for men of 5.7 years and for women of 5.2 years.

There are also a number of people who experience reduced quality of life as a result of suffering from one or more medical conditions. Delivering new or enhanced green infrastructure can play a key role in helping address and



tackle health inequality and well being issues.

Economy:

Growth rates for Cornwall and the Isles of Scilly have been relatively high over the last decade. However it remains the second weakest economy in the country and the latest data for 2009 shows local economic decline from the recession has been worse than the national average.

Its total GVA contribution equalled £7,001 million, which equates to 7.4% of the South West and 0.6% of the UK total for GVA (Cornwall Council, 2011b).

In terms of employment by sector the two biggest sectors in Cornwall are distribution, hotels & restaurants (31%) and public administration, education & health (29%). These sectors account for the majority of employment, with Cornwall being more dependent on these two sectors (60%) than the regional (54%) and national averages (50%). Manufacturing accounts for less than one-tenth (9%) of employment locally. Although small, agriculture & fishing account for a larger share of employment in Cornwall (3%) than the regional (2%) or national (1%) average (SLIM, 2010).

Cornwall has higher self employment rates than regional and national averages.

In terms of its performance in relation to European economies Cornwall and the Isles of Scilly have been identified as an area for support from the European Union (EU). In 1999 it was classified as an Objective One region and given access to £350m (€498m) to invest in a new and lasting prosperity and to revive a struggling economy. In 2007 Cornwall was once again identified as having a relatively weak economy compared with the EU average and was awarded European Union 'Convergence status' worth £415m (€579m) to help develop the local economy and move it closer to the EU average.

Cornwall will be eligible for a further programme of high level European funding (2014 and 2020) which could deliver further opportunities to assist in the planning, delivery and investment of strategic green infrastructure for Cornwall.

Although the economic climate in Cornwall remains uncertain, there has been a rise in unemployment in Cornwall over the previous year's figures, and the cost of living remains higher than many other parts of the country.

The public sector, a key employer in Cornwall, is also anticipated to experience further challenges as a result of the continued economic uncertainty and austerity measures.



Environment:

Cornwall contains some of the finest coastal scenery and distinct natural and historic environment in the country. This resource is defined by a number of large landscape scale habitats such as the Goss Moor, Bodmin Moor, the Camel, Tamar and Fal Estuaries and the Wild Penwith heaths and wetland. There is also considerable contrast from the rugged northern coastal cliffs and the oak lined river valleys of the south coast.

Cornwall's historic environment is a finite and non-renewable resource, an integral part of the environment and economy and critical to the unique sense of place and distinctive cultural identity shared by Cornish communities. The interplay of geology, agriculture, maritime location and rich mineral wealth has created archaeology, buildings, settlements, historic landscapes and seascapes of international, national and local significance.


This environmental resource includes:

- 2000ha (hectares) of nature reserves
- 10% (circa) of the land cover is classified as county wildlife site
- a high number of Special Areas of Conservation (top 3 of the UK) of international importance
- 724.204 km (kilometres) of coast – much of it one large continuous nature reserve
- 56,000 historic records – Cornwall has the most statutorily protected assets in local authority care.
- 12,671 listed buildings, 1,344 scheduled monuments, 145 Conservation areas covering 4070 ha, 37 registered parks and gardens, 13 designated wrecks, 2 registered battlefields and World Heritage site of 18,222 ha covering 5.5% of the County.

and specifically contains:

- the Lizard flora and choughs
- the extensive sand dune systems of Gwithian to Mexico Towans Site of Special Scientific Interest (SSSI) and Penhale Dunes (SSSI) and Special Areas of Conservation (SAC)
- a large number of the United Kingdom Biodiversity Action Plan (UK BAP) priority hedgerows and locally important Cornish Hedges
- it is a national stronghold for greater horseshoe bats and harbour porpoises

Cornwall has also gained World Heritage Site status as a result of the transformation of the landscape in the 18th and early 19th centuries as a result of the rapid growth of pioneering copper and tin mining. Much of the evidence from this past, such as deep underground mines, engine houses, foundries, new towns, smallholdings, ports and harbours, and their ancillary industries can still be seen today and have influenced how Cornwall's communities have developed.



The agricultural sector also has demonstrated it has a significant role to play in conservation, and potentially will continue to do so depending on future support mechanisms, as it accounts for about 80% of total land area in Cornwall and the Isles of Scilly (Cornwall Council, 2010).

Ecological footprints measure the sum of all the cropland, grazing land, forest and fishing grounds required to produce the food, fibre and timber it consumes, to absorb the wastes emitted when it uses energy, and to provide space for its infrastructure. In terms of our eco footprint, the figure calculated in 2004 for Cornwall and the Isles of Scilly was 5.4 global hectares per person which is higher than the UK national average of 5.3 global hectares per person and considerably above the 2.1 global hectares which is considered to be a globally sustainable use of resource (World Wildlife Fund, 2008).

2 Green Infrastructure in Cornwall


2.1 A Green Infrastructure Vision for Cornwall

Our vision is for a strategically planned and delivered green network throughout Cornwall, comprising high quality green spaces, green corridors and other environmental features delivering a wide range of ecosystems services for the benefit of all.

We believe that everyone in Cornwall should have local access to good quality natural green spaces close to where they live:

- To provide access to the natural environment
- For opportunities for physical activity, healthy lifestyles and improved well-being
- To provide places for community food growing
- For economic benefits
- To maintain Cornwall's ecological resources
- For the management of water resources
- To help adapt to and mitigate the effects of climate change
- For high quality built and natural landscapes
- To promote sustainable transport opportunities
- To provide places and routes for recreational activities such as cycling, fishing, boating, horse riding, walking and play
- To improve links to facilities and services

Green infrastructure will be designed and managed as an integrated multifunctional resource that will provide: an enhanced living environment, biodiversity and landscape; opportunities for activity and recreation; improved quality of life and well-being benefits for people in Cornwall and better connectivity and links to facilities and services.



Its design and management will respect and enhance the character and local distinctiveness of Cornwall with regards to its diversity of species, habitats and landscape types.

Our vision will be delivered through a strategy, endorsed by a wide range of partners and communities involved in owning, managing or using Cornwall's green infrastructure resources.

2.2 Why Invest in Green Infrastructure?

Cornwall has a beautiful and unique natural environment and a strong regional identity which acts as a key economic driver for the area. Over centuries the natural and built environment has contributed to Cornwall's economic prosperity from its mining, agricultural and maritime heritage. This remains the same today, with the natural environment acting as a key driver for tourism, the generation of renewable energy technologies linked to driving a low carbon economy, green jobs and a continued focus on agriculture and a focus on adding value through food and drink processing.

There are many benefits socially, economically and environmentally which can be reaped from investing in high quality green infrastructure, these include:

- Identifying ways to adapt to or mitigate against effects of climate change, for example using trees for natural air cooling and absorbing CO₂
- Dealing with flood alleviation and water management through increasing use of permeable surfaces, creating up stream water catchment systems, designing in Sustainable Urban Drainage Systems (SUDS) schemes etc.
- Providing opportunities to adopt more healthy lifestyles through increasing and enhancing natural spaces to provide more opportunities for natural play, recreation and enjoyment
- Protecting and enhancing biodiversity and landscape through encouraging and adopting new land management approaches to deliver biodiversity gain and landscape enhancements
- Improving social inclusion and health and well-being through provision of better living environments and high quality and accessible natural spaces near housing which improves and enhances the desirability of living in these areas
- Supporting economic activity through provision of quality environment, local distinctiveness and cultural awareness that appeal to businesses and encourage investment
- Promoting sustainable transport through planning for new and enhanced green and blue corridors, for cycling, walking and water transport
- Supporting sustainable communities by providing links to necessary facilities and services
- Designing and creating attractive environments around and within new and existing residential and employment areas increases desirability


- Supporting and increasing the tourism offer by making environmental improvements that increase the setting, functionality and accessibility of destinations
- Creating and managing productive landscapes, such as forestry and community growing spaces to increase new economic opportunities and strengthening links between people and their environment
- Make available learning spaces such as outdoor classrooms that can provide opportunities and subject matter across academic disciplines to understand more about how we live, how our culture has evolved and where we are going in the future as well as supplying the potential for the attainment of new skills
- Delivering statutory obligations such as the requirement to legally protect the public rights of way network provides an opportunity to enhance their use for health and well-being purposes, as sustainable transport choices and to add new links to the existing rights of way network and thereby reconnect breaks in routes and provide links to key destinations
- Native woodland, because of its unique ability to deliver across a wide range of benefits:
 - landscape and biodiversity,
 - helping habitats become more robust to adapt to climate change through buffering and extending fragmented ancient woodland
 - for quality of life (amenity & recreation, public health, flood amelioration, urban cooling)
 - timber and woodfuel markets
 and can also contribute positively to stimulating the local economy

Continuing pressures on the environment from population increases, the need for housing and employment when in particular combined with new and rising demands to tackle issues of climate change, energy self security and food production will continue to increase weight on the natural environment. This will require a focus on providing joined up and multi functional solutions that are necessary in driving activity and investment in the protection, enhancement and planning of new green infrastructure assets.

2.3 The Economic Valuation of Green Infrastructure in Cornwall

As part of the development of the Green Infrastructure Strategy for Cornwall, Cornwall Council took a lead in commissioning a study to identify and understand the socio-economic value of Cornwall's green infrastructure. Steering group members included:

- Cornwall Council representatives from Economic Development, Planning and Regeneration and Environment services
- Cornwall and Isles of Scilly Primary Care Trust
- Cornwall AONB Unit

- 
- Natural England
 - Environment Agency
 - Visit Cornwall

The work undertaken to date has provided a tool and methodological approach to help aid decision makers and informers to think about, and begin to value, in the early stages of a project's development, the possible range of social, economic and health impacts that green infrastructure can provide to residents, visitors and businesses.

It has been developed for use in three types of situation:

- Developers use the tool to value the possible impacts of a development proposal to inform early stage discussions with the local planning authority; a community group could use it to identify which impacts a project might provide; a public sector organisation could use it to see what scale of impacts might be provided relative to any project investment
- As a means of providing a comparison of the range and value of socio-economic and health benefits delivered by different project options
- To ascertain when a policy is being considered or developed that its objectives are compatible with the Green Infrastructure Strategy


The outcome of the Socio Economic Valuation of Green Infrastructure project should ensure that Cornwall is ultimately placed to maximise appropriate and best placed opportunities for investment in the development and delivery of green infrastructure for the next 10 years and provide a tool to enable decision makers and technical advisors to understand the potential impacts (from a socio-economic and health perspective) on changes in the state of Cornwall's green infrastructure resources.

3 Understanding the Context – National Drivers

3.1 The National Planning Policy Framework

On 27th March 2012, The National Planning Policy Framework (NPPF) was published and replaced Planning Policy Statements (PPS) and Planning Policy Guidance (PPG) notes. Therefore, the NPPF supersedes the former PPG17 – Planning for Open Space, Sport and Recreation and Companion Guide (2nd July 2002).

The NPPF sets out the Government's planning policies for England and how they should be applied. The NPPF must be taken into account in the



preparation of local and neighbourhood plans, and is a material consideration in planning decisions.

The NPPF contains the following references that relate to green infrastructure and open spaces:

Achieving Sustainable Development - Core Planning Principles:

Para 17: *Within the overarching roles that the planning system ought to play, a set of core land-use planning principles should underpin both plan-making and decision-taking [these 12 principles include]:*

- *promote mixed use developments, and encourage multiple benefits from the use of land in urban and rural areas, recognising that some open land can perform many functions (such as for wildlife, recreation, flood risk mitigation, carbon storage, or food production);*
- *actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable; and*
- *take account of and support local strategies to improve health, social and cultural well-being for all, and deliver sufficient community and cultural facilities and services to meet local needs.*


7 - Requiring Good Design:

Para 58 - *Local and neighbourhood plans should develop robust and comprehensive policies that set out the quality of development that will be expected for the area. Such policies should be based on stated objectives for the future of the area and an understanding and evaluation of its defining characteristics. Planning policies and decisions should aim to ensure that developments:*

- *optimise the potential of the site to accommodate development, create and sustain an appropriate mix of uses (including incorporation of green and other public space as part of developments) and support local facilities and transport networks.*
- *create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion; and*
- *are visually attractive as a result of good architecture and appropriate landscaping.*

8 - Promoting Healthy Communities

Para 73 - *Access to high quality open spaces and opportunities for sport and recreation can make an important contribution to the health and well-being of communities. Planning policies should be based on robust and up-to-date assessments of the needs for open space, sports and recreation facilities and opportunities for new provision. The assessments should identify specific needs and quantitative or qualitative deficits or surpluses of open space, sports and recreational facilities in the local area. Information gained from the assessments should be used to determine what open space, sports and recreational provision is required.*



Para 75 - *Planning policies should protect and enhance public rights of way and access. Local authorities should seek opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.*

10 – Meeting the challenge of climate change, flooding and coastal change

Para 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.*

11 – Conserving and enhancing the natural environment

Para 109 - *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, 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*


Para 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; and*
- *Maintain the character of the undeveloped coast, protecting and enhancing its distinctive landscapes, particularly in areas defined as Heritage Coast, and improve public access to and enjoyment of the coast*

3.2 The Natural Environment White Paper

The Government White Paper 'The Natural Choice: Securing the Value of Nature' (Defra, 2011) emphasises the socio-economic and environmental importance of natural spaces and discusses the benefits of green infrastructure.

Para 2.78 - *We need urban green infrastructure to complete the links in our national ecological network. Urban green space allows species to move around within, and between, towns and the countryside. Even small patches of habitat can benefit movement. Urban green infrastructure is also recognised as one of the most effective tools available to us in managing environmental risks such as flooding and heatwaves. It is part of the answer to the challenges posed by a changing climate.*



Para 2.81 - *Urban green space could be a huge asset both locally and nationally, but is often perceived as a liability, generating concerns about management costs and other risks. There is strong evidence for the economic and social benefits of green infrastructure. To take account of this, appropriate methodologies are needed so that those who may wish to retain or develop green infrastructure locally, such as local authorities, healthcare bodies and businesses, can assess the value for money of local spending on it. In chapter 4 we set out how we will work with civil society organisations, local government and relevant professional bodies to support local areas in planning and developing their green infrastructure.*

It also offers this definition of Green Infrastructure:

'Green infrastructure is a term used to refer to the living network of green spaces, water and other environmental features in both urban and rural areas. It is often used in an urban context to cover benefits provided by trees, parks, gardens, road verges, allotments, cemeteries, woodlands, rivers and wetlands.

Green infrastructure is also relevant in a rural context, where it might refer to the use of farmland, woodland, wetlands or other natural features to provide services such as flood protection, carbon storage or water purification. Green infrastructure maintains critical ecological links between town and country.

Around the country local partnerships are seeking to use green infrastructure to drive economic growth and regeneration and improve public health, well-being and quality of life. It can also support biodiversity and the functioning of natural systems such as rivers and flood plains and help reduce the negative impacts of climate change'

The Natural Environment White paper also draws on the findings of the UK National Eco System Assessment (NEA) which was published in the same month and provides a mechanism to show the social and economic benefits provided by the environment. The NEA also highlights that a 30% decline in the UK's ecosystems functions along with associated reductions on the quality and quantity of urban green spaces.

In addressing these issues the White Paper seeks to encourage local action guided by local knowledge and statutory powers of local authorities to work in a more integrated way to achieve multiple benefits. Specific measures include:

- The establishment of a green infrastructure partnership and support for the development of Local Nature Partnerships
- The creation of Nature Improvement Areas aimed at reversing the decline and fragmentation of wildlife habitats
- The establishment of a new Green Areas Designation to protect local green spaces



3.3 Healthy Lives, Healthy People: Our Strategy for Public Health in England

The Public Health White Paper Health Lives, Healthy People sets out the Government's long term vision for the future of public health in England and for the first time the relationship between environmental quality and good public health has been recognised.

Specific references in the Public Health White Paper connected to green infrastructure include:

"The quality of the environment around us also affects any community. Pollution, air quality, noise, the availability of green and open spaces, transport, housing, access to good-quality food and social isolation all influence the health and wellbeing of the local population. Climate change represents a challenge in terms of long-term health services planning and emergency preparedness."

"Improving the environment in which people live can make healthy lifestyles easier. When the immediate environment is unattractive, it is difficult to make physical activity and contact with nature part of everyday life. Unsafe or hostile urban areas that lack green spaces and are dominated by traffic can discourage activity. Lower socioeconomic groups and those living in the more deprived areas experience the greatest environmental burdens".


The strategy for Public Health in England also recognises that wider factors shape the health and wellbeing of individuals, families and local communities – such as education, employment and the environment and these must be addressed in order to tackle health inequalities.

It also states that it sees tackling health inequalities being achieved through empowering local government and communities, who will have new resources, rights and powers to shape their environments and tackle local problems.

3.4 Biodiversity 2020: A Strategy for Englands Wildlife & Ecosystems Services

This new biodiversity strategy for England builds on the Natural Environment White Paper and provides a comprehensive picture of how the Government is looking to implement international and European (EU) commitments. It sets out the strategic direction for biodiversity policy for the next decade on land (including rivers and lakes) and at sea. Specific references in this strategy relating to green Infrastructure planning include:

- Establishing a new "green areas" designation to empower communities to protect local environments that are important to them.
- Working with transport agencies and key delivery partners to create coherent and resilient ecological networks in the natural areas at the edges of our strategic roads and railways. The Government will host a forum with environmental stakeholders to inform future priorities for the enhancement of these green corridors.

- 
- Improving public health locally, by making high quality green space available to everyone.

The Strategy also contains a priority action around the Government's intention through reforms of the planning system "to take a strategic approach to planning for nature within and across local areas. This approach will guide development to the best locations, encourage greener design and enable development to enhance natural networks. We will retain the protection and improvement of the natural environment as core objectives of the planning system"

3.5 Green Infrastructure and Ecosystems Services

Ecosystems Services are a growing area of work in the UK. The concept is that our health and wellbeing depends upon the services provided by ecosystems and their components: water, soil, nutrients and organisms. Therefore, ecosystem services are the processes by which the environment produces resources utilised by humans such as clean air, water, food and materials.

Ecosystem services can be defined in various ways. The Millennium Ecosystem Assessment Established in 2001 classified ecosystem services as follows:

- Supporting services: The services that are necessary for the production of all other ecosystem services including soil formation, photosynthesis, primary production, nutrient cycling and water cycling.
- Provisioning services: The products obtained from ecosystems, including food, fibre, fuel, genetic resources, biochemical's, natural medicines, pharmaceuticals, ornamental resources and fresh water;
- Regulating services: The benefits obtained from the regulation of ecosystem processes, including air quality regulation, climate regulation, water regulation, erosion regulation, water purification, disease regulation, pest regulation, pollination, natural hazard regulation;
- Cultural services: The non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation and aesthetic experiences – thereby taking account of landscape values;

Based upon an international work programme run by 1,300 researchers from 95 countries, the Millennium Ecosystem Assessment (MA), which is to date is the most comprehensive assessment of the state of the global environment, concluded in its 2005 report that "human activities have changed most ecosystems and threaten the Earth's ability to support future generations".

Through adopting an ecosystem services approach that adheres to the following key principles:



Management within natural limits this recognises the need to respect biological limits and thresholds and conserves ecosystem structures and productivity

Management for the long term aims to optimise productivity for long-term benefits rather than short-term gain

Management at micro and macro scales which recognises that ecosystems exist on many scales and are interconnected management should integrate efforts at different scales

Account for true value that there is a need for economic valuation to be based upon all ecosystem goods and services and not simply the commodity value of extracted goods

Make trade-offs clear so that ecosystem management will involve trade-offs, but these should be made transparently and equitably

Involve stakeholders in decisions so that major management decisions should involve all stakeholders to foster equity and inspire active participation in the stewardship of ecosystems

In Cornwall, green infrastructure delivery plans will be created on a river catchment basis to enable green infrastructure benefits to be enacted on an ecosystem basis. This approach is explained in further detail in Chapter 4.



4 Cornwall's Response

To reflect and meet the obligations of the National Policy Context for green infrastructure, the adoption of this document and the strategic framework it provides will enable a consistent policy approach for green infrastructure planning and investment to be applied across Cornwall, ensuring that opportunities are not missed. In addition as a strategic green infrastructure framework for Cornwall, this document can, by setting out local green infrastructure intentions, provide a single point of reference to evidence conformity with existing and emerging national policies.

4.1 Core Strategy - Planning Future Cornwall (Local Planning Policy)

Cornwall Council is currently in the process of developing a local spatial planning policy document for Cornwall which will set out the level, distribution, aims and planning policies for new housing, employment, retail, the environment, leisure, community facilities, essential public services and infrastructure, minerals, waste and energy issues for Cornwall over the next 20 years.

In ensuring that opportunities to maximise the planning, delivery and funding for green infrastructure in Cornwall, green infrastructure policy will be included within the Core Strategy (Planning Future Cornwall). This policy will set out for developers a statement of intent regarding the creation, enhancement and maintenance of green infrastructure for Cornwall over this planning period.

To support the Localism Policy in the Core Strategy, a toolkit containing guidance and a proposed methodology for integrating green infrastructure into Neighbourhood Plans is being developed.

4.2 Green Cornwall

Green Cornwall is Cornwall Council's overarching programme to coordinate our efforts to reduce our carbon emissions and strengthen our wider leadership role within Cornwall. Given the current local, national and international drive to reduce impacts on the environment, the role of Green Cornwall in bringing together our combined resources to achieve this goal is crucial. Green infrastructure is an integral element of the Green Cornwall programme and will provide evidence and information about the potential benefits that green infrastructure can play in particular in helping Cornwall adapt to the projected impacts of climate change.

4.3 Future Cornwall (Community Strategy)

The Future Cornwall Strategy sets out the direction for change and guides the local development framework and the local transport plan. It provides a framework for sustainable development, which means making improvements for people, the local economy and the local environment in a way that is mutually reinforcing.



The key long term objectives of the Future Cornwall Strategy are to:

- become a market leader in innovative business and low carbon technologies; increase productivity and raise quality across the economy
- enhance and build a robust network of small and medium businesses to secure Cornwall's economic stability
- improve our communities through quality building, using housing development to meet local need and drive the regeneration and sustainability of communities, promoting smaller settlements to be centres of employment and services and set an example in design for sustainable living
- promote equality of opportunity and well-being, improve access to quality services, increase participation in influencing local decision making and encouraging individuals to engage in shaping and delivering services in their communities

Green infrastructure has a key role to play in helping to ensure the deliverability of Future Cornwall's objectives.


4.4 Cornwall and the Isles of Scilly Health Inequalities Strategy

The main premise of the Cornwall and the Isles of Scilly Health Inequalities Strategy is that health inequalities do not happen by chance, meaning they can be avoided. The Health Inequality Strategy is therefore aimed at creating a plan of action to tackle identified health inequalities in Cornwall through key themes such as:

- Increasing active lifestyles, promoting healthy weights, reducing risks of obesity and promoting sensible alcohol use
- Increasing work and volunteering opportunities (for instance within the environment sector), and reducing worklessness to reduce mental ill health and financial exclusion

The key Health Inequalities relating to green infrastructure are:

- 19% of children live in poverty but in some areas this rises to 58% of children (Cornwall) – it is known that deprived areas are a barrier to following a healthy lifestyle
- Inactivity affects 60% of adults (England and Wales)
- Inactive patients on average spend 38% more days in hospital, have 13% more specialist services and 12% more nurse visits (England and Wales)
- 75% of people over 75 are suffering from a chronic illness of which 45% have more than one condition (Cornwall and Isles of Scilly)
- Inequalities affect the ability to work, good work is good for your health (England and Wales)
- Volunteering: 32% of people volunteer (Cornwall), opportunities exist in the environment sector with organisations such as The



Conservation Volunteers (formally known as BTCV) and Volunteer Cornwall etc.

- Obesity reduces life expectancy by an average of 9 years (England and Wales)

The recently formed shadow Health and Wellbeing Board is leading the development of Cornwall's Health and Wellbeing Strategy. The strategy is based on evidence from the Joint Strategic Needs Assessment (JSNA) and is being co-produced with engagement from stakeholders. There will be a consultation phase for the strategy before it is finally presented to the Board in July for agreement.

Green infrastructure has a key role in helping to deliver the ambitions of the Cornwall and Isles of Scilly Health Inequalities Strategy and the forthcoming Health and Well-being Strategy by providing new opportunities for people to undertake more physical activity via making use of green spaces or participating in helping look after green spaces. This can enhance both personal health and well-being, which can lead to cost savings in prevention of ill health, and unhealthy environments and lifestyles through all life stages, reducing the risk of long-term health conditions and dependency on health and social care services into older age.

4.5 The State of the Natural Environment in the South West

This evidence report, produced by Natural England identifies a number of regionally important issues, the work that is currently being undertaken and new challenges faced. It concludes with a call to action summarising how organisations can work together, targeting actions, across the region to deliver a healthy natural environment that underpins people's prosperity and a more equitable society for instance through the formation of Local Nature Partnerships.

In relation to green infrastructure, Natural England commits to engage with partners, in particular local planning authorities and the South West Green Infrastructure Network Group, to ensure that the conservation and enhancement of the natural environment and people's well-being are fully integrated in housing, infrastructure and transport projects.

4.6 Connecting Cornwall: 2030 (Local Transport Plan)

Connecting Cornwall: 2030 is the current Local Transport Plan for Cornwall and covers a period of 20 years. It is the key strategic policy tool through which the Council exercises its responsibilities for planning, management and development of transport in Cornwall, for the movement of both people and goods. Although it acknowledges that the construction and use of transport can impact negatively on the environment in a number of ways, it also supports green infrastructure through objectives relating to:

- Making the most of opportunities to protect and enhance the environment
- Improve the health of our communities through provision for active travel



4.7 South West Regional Woodland & Forestry Framework Plan

The South West Regional Woodland & Forestry Framework 2005 aims to be the first point of focus on the future of the region's woods and forests both in terms of identify how the South west can benefit more from woods as well as how it can become a better custodian of its woods and forests, and responsibly nurture them into the future. Following an extensive consultation process, it set out the priorities for activity across the private, public and voluntary sectors. Detailed actions, resources and partners have been identified through various iterations of its accompanying Implementation Plan. This provides important support for the management and development of woodland and forestry as an important green infrastructure asset.

4.8 Flood and Water Management

The Environment Agency has a number of flood and water management policies and approaches which support the development and need for a Green Infrastructure Strategy for Cornwall. The key ones are:

- The National Flood Risk Management Plan
- River Basin Management Plans
- Catchment Flood Management Plans

4.9 Other Strategies and Plans Relevant to Green Infrastructure in Cornwall

There are other opportunities to align green infrastructure priorities from a variety of other strategies belonging to other organisations across the environment, economic and social sectors that have a role or interest in the use of or investment in the maintenance and delivery of green infrastructure in Cornwall and these can be referred to in Appendix 3.

A full list of information on the environmental & guidance framework, key partner delivery information and green infrastructure definitions relevant to Cornwall can be found in the [Green Infrastructure: Emerging Evidence Base](#).

4.10 Cornwall's Green Infrastructure Strategy

This strategy builds on the strengths of Cornwall through taking what is already known about green infrastructure in Cornwall (reference "Understanding the State of Green Infrastructure in Cornwall: Evidence Base", Cornwall Council 2012) and using this as the basis from which future green infrastructure opportunities will be planned, designed and delivered. It will also require a new way of thinking about green infrastructure that places environmental enhancement as an essential component.



This strategy provides a strategic framework to enable a focus on the two main areas which are best able to develop and deliver a well planned and functioning green infrastructure resource. These areas are:

- Where new housing and employment growth is likely to be delivered through allocation of housing growth and distribution options, as set out in the Core Strategy
- On a catchment level to increase the ability of natural systems to function more effectively

To be successful the strategy will need to have in-built flexibility to allow it to evolve over time and to reflect circumstances as they change and as projects are delivered.

4.11 Strategic Framework - Programme Themes

In order to realise future green infrastructure opportunities, the first step in developing this strategy was a requirement to understand what the factors are that are driving green infrastructure requirements in Cornwall. Through a process of stakeholder engagement and consultation a number of strategic programme themes have been identified as follows with associated key principles:

Health and Well-being Theme

Key Principle: The importance of green infrastructure for people of all ages and abilities to experience enhanced health and well being and quality of life should be recognised and taken into account when planning and investing in the delivery of new and enhanced green infrastructure in Cornwall through the design and development of new homes, employment sites and infrastructure

- Active travel and physical activity
- Social inclusion
- Local food production

Economy Theme

Key Principle: The importance of green infrastructure in providing a positive platform for the economy must be taken into account when planning and designing new homes, employment sites and infrastructure

To address this we will focus action to:

- Understand and embed the value of green infrastructure and its relationship with 'Ecosystem Services'



Climate Change (adaptation and mitigation) Theme

Key Principle: The importance and role of green infrastructure in increasing Cornwall's resilience to climate change (adaptation) and reducing our contribution of greenhouse gas emissions (mitigation) must be taken into account when planning and investing in the delivery of new and enhanced green infrastructure in Cornwall through the design and development of new homes, employment sites and infrastructure

Education Theme

Key Principle: The importance and role of green infrastructure in increasing understanding about how we live, how our culture has evolved and what the future holds, as well as supplying the potential for the attainment of new and transferable skills, must be taken into account when planning and investing in the delivery of new and enhanced green infrastructure in Cornwall through the design and development of new homes, employment sites and infrastructure

To address this we will focus action on:

- Raising awareness and understanding of green infrastructure and its benefits
- Better partnership working to deliver green infrastructure

Environmental Quality Theme

Key Principle: The importance and role of green infrastructure in reversing biodiversity loss and reconnecting fragmented habitats and supporting a move to embed ecosystems services must be taken into account when planning and investing in the delivery of new and enhanced green infrastructure in Cornwall through the design and development of new homes, employment sites and infrastructure

To address this we will focus action on:

- Protecting character and identity
- Reducing loss of habitat increase biodiversity and improve ecological coherence

These strategic themes, priorities, related outcomes, key actions and key partners are shown in Figure 4.1.

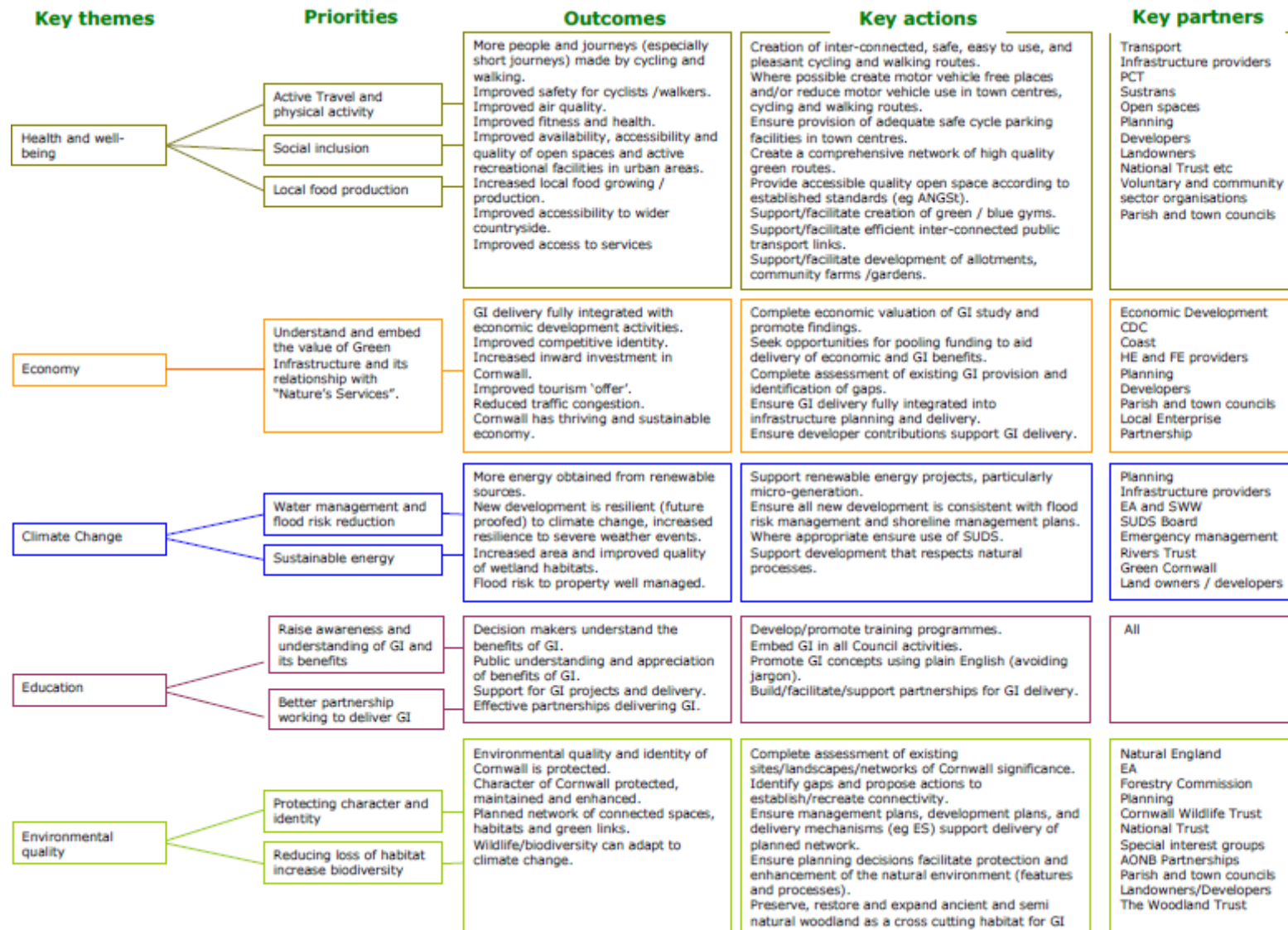


Figure 4.1 – Green Infrastructure Workshop Priorities

Although the programme themes have been prioritised to provide the strategic focus for action, they are not predicting exactly what, when and how green infrastructure will be delivered on the ground.

The key actions identified under the theme headings are cross cutting in their nature and may be delivered as stand alone programmes or as part of the wider green infrastructure development as over time the relative importance of the themes set out could change.

Additionally the relative importance of the themes may also change as a result of local variations across Cornwall.

More detailed monitoring targets will be agreed to show how progress is being made in delivering these programme themes.

4.12 Strategic Initiatives

There are two key initiatives proposed in this strategy as a means of securing and maximising the opportunities for planning and delivering green infrastructure in Cornwall as follows:

4.13 Green Infrastructure in Growth Areas

Green infrastructure should be an integral part of new development everywhere, delivered via the spatial planning system and through the communities that need it for their day to day living. It should also form a key part of proposals to regenerate existing urban and rural areas (Natural England, 2012).

Town Framework Plans are required as part of the development of the Core Strategy where there is likely to be significant local change as a result of new housing growth or a focus on employment activity. This will enable the Council to develop green infrastructure strategies for each of the Town Framework areas identified below as being the areas where the majority of development will be focused, following adoption of the dispersed approach to growth outlined in the Core Strategy Preferred Approach. These towns are:

- Bodmin
- Bude
- Camborne, Pool, Illogan and Redruth (CPIR)
- Falmouth and Penryn
- Hayle
- Helston
- Launceston
- Liskeard
- Newquay
- Penzance and Newlyn
- Saltash
- St Austell
- St Ives

- Wadebridge

Ensuring that green infrastructure planning is undertaken to inform masterplans and other spatial planning documents is an essential component in guiding development and shaping the character of growth in these areas. Although the exact blend of actions will be different in each area, as they will need to respond to local constraints and opportunities, the Town Framework green infrastructure strategies will all share the same objective to raise the quality of existing green infrastructure and strategically plan for the creation of new green infrastructure.

The green infrastructure strategies being developed at a Town Framework level will consist of gathering key evidence as follows:

Flooding and Surface Water Areas

- Contextual text for the town relating to flooding and water management
- Maps identifying where existing flood and surface water problems are known
- Maps showing the location of potential new SUDS schemes in relation to new development
- Creating a suite of general and local principles that are expected to be considered and adhered to in any new developments in the Town Framework area

Ecological Resource

An ecological resource map showing the location of the following habitat types:

- Special Areas of Conservation
- Special Protection Areas
- Sites of Special Scientific Interest
- National Nature Reserves
- Local Nature Reserves
- County Wildlife Sites
- Ancient Woodland
- Biodiversity Action Plan Habitats
- Semi-natural Habitat (from Landcover (2005))

This mapping will be used to identify areas where there are key habitats to protect and opportunities for enhancing and reconnecting biodiversity assets and networks and will be accompanied by a suite of general and local principles for each of the Town Framework areas.

Active Travel and Connections

- Maps of existing active travel and recreational routes

- Identifying and mapping key activity locations and or destinations within the Town Framework areas
- Identifying problematic areas (due to either the severance of routes, unsafe crossing points etc.)
- Mapping potential enhancements to or new active travel or recreational routes (both within the town and out into the wider countryside)
- Creating a suite of general and local principles that are expected to be considered and adhered to in any new developments in the town framework area

Public Open Spaces

The creation of Cornwall Council has provided an opportunity to adopt a new set of open space typologies. These are listed below:

- Parks and Gardens/Amenity Green Space/Civic Spaces
- Natural and Semi-Natural Green Spaces/Green Corridors/Accessible Countryside in Urban Fringe
- Outdoor Sports Facilities – with full public access
- Provision for Children
- Provision for Teenagers
- Allotments/Community Gardens/City (Urban) Farms
- Cemeteries and Churchyards
- School Grounds & Other Outdoor Sports Facilities – with no or limited public access

These typologies are described in appendix 1.

Through collecting data on the extent of current provision across these four issues, it has been possible to work out what future green infrastructure provision is required to accommodate the level of growth identified for each of the Town Framework towns.

The final phase of this work will result in developing a final green infrastructure conceptual map which will highlight where new or enhancements to existing multifunctional resource is best placed in order to deliver the key strategic themes in Cornwall (outlined above in section 4.1).

In many cases new green infrastructure may not be required and the focus will be directed towards improving the quality or accessibility of existing green infrastructure assets.

4.14 Green Infrastructure in Rural Areas

Although there are likely to be greater issues for the larger urban places due to pressure for growth requiring a particular focus on urban green

infrastructure. As part of the ongoing delivery of the Green Infrastructure Strategy a further piece of work is being undertaken based on the approach to the Town Framework areas, whereby a selection of a further 108 smaller settlements that are likely to see some level of growth over the next 20 years will be identified for rural area assessments.

As an additional benefit taken together, the evidence base and associated information from the Town Framework green infrastructure strategies and the rural area assessments will enable the council to set its own locally relevant public open space standards.

4.15 River Catchment Green Infrastructure Delivery Strategies

The European Commission has stated that "The best model for a single system of water management is management by river basin - the natural geographical and hydrological unit - instead of according to administrative or political boundaries. Initiatives taken forward by the States concerned for the Maas , Schelde or Rhine river basins have served as positive examples of this approach, with their cooperation and joint objective-setting across Member State borders, or in the case of the Rhine even beyond the EU territory. While several Member States already take a river basin approach, this is at present not the case everywhere. For each river basin district - some of which will traverse national frontiers - a "river basin management plan" will need to be established and updated every six years, and this will provide the context for the co-ordination requirements identified above." (European Commission, 2012)

Green infrastructure provision on a local scale which meets many of the objectives around healthy lifestyles, well being and high quality urban environment will be met through the implementation of Town Frameworks. However, the wider objectives of green infrastructure provision such as climate change mitigation, economic enhancement restoring ecological networks and coherence and most of all securing ecosystem services will need to be implemented on a larger scale.

The Green Infrastructure Strategy proposes a river catchment scale as a pragmatic approach to developing programmes which can deliver these green infrastructure objectives. There are numerous catchment areas in Cornwall, some can be amalgamated, others may stand alone, but the challenge for the delivery at this scale of GI is to develop an approach that is understood and supported by local communities, secures appropriate funding and can be rolled out over a number of years.

Work undertaken by the Environment Agency through previous Catchment (River Basin) Management Plans and now more recently through the Catchment Restoration Fund as a part of the Water Framework Directive already provide a basis for developing the wider approach to securing ecosystem services in Cornwall.

Given the number and in some cases the complexity of river catchment functioning in Cornwall, Cornwall Council will work with its partners to scope the key issues including:

- Identifying pressure areas on catchment functioning
- Identifying the causes of pressure
- Identifying what actions can or could be taken to resolve or remove pressures
- Identifying opportunities for improvement and restoration of catchment functioning
- Setting out proposals for prioritising implementation of river catchment GI delivery plans

5 Delivering the Strategy

5.1 The Delivery Approach

It is not enough to simply map out the green infrastructure assets that we have or develop projects in isolation. Co-ordinated delivery is integral to the process.

Because a green infrastructure strategy potentially plays such a significant role in delivering the Council's objectives for Cornwall, it is essential that the strategy is capable of delivering green infrastructure elements and features on the ground and makes the links with other studies and strategies. Having an adopted Green Infrastructure Strategy increases our ability to apply for funding, provides evidence of need and gives funding bodies certainty regarding our plans. The provision of green infrastructure functions potentially affects all of our service areas and will require implementation of the following elements.

5.2 Leadership

This Green Infrastructure Strategy for Cornwall provides a joined up framework to promote a coordinated approach to planning, delivering and managing green infrastructure across stakeholder organisations in Cornwall. It provides a single platform for sourcing place-based green infrastructure and will aid local decision making where green infrastructure assets are concerned.

It will require a cross boundary approach and cooperation with neighbouring authorities and will require:

- strong political leadership to communicate, lobby and advocate the importance of green infrastructure planning and delivery

- the development and maintenance of robust partnership working to plan and design future new green infrastructure assets, win resources, deliver and manage and maintain the asset over time
- integration within the planning system and other strategic initiatives such as economic development, regeneration, housing and health in Cornwall to enhance and increase the delivery of green infrastructure on the ground to ensure its success
- monitor performance and implement reviews

5.3 Investment

In the past much of the funding used to invest in the development of open space and parks, forestry, waterways and nature conservation has been associated with public sector activity. More recently public funding has been supplemented through planning obligations.

With the current economic situation and a tightening of public sector funding new approaches to diversifying investment will need to be found for both capital and revenue.

Investment programmes to deliver identified green infrastructure priorities will come through a variety of sources such as developer contributions:

- The **Community Infrastructure Levy (CIL)** which is applied to all residential developments as a way to fund infrastructure developments (including necessary green infrastructure) to support the level of growth in an area. CIL funding will be used to deliver green infrastructure on a larger than local basis
- Developer provision on site or in kind
- **Section 106** funding can be used as a means of delivering green infrastructure as off site provision. However, post 2014 there may be some restrictions on the number of schemes that can contribute towards the infrastructure.

Other funding sources to aid the management and delivery of new and or enhanced existing green infrastructure include:

- Flood defence funding (administered by the Environment Agency)
- Commissioning from health, education and leisure sectors
- Lottery and European funding
- Generating income and adding additional value to green infrastructure assets
- Agri and other environmental schemes (including the new Common Agricultural Policy (CAP)2014 – 2020))
- Bio-diversity offset or habitat banking

Although a challenge, planning for the delivery of green infrastructure in Cornwall has a duty to consider and make arrangements for the ongoing management and maintenance of the asset and over time, to be assured

that the benefits and functions are delivered and secured in the long term.

Potential sources of funding available now that could be used to ensure this are as follows:

- The **Community Infrastructure Levy (CIL)** which makes provision for maintenance and management of any new infrastructure provision over a specified time period
- The formation of **community enterprises** including Community Infrastructure Companies (CICs) which could be used to offset revenue (staff, equipment, offices etc) and capital costs from the long term management of green infrastructure assets for example by setting up commercial businesses around the assets
- Increased **partnership working** with Parish and Town Councils to ensure that green infrastructure assets are managed and maintained to ensure their continued functioning and use
- Establishing **“friends of” schemes** to manage and maintain community green infrastructure assets such as has been done at Mount Edgumbe Country Park
- Setting up organised programmes of activities and programmes **commissioned** from other service providers (health and leisure) that would help deliver management and maintenance over an agreed time frame

In many cases planning the delivery and maintenance of new green infrastructure could deliver cost savings to infrastructure providers and managers from providing multiple or cross cutting functions by integrating different activities and land usage on an individual site or across a green infrastructure network as a result of the added value that this may bring.

Additionally the development and adoption of this strategic framework should enable an approach to the consolidation and alignment of existing public sector funding in Cornwall to be focussed on achieving the key green infrastructure priorities.

The Cornwall Socio-Economic Valuation Study has produced a valuation tool (explained in further detail in section 2.4). It will have a key role in aiding decision making. Through the provision of guidance and values it will enable a broad assessment to be carried out looking at the prospective value of green infrastructure investments and existing green infrastructure assets. The assessment provides guidance as to whether the benefits contribute directly to the economy or, less obviously, to provide for wider, non market societal returns.

5.4 Procurement

For Cornwall Council, responsible procurement means pioneering socially, environmentally and economically responsible procurement to deliver improved quality of life and better value for money for our people, our businesses and for Cornwall as a whole. Essentially, responsible procurement is good procurement.

Responsible Procurement for Cornwall Council is made up of 5 workstreams:

- Environmental Sustainability & Carbon Management
- Equality and Diversity
- Safeguarding
- Ethical Sourcing
- SME Development

Cornwall Council has a strong understanding of the importance of Responsible Procurement to the sourcing of Green Infrastructure. For the sourcing and rollout to be successful it is vital that environmental sustainability, and other strands of Responsible Procurement, is embedded throughout the sourcing of infrastructure projects.

5.5 Existing Supporting Projects

The **Infrastructure Delivery Plan (IDP)** brings together the infrastructure (grey, green and social) projects and needs for Cornwall for the next 20 years. It sets out the infrastructure items, how critical they are for delivering the core strategy, their location, delivery agents, timescale and costs, together with current and potential funding streams.

It will also demonstrate the deliverability of projects to underpin the Core Strategy and will influence investment plans of infrastructure providers, enable the pooling of contributions, underpin infrastructure bids and provide critical evidence for the Community Infrastructure Levy (CIL).

It is supported by a comprehensive database, linked to Geographic Information Systems (GIS) mapping. It is also closely linked to the Local Investment Plan and shares a joint evidence base.

Emerging from the Natural Environment White Paper is the opportunity for a **Local Nature Partnerships (LNP)** to be developed. In Cornwall a proposal has been made for a Cornwall and Isles of Scilly LNP. This will bring together many environmental organisations in Cornwall under an umbrella group which will have the ability to focus on common aims and objectives, including elements of green infrastructure.

The LNP will have close links with the already established Local Enterprise Partnership (LEP) as set out in the White Paper, and will ensure that the LEP develops a more strategic understanding of environmental opportunities which will support the objectives of the LEP. The links to green infrastructure provision are significant, particularly in relation to health and well being and the understanding of ecosystem services.

The Active Travel Strategy sets out Cornwall Council's aspirations for developing a comprehensive, safe and ambitious walking and cycling network for Cornwall over the next 20 years enabling more people to travel actively for the benefit of their health and the environment. These

aspirational networks will cover the major urban areas and connecting routes between them. They will provide active travel opportunities for commuters, school pupils, university students, those accessing services, leisure travellers and tourists.

With Cornwall's predicted population growth, the ability to influence the design of new developments will be vital to the implementation of a safe and comprehensive walking and cycling network. Guidance for developers will ensure that the needs of pedestrians and cyclists are considered by locating amenities and services appropriately and ensuring that infrastructure and storage facilities are well designed.

The **Green Paper for Active Healthy Lifestyles** produced by Cornwall Council seeks to promote lifestyles that feature recreational physical activity resulting in increased physical activity. It covers the range of ways that we can work to promote physical activity including the opportunities that green infrastructure can provide in creating locally accessible, safe and cost effective places for physical activity.

5.6 Mapping the Resource

A key output of the implementation of the Green Infrastructure Strategy will be the development of a Geographic Information System (GIS) for Cornwall holding existing, updated and new spatial information as data and evidence is collected, collated and mapped at three levels:

- Cornwall wide (tier 1)
- River catchment (tier 2)
- Town framework (tier 3)

A list of the current GIS data sets held for green infrastructure at a Cornwall wide level can be referenced in Appendix 2.

The intention is to make this data available via a publicly accessible web-based GIS. This will enable individuals and organisations to investigate and explore green infrastructure in Cornwall.

5.7 Future Work

The Localism Act contained significant changes to the current planning system and provides for greater involvement and leadership from town and parish councils in the planning system. Currently a number of parish and town councils in Cornwall are working on the development of **neighbourhood plans**. Given the requirement for the local authority to support and provide technical guidance to those parish and town councils working on developing neighbourhood plans, work will be required to develop a template and guidance to ensure that green infrastructure planning is integrated into the plan making process in a consistent way.

In terms of **updating** the development and delivery of the Green Infrastructure Strategy, the next iteration will require the identification of

areas where potential conflict is experienced due, for example, to short term solutions such as a need to realise assets as a result of government austerity and public sector budget cuts. It will always be important though to ensure that there is adequate play provision in new areas of development and that these should be funded through the existing mechanisms of CIL or the S106 agreements. Work is currently underway to ensure there is a better understanding of standards of provision and when these have been identified they will be included as an appendix to the this Strategy.

Monitoring of the Green Infrastructure Strategy will be incorporated within the Core Strategy Annual Monitoring Report (AMR) process to ensure that green infrastructure delivery is monitored in a consistent manner.

A future action based on **implementation** will relate to the agreement of our key green infrastructure partners to identify and agree to the coordination of monitoring information.

The UK Government has advocated an **integrated approach** to managing environmental impact and improving sustainability within growth agendas and regeneration projects. Integrating green infrastructure as a vital component of delivering successful sustainable communities requires the consideration of certain questions such as what is an integrated approach, what needs to be integrated and why, what will it look like and how much will it cost?

It will be important to establish the **interconnection** between the main urban settlements and the wider environment both as a means of people accessing it and as a means of understanding the impact the wider environment might have on the settlements, both negative and positive.

5.8 The Next Steps – Delivering Tier 2

The development and delivery of the next phase of the Cornwall Green Infrastructure Strategy, the River Catchment Green Infrastructure Delivery Plans (that link to natural ecosystems service functions), will enable the council and its partners to answer these questions. They will then in turn use the green infrastructure principles in order to identify where there are potential opportunities to use green infrastructure to address the planning and delivery of green infrastructure at a larger than local scale and outside of the main towns. By so doing it will improve and manage water cycles, with the overall aim to create a more integrated, sustainable and responsible approach to development and environmental management and take account of the particular characteristics of the environment in Cornwall, for instance the patchwork nature of open spaces, and how the sum of these parts needs to be considered as an important part of providing a whole Green Infrastructure network.

In addition the formal adoption of the Cornwall wide Green Infrastructure Strategy will provide a platform for further engagement with a wide range

of organisations and sectors from volunteer groups through to the farming and agricultural industry who will have a role to play in ensuring successful delivery of green infrastructure at either the strategic, catchment or local level.

6. References

Cornwall Council (2012): *Local Towns Definition*

Cornwall Council (2011a): *Understanding Cornwall* [Online] Available at: <http://www.cornwall.gov.uk/default.aspx?page=24160> (accessed on 20.03.2012)

Cornwall Council (2011b): *Cornwall GVA Analysis*

Cornwall Council (2010): *Cornwall environment evidence report (Draft)*

Department for Environment Food and Rural Affairs (DEFRA) (2011): *The Natural Choice: Securing the Value of Nature* [Online] Available at: <http://www.official-documents.gov.uk/document/cm80/8082/8082.pdf> (accessed on 28.03.2012)

Department for Communities and Local Government (DCLG) (2012): *National Planning Policy Framework* [Online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf (accessed on 28.03.2012)

Department for Communities and Local Government (DCLG)(2002): *Planning Policy Guidance 17: Planning for Open Space, Sport and Recreation* [Online] Available at: <https://www.gov.uk/government/topics/planning-and-building> (accessed on 28.03.2012)

European Commission (2012): *Introduction to the new EU Water Framework Directive*

Natural England (2012): *MOA*

Nisbet, T.R. and Thomas, H. (2004): *The role of woodland in flood control: a landscape perspective.*

SLIM (2010): *Sub-Regional Employment and Skills Analysis*

World Wildlife Fund (2008): *Living Planet Report*



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7. Appendixes:

Appendix 1. Open Space Typologies

Typology Ref No.	PPG17 typology	Category descriptions likely to be found in Cornwall
1.	Parks and gardens	Urban parks, 'recreation grounds' or 'King George V playing fields' or any decent 'playing fields' with multiple formal uses other than sport. Could contain equipped play areas. Public gardens. Millennium Greens.
	Amenity green space	Informal recreation spaces, landscaped & managed (formally rather than natural) green spaces in and around housing, hospitals, colleges & public buildings. Village greens.
	Civic Spaces	Civic and market squares and other hard surfaced areas designed for pedestrians
2.	Natural and semi-natural green spaces	Land that is open to the public and that is predominantly managed for nature conservation. Publically accessible nature reserves, woodlands, urban forestry, scrub, heath, grasslands (e.g. commons and coastal), wetlands, open and running water, reservoirs, heritage mine workings and derelict open land and rock areas (e.g. cliffs, quarries and pits). Country Parks – Tehidy & Kitt Hill. Accessible beaches and intertidal land. Unlike other typologies the majority of the spaces will not receive regular short grass mowing. Where the site contains grasslands this will be typically managed for meadow habitats through one or two crops per year or by natural or livestock grazing.
	Green Corridors	Riverside and canal banks and other strips of land associated with public access, bridleways, cycleways, national trails, former tramways and rights of way
	Accessible countryside in urban fringe areas	Generally agricultural or private natural space adjoining housing areas where informal recreation has been established and permitted for at least five years. This is more than a mere right of way across land and implies that the public may roam throughout the space as long as they adhere to the countryside code.
3.	Outdoor sports facilities (active recreation) FULL Public	Seasonal and fixed sports spaces that are openly accessible to the public (fees may apply) Natural or artificial surfaces and either publicly or privately owned) - including tennis courts, bowling greens, sports pitches, athletics tracks, school and other institutional playing fields, and other outdoor sports

Typology Ref No.	PPG17 typology	Category descriptions likely to be found in Cornwall
	Access.	areas which may be used for informal recreation when not is sporting use. Very often these facilities are located within parks or recreation grounds (typology 1) in which case only the formal pitch should be distinguished in this category.
4.	Provision for children	Public areas specifically laid out for children's play either comprising landscaping or equipment to provide play opportunities. Adventure playgrounds.
5.	Provision for teenagers	Public areas specifically laid out for multi-use games areas, skateboard parks, outdoor basketball hoops, and other more informal areas (e.g. 'hanging out' areas, teenage shelters). Adventure playgrounds.
6.	Allotments, community gardens, and city (urban) farms	Local authority or privately operated allotments, community orchards. Permaculture and community food growing initiatives.
7.	Cemeteries and churchyards	Operating & closed graveyards, cemeteries, gardens of remembrance, church grounds, woodland burial land.
8.	School grounds and other outdoor sports facilities – NO OR LIMITED PUBLIC ACCESS.	School playing field, golf course and private sports clubs with limited public (non member) access. This includes facilities on military bases, college campuses and private institutions. Any land or portions of associated with a school used for the provision of sporting, academic or extracurricular programs outdoors which often include other facilities, including playgrounds and recreational places.

Appendix 2: GIS Green Infrastructure Data Sets

LAYER	DATA OWNER	DATA FORMAT
BACKGROUND MAPS		
Gazetteers (Place Gazetteer)	Cornwall Council	ESRI Shapefile
Gazetteers (Street Gazetteer)	Cornwall Council	ESRI Shapefile
Gazetteers (AddressPoint Gazetteer)	Ordnance Survey	ESRI Shapefile
MasterMap	Ordnance Survey	Oracle 10g
Colour Rasters (1:10,000 Maps)	Ordnance Survey	TIFF
Colour Rasters (1:25,000 Maps)	Ordnance Survey	TIFF
Colour Rasters (1:50,000 Maps)	Ordnance Survey	TIFF
Colour Rasters (1:250,000 Maps)	Ordnance Survey	TIFF
Greyscale Rasters (1:10,000 Maps)	Ordnance Survey	TIFF
Greyscale Rasters (1:25,000 Maps)	Ordnance Survey	TIFF
Greyscale Rasters (1:50,000 Maps)	Ordnance Survey	TIFF
Greyscale Rasters (1:250,000 Maps)	Ordnance Survey	TIFF
Aerial Photography (2005)	Getmapping	ESRI Geodatabase/JPG
Aerial Photography (2000)	Getmapping	ESRI Geodatabase/JPG
Historic Maps	Landmark	TIFF
Overview Map	Ordnance Survey	ESRI Shapefile
ADMINISTRATIVE BOUNDARIES		
Cornwall Unitary	Ordnance Survey	ESRI Shapefile
Isles of Scilly Unitary	Ordnance Survey	ESRI Shapefile
Plymouth Unitary	Ordnance Survey	ESRI Shapefile
Devon County	Ordnance Survey	ESRI Shapefile
Torbay Unitary	Ordnance Survey	ESRI Shapefile
Electoral Divisions	Ordnance Survey	ESRI Shapefile
Parish Boundaries	Ordnance Survey	ESRI Shapefile
Former Districts	Ordnance Survey	ESRI Shapefile

TRANSPORTATION AND ACCESS

Roads	Cornwall Council	ESRI Shapefile
Railway Lines	Ordnance Survey	ESRI Shapefile
Railway Stations	Ordnance Survey	ESRI Shapefile
Cycle Routes and Trails	Cornwall Council	ESRI Shapefile
South West Coast Path	South West Coast Path Team	ESRI Shapefile
Public Rights of Way	Cornwall Council	ESRI Shapefile
Bus Stops and Shelters	NaPTAN (National Public Transport Access Node)	ESRI Shapefile
CRoW Act 2000	Natural England	ESRI Shapefile

OWNERSHIP AND MANAGEMENT

Entry Level Stewardship	Natural England	ESRI Shapefile
Entry Level plus Higher Level Stewardship	Natural England	ESRI Shapefile
Higher Level Stewardship	Natural England	ESRI Shapefile
Organic Entry Level Stewardship	Natural England	ESRI Shapefile
Organic Entry Level plus Higher Level Stewardship	Natural England	ESRI Shapefile
Organic Farming Scheme Agreements	Natural England	ESRI Shapefile
Environmentally Sensitive Areas Agreements	Natural England	ESRI Shapefile
Environmentally Sensitive Areas	Natural England	ESRI Shapefile
County Farm Estates	Cornwall Council	ESRI Shapefile
National Trust	National Trust	ESRI Shapefile
Forestry Commission Woodland	Forestry Commission	ESRI Shapefile
Woodland Grant Schemes	Forestry Commission	ESRI Shapefile
English Woodland Grant Scheme Work Areas	Forestry Commission	ESRI Shapefile
National Inventory of Woodland and Trees	Forestry Commission	ESRI Shapefile
Woodland Trust	Woodland Trust	ESRI Shapefile
RSPB Reserves	Royal Society for the Protection of Birds	ESRI Shapefile

HYDROLOGY

Flood Zone 2	Environment Agency	ESRI Shapefile
Cornwall 100yr Tidal Flood Zone 2	Environment Agency	ESRI Shapefile
Flood Zone 3a	Environment Agency	ESRI Shapefile
Flood Zone 3b Functional Floodplain	Cornwall Council	ESRI Shapefile
Areas Benefitting from Flood Defences	Environment Agency	ESRI Shapefile
Areas Susceptible to Surface Water Flooding	Environment Agency	ESRI Shapefile
Areas Susceptible to Ground Water Flooding	Environment Agency	ESRI Shapefile
Critical Drainage Areas	Environment Agency	ESRI Shapefile
Detailed River Network	Environment Agency	ESRI Shapefile
Flood Defences	Environment Agency	ESRI Shapefile
Flood Map for Deeper Surface Water 1in200yr Rainfall	Environment Agency	ESRI Shapefile
Flood Map for Deeper Surface Water 1in30yr Rainfall	Environment Agency	ESRI Shapefile
Flood Map for Surface Water 1in200yr Rainfall	Environment Agency	ESRI Shapefile
Flood Map for Surface Water 1in30yr Rainfall	Environment Agency	ESRI Shapefile
Flood Storage Areas	Environment Agency	ESRI Shapefile
Historic Flood Maps	Environment Agency	ESRI Shapefile
Landfill Sites	Environment Agency	ESRI Shapefile
250m Buffer of Landfill Sites	Environment Agency	ESRI Shapefile
Historic Landfill	Environment Agency	ESRI Shapefile
Main Rivers	Environment Agency	ESRI Shapefile
River Bank Top 20m Buffer	Environment Agency	ESRI Shapefile
Source Protection Zones	Environment Agency	ESRI Shapefile

BIODIVERSITY

Ancient Woodland	Natural England	ESRI Shapefile
RAMSAR Sites	N/A	N/A
Special Areas of Conservation	Natural England	ESRI Shapefile
Special Protection Areas	Natural England	ESRI Shapefile
Draft Marine Special Areas of Conservation	N/A	N/A
Marine Conservation Zones	N/A	N/A
(Candidate) Marine Special Areas of Conservation	Natural England	ESRI Shapefile
(Possible) Marine Special Areas of Conservation	N/A	N/A
New Marine Special Protection Areas	N/A	N/A
Sites of Special Scientific Interest	Natural England	ESRI Shapefile
National Nature Reserves	Natural England	ESRI Shapefile
Local Nature Reserves	Natural England	ESRI Shapefile
County Wildlife Sites	Cornwall Wildlife Trust	ESRI Shapefile
Biodiversity Action Plan	Natural England	ESRI Shapefile
Biodiversity Action Plan Habitats	ERCCIS	ESRI Shapefile
Ecological Resource	ERCCIS	ESRI Shapefile
Heritage Coast	Natural England	ESRI Shapefile
Natural Areas	Natural England	ESRI Shapefile
Cornwall Wildlife Trust Reserves	ERCCIS	ESRI Shapefile

LANDSCAPE

Areas of Outstanding Natural Beauty	Natural England	ESRI Shapefile
Areas of Great Landscape Value	Natural England	ESRI Shapefile
Landscape Character Areas	Cornwall Council	ESRI Shapefile
Historic Landscape Characterisation	Cornwall Council	ESRI Shapefile
Landscape Description Units	Cornwall Council	ESRI Shapefile
Agricultural Land Classification	Natural England	ESRI Shapefile

MINERALS AND GEOLOGY

Regionally Important Geological Sites	County RIGS Group	ESRI Shapefile
Mineral Consultation Areas	Cornwall Council	ESRI Shapefile

LANDUSE

Traditional Orchards	Natural England	ESRI Shapefile
Energy Crops Schemes	Natural England	ESRI Shapefile

HISTORICAL AND CULTURAL

Scheduled Monuments	English Heritage	ESRI Shapefile
Registered Battlefields	English Heritage	ESRI Shapefile
Registered Parks and Gardens	English Heritage	ESRI Shapefile
World Heritage Sites	English Heritage	ESRI Shapefile
Areas of Great Historic Value	Cornwall Council	ESRI Shapefile
Millennium Greens	Natural England	ESRI Shapefile
Doorstep Greens	Natural England	ESRI Shapefile
Protected Wreck Sites	English Heritage	ESRI Shapefile

HEALTH AND RECREATION

Country Parks	Natural England	ESRI Shapefile
Open Spaces Typology 1. Parks and Gardens; Amenity Green Space; Civic Spaces	Cornwall Council	ESRI Shapefile
Open Spaces Typology 2. Natural and semi-natural green spaces; Green Corridors; Accessible Countryside in Urban Fringe Areas	Cornwall Council	ESRI Shapefile
Open Spaces Typology 3. Outdoor Sports Facilities (Active Recreation) - Full Public Access & Community Use	Cornwall Council	ESRI Shapefile
Open Spaces Typology 4. Provision for Children	Cornwall Council	ESRI Shapefile
Open Spaces Typology 5. Provision for Teenagers	Cornwall Council	ESRI Shapefile
Open Spaces Typology 6. Allotments; Community Gardens; City (Urban) Farms	Cornwall Council	ESRI Shapefile
Open Spaces Typology 7. Cemeteries and Churchyards	Cornwall Council	ESRI Shapefile
Open Spaces Typology 8. School Grounds and Other Outdoor Sports Facilities (No or Limited Public Access)	Cornwall Council	ESRI Shapefile
Indices of Deprivation (2007)	Office for National Statistics	ESRI Shapefile
Indices of Deprivation (2010)	Office for National Statistics	ESRI Shapefile

Appendix 3: Additional and Relevant Plans and Programmes

Cornwall Council Business Plan

Cornwall Council's priorities cover many service areas related directly and indirectly to green infrastructure. Of the 7 priority fix areas the environment; housing and waste areas have particular relevance to GI:

- Work with our partners (public and private) to maximise our impact on carbon reduction
- We will promote sustainable development that benefits communities and the economy they rely upon as well as the environment. This will include good design and the protection and enhancement of our local character.

Longer term priorities include improving the environment (low carbon) and environmental services performance targets to excellent (by 2014).

Environment, Planning and Economy Directorate Plan

Priorities most relevant to green infrastructure are:

- Creating Better Places to Live
 - Enabling quality and affordable housing;
 - Improving the quality of our local environment;
 - Creating safe and attractive neighbourhoods;
 - Empowering and sustaining all of our communities;
 - Engaging communities and promoting community pride;
- Enabling Sustainable Economic Prosperity
 - Maximising the outcomes from Convergence and other funding streams;
 - Enabling renaissance of our towns and regeneration of our communities;
 - Maximising the economic potential of Cornwall's unique environment and culture;
 - Promoting sustainable development that benefits both people and the environment;
- Creating a Green Cornwall
 - Reducing the need to travel and providing safer and sustainable transport choices
 - Using less energy and reducing the carbon footprint
 - Developing an integrated approach to managing public space
 - Making the most of our historic, natural and maritime environment
 - Promoting development that reinforces sustainability, good design and local character

- Creating Connectivity and Strategic Infrastructure
 - Enabling good access to services and facilities
 - Unlocking bottlenecks on the strategic road and rail infrastructure

- Delivering Excellent Services
 - Developing and implementing transformational change programmes, which are:
 - Responsive to customer need
 - Build effective partnerships
 - Deliver unified and integrated services
 - Sustainable and encourage sustainable low carbon practices
 - Commissioned and managed effectively through a range of delivery options
 - Supporting innovation and creativity
 - Building on best practice and continually improving

Natural England

[Natural England's Corporate Plan 2011 – 2015.](#)

Natural England's purpose is defined in legislation: 'To ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development' (Natural Environment and Rural Communities Act 2006).

Natural England's priorities flow from the global plan for biodiversity agreed at Nagoya; the 'Making Space for Nature' Report and the ambitions we expect to be set out in the Natural Environment White Paper and the England Biodiversity Strategy. Our priorities are to:

- reconnect people with nature;
- protect natural assets; and
- maximise the opportunities offered by a greener economy.

We will deliver these priorities through four key themes which reflect the new delivery landscape, our role and how we will work in future:

- **Delivering with communities** – we will focus on delivering landscape, habitats and species priorities, and realising social and economic benefits from the environment, with and through local communities and partnerships.
- **Customers** – we will continue to improve the way we work with customers and partners and the service we provide – in particular the handling of the applications and payments for the incentive schemes we administer. We will also build broad partnerships at local and sub-national level to realise benefits and secure additional contributions to the natural environment.

- **Science and Evidence** – we will collaborate on, and share all of our knowledge of the natural environment to widen and deepen understanding more widely across society.
- **Capability** – we will continue to develop as a modern and effective public body and ensure the people we have and the skills and processes they use maximise the benefits for the natural environment and enable effective engagement with and empowerment of local partnerships.

Environment Agency

Delivery of the Environment Agency's purpose is outlined in their [Corporate Strategy - Creating a Better Place \(2010 – 2015\)](#). This is through five areas of which three are considered most relevant to the delivery of green infrastructure:

- **Act to reduce climate change and its consequences**
 - Help people and wildlife adapt to climate change and reduce its adverse impacts.
 - Provide advice, guidance and evidence to key stakeholders on adaptation.
 - Work with local, devolved and central government, and in England regional bodies, to help them embed reducing and adapting to climate change in their policies and plans.
 - Climate change adaptation is integrated into our business plans and ways of working.
- **Protect and improve water, land and air**
 - Biodiversity is enhanced and fish stocks are managed sustainably for the benefit of wildlife and people.
 - Ensure that our water management and flood and coastal risk management activities enhance wildlife conservation and bring wider environmental benefits.
 - Work with partners to create and restore new wetland and coastal UK Biodiversity Action Plan habitats and protect priority species.
- **Work with people and communities to create better places**
 - Flood risk and coastal erosion are effectively managed and people and property are better prepared and protected.
 - Work with nature to tackle flood risk, including creating new habitats that accommodate water and aid conveyance. Better local environments enhance people's lives and support a sustainable economy.
 - New and existing developments have a reduced environmental impact and well-planned environmental infrastructure.

- Influence strategic European, national, regional and local land-use planning policies so that they respect environmental limits and take into account future climate risks.
- Ensure that the environmental infrastructure associated with new housing is planned for.

Cornwall and Isles of Scilly Primary Care Trust

The Trust's [Strategic Plan for improving health in Cornwall and the Isles of Scilly between 2008/09 to 2012/13](#) prioritises the following themes:

- Help more children to achieve a healthy weight and so improve their current and long-term health prospects;
- Improve mental health and well-being and help people with mental health problems to have the same life opportunities as everyone else; reduce the number of deaths by suicide;
- Reduce the gap between people with the best health and those with the poorest by targeting support where it is needed most;
- Help people to live longer and raise life expectancy in Cornwall to match the best levels in Europe.

The Forestry Commission

The Forestry Commission has four key priorities outlined in their [England Forestry Strategy](#) which are:

- **Forestry for Rural Development** covers forestry's role in the wider countryside, including its contribution to the rural economy and timber and marketing opportunities. There will be a focus both on the role of new woodlands and on how existing woodlands can be managed to deliver more benefits to local economies, by creating jobs both upstream and downstream of the forest industry.
- **Forestry for Economic Regeneration** outlines opportunities for woodlands to play a positive role in strategic land-use planning. These include restoring former industrial land and creating a green setting for future urban and urban fringe development.
- **Forestry for Recreation, Access and Tourism** describes what can be done to promote more and better-quality public access to woodlands. The programme also includes opportunities for ensuring that woods and forests continue to be used for a wide range of recreational pursuits as well as complementing and supporting the tourist industry.
- **Forestry for the Environment and Conservation** embraces the role that woodlands can play in conserving and enhancing the character of our environment and our cultural heritage, and in delivering the Government's nature conservation, biodiversity and climate change objectives. It also considers the impact that woodland creation and management may have on other environmental resources and other land uses.

Cornwall Wildlife Trust

The Wildlife Trust aims to be Cornwall's leading voluntary wildlife champion through:

- Standing up for wildlife and the environment through advocacy, policy and campaigning;
- Creating wildlife havens by working to rebuild biodiversity both on land and in the marine environment;
- Inspiring a love of nature through outreach and educational initiatives;
- Encouraging sustainability by promoting community-led action on climate change and sustainable living.

The Woodland Trust

Delivery of the **Woodland Trust's** objectives is through the following three aims:

- Work with others to plant more native trees
- Protect native woods, trees and their wildlife for the future
- Inspire everyone to enjoy and value woods and trees

The National Trust

'Fresh Tracks Down Old Roads - The Strategy for the Next Decade' (2010) includes the development of:-

- A wider range of activities at properties, from nature walks and bike riding to surfing
- New opportunities for public access to our land for food production
- Local review of the use of our coast and countryside properties in partnership with our neighbours and other user groups
- Initiatives to promote our huge presence in the countryside, encouraging people to enjoy the unique delights that time spent outdoors in remarkable landscapes can offer.