

## 2.1 ANGSt and open space standards

ANGSt was developed in 1996 to demonstrate how size and distance criteria can help define the green spaces that provide the greatest contribution to a sustainable community. Because of its broad definition of what can constitute natural areas, it does not attempt to classify greenspace by established typologies. For these reasons it is very well suited to broad assessments of existing provision, as well as determining strategic requirements for provision of greenspace for major new developments. It is one of a number of provision standards for greenspace that are available for local authorities to adopt, and can be used in conjunction with other standards to give a strategic approach to greenspace provision, including, but extending beyond, spaces in the immediate area of people's homes.

A review of ANGSt in 2003 by Handley et al recognised that *“ANGSt should be integrated into a comprehensive approach to greenspace planning, and should be defined locally to account for varying circumstances, such as existing levels of provision and community demand for additional greenspace or for change in the balance of provision”*.

Local authorities have commonly used the results of a PPG 17 assessment of open space to set standards for different typologies of green spaces, as suggested by the companion guide to PPG 17. Again these are often based on an area per typology, per 1000 people. Distance thresholds are often included, with separate distances being established per typology. Most PPG 17 assessments are now published on Geographic Information Systems (GIS). These can show areas of under-provision of the different typologies of greenspace, and can overlay other data, such as areas of multiple deprivation, to show how greenspace provision relates to other social issues. (PPG 17 set out how local authorities should assess the existing and future needs of their communities for open space, sport and recreation facilities. **NOTE:** PPG 17 is to be replaced in 2010. Two new Planning Policy Statements are out for public consultation at the time of writing, namely 'Planning for a Natural and Healthy Environment' (replacement for PPS7, PPS9 and PPG17), and 'Planning for a Low Carbon Future in a Changing Climate'.)

Whichever approach is adopted, standards of greenspace are needed for determining current provision, identifying gaps, and identifying the need for green spaces of different types to meet local demand. This can either mean existing demand, or demand created by population changes or growth as a result of new developments. Standards will also be used to inform an authority's approach to developer contributions through Supplementary Planning Documents. These set out the level of space, or an alternative financial contribution, that developers must make to ensure that adequate provision is made for infrastructure, including open space. This is normally expressed as area per household, or area per person, generated by a new development. Although there can be attempts to take strategic provision into account, most standards used or developed by local authorities remain essentially local in their nature.

In defining ANGSt locally, other standards need to be considered, e.g.

- Six Acre Standard.
- Towards a Level Playing Field.
- Woodland Access Standards.

A brief resume of these is given below:

## Six Acre Standard

A long-standing national standard, with which ANGSt can work, includes the former National Playing Fields Association's (now [Fields in Trust](#)) *Six Acre Standard*. This was originally developed in the 1930s as part of the garden city movement. In 2008, Fields in Trust (FIT) published *Planning and Design for Outdoor Sport and Play* (PAD), the document which updates and supersedes the *Six Acre Standard*. PAD continues to uphold the original FIT recommendation that 6 acres (2.4 ha) of recreational space is required for every 1000 people, and also provides a detailed framework relating to quantity, quality and accessibility of outdoor facilities for sport and play and the importance of local assessments and standards.

## Towards a Level Playing Field

Sport England has produced a detailed [toolkit](#) for calculating the number of playing fields needed in a given area. The toolkit enables demand to be calculated for football, rugby, cricket and hockey pitches. It uses actual population figures and numbers of sports teams from ward data. The tool can forecast future demand for pitches through an assessment of the number of teams generated per 1000 population in the local area. No distance thresholds are included, but it is possible to see which areas have sufficient pitches to meet local demand, and where there are shortfalls. Overall a high proportion of urban greenspace is dedicated to natural turf pitches, which are generally poor in bringing people close to nature. Making provision for sport through artificial turf pitches can assist in releasing these areas for more effective use. It needs to be remembered that the Sport England calculations of the number of pitches needed using this model do also impact on access to nature.

## The Woodland Trust Woodland Access Standards

This is based on a similar principle of accessibility to the Natural England ANGSt:

- No person should live more than 500 metres from at least one area of accessible woodland of no less than 2 hectares in size.
- There should also be at least one area of accessible woodland of no less than 20 hectares within 4 kilometres (8 kilometre round-trip) of people's homes.

The [National Society of Allotment and Leisure Gardeners \(NSALG\)](#) has also produced a national allotment standard for a minimum provision of 20 standard plots of 250 square metres per 1,000 households.

## 2.2 ANGSt: its application and its strengths

### How ANGSt can work – Achievability

In order to integrate ANGSt into the planning documents that set the requirements for green spaces, it is important to understand its strengths and limitations.

**Achievability** – ANGSt sets a high level of accessibility, particularly for the level of space to be provided within 300 m of people’s homes. High aspirations can mean low levels of achievement, and local authorities do not wish to associate themselves with failure.

**How it can work** – ANGSt needs to be understood as a long term and geographically wide-ranging benchmark, against which progress can be made over time. Use ANGSt to map not only the accessible natural greenspace already present but also the potential spaces that could be improved to meet the standard. Compliance with ANGSt might be expressed in percentage terms, rather than as a straight comply / failure to comply. Policies for open space provision need to be supportive of a move towards greater levels of compliance with the Standard. In this way, ANGSt can be seen as a positive, long term strategic aim.

In 2008 Land Use Consultants reviewed 16 green space strategies and 4 green infrastructure strategies from across the nine English regions. The review indicated that many local authorities are adapting ANGSt within their greenspace strategies into locally-derived distance standards, reflecting the approach promoted by PPG 17.

A survey of 20 planning obligation documents (which determined standards for green space provision), and 15 green infrastructure strategies, undertaken as part of this study in December 2009, found that:

- Out of 20 planning documents, 7 mentioned ANGSt, (35%) and 2 applied it as a standard for provision of green space (10%).
- Out of 15 Green Infrastructure Strategies, 9 mentioned ANGSt (60%) and 7 applied it (47%).
- Whilst some planning documents used locally developed standards, NFPA’s Six Acre Standard was used by more than half of the documents.

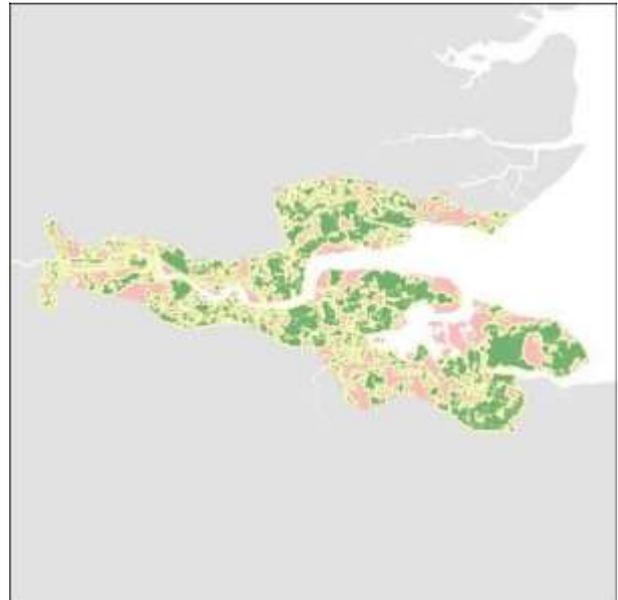
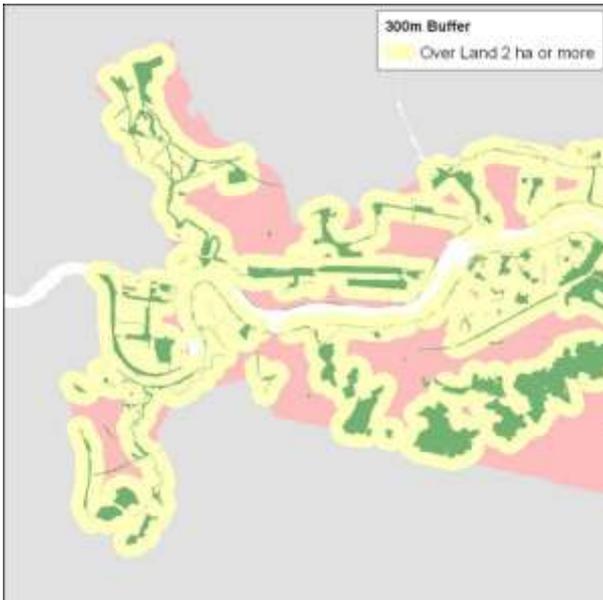
It is clear therefore, from this small sample, that ANGSt is much more widely used and understood in the concept of planning for green infrastructure, than in determining standards of greenspace provision through the development control planning system. Together these reviews confirm the need to reconsider ANGSt and how it should be interpreted to enable improved application at local level.

Using standards, like some of those above, based on a mix of population numbers and accessibility radii only, can result in the provision of disparate small spaces that serve little useful function. ANGSt is a model that can effectively provide an overarching guidance to determine where local spaces will be needed. It can ensure that spaces provided are of a sufficient size, and are close enough to people’s homes to deliver the Nature Nearby concept.

If work has been undertaken on mapping green spaces as part of a PPG 17 assessment, this can be used to identify the number and distances of green spaces above 2 ha, above 20 ha, above 100 ha, and above 500 ha, and the hectarage of Local Nature Reserves per 1,000 head of

population. Because of the greater distances for the larger sites (up to 10 kilometres), mapping across local authority boundaries will normally be necessary. A good example of where this has been shown to work well is the Thames Gateway Green Grid.

Rough initial mapping of ANGst in the Thames gateway. Areas in pink are outside the 300m buffer and signify areas of natural greenspace deficiency.



## Mapping naturalness

The definition of natural space within ANGst is “*places where human control and activities are not intensive so that a feeling of naturalness is allowed to predominate*”. Deciding at which point a feeling of naturalness predominates may be difficult to determine. It is often easier to recognise visually, but there is considerable room for interpretation.



The first stage to deliver more or better quality natural greenspace is to assess what is already there. To do this it is useful to overlay datasets on a Geographic Information System.

- a) Map all accessible greenspace. It is helpful to use the Generalised Land Use Database which categorises green space as one of nine land use types (ref. Office of the Deputy Prime Minister. Generalised land use database statistics for England. London: ODPM Publications, 2005).
- b) Identify which green spaces are accessible. Many local authorities have mapped PPG 17 open space, and this can be a useful starting point for identifying accessible greenspace. However the data set would need refining to remove the categories of land that are not green space (eg. civic areas such as market squares).
- c) Assess which areas are natural using either survey or proxy measures, eg. land use categorisation as set out by Aleksandra Kazmierczak of Salford University (Annex 2). This should be refined to pick up on natural areas within more formal green spaces.
- d) Map levels of population. It is helpful to use Lower Super Output Areas (LSOA) which use post code areas to group populations of around 1,500 people.

Once this information has been compiled into a Geographical Information System it will be possible to see where accessible greenspace coincides with natural greenspace. The size of these areas can be calculated and grouped into: those under 2ha; 2 – 20 ha; 20 – 100 ha; and 100 – 500 ha. Buffer zones can then be added around the mapped areas of accessible natural greenspace at distances of 300 m, 2 km, 5 km and 10 km.

From the above it is clear that the best way to ensure that ANGSt is adopted as part of the overall planning requirements for greenspace is to work in partnership with the key players across local authority areas, and those involved in any new developments. This will include local authority departments including planners, health and educational teams, countryside/greenspace managers, and staff from any partnership companies that may have been formed and charged with overseeing major growth areas, eg. Ashford's Future (which developed the Green/Blue Grid). External organisations to bring on board might include:

- Greenspace and local access forums.
- Social landlords.
- Master planners, architects and developers, who will need to understand how to incorporate the requirements of ANGSt into their developments.
- Community volunteer groups, friends' groups, allotment associations and other local groups.
- Parish councils.
- Regional development agencies.
- Primary care trusts.
- Play scheme initiatives.
- Educational initiatives.
- Other government bodies such as Natural England, Forestry Commission, Environment Agency, Sport England, CABE Space, English Heritage and British Waterways.

## How ANGSt can work – Applicability

**Applicability** – “The Standard only deals at one level with local spaces: the requirement to have a 2ha site within 300m of people’s homes. It does not address the need to express quantities of different types of space in terms of population sizes. It also sets standards for the provision of strategic spaces that are often outside the remit of a single local authority to provide. It cannot therefore, provide for the full range of a local planning authority’s needs.”

**How it can work** – The ANGSt model works well when taken out of the local context, and brought into strategic planning for green infrastructure. The cross-boundary nature of regional and sub-regional GI strategies means that a broader overarching benchmark standard will be needed for strategic provision of green space. Principles of accessibility take priority over local compliance when considering developing opportunities for strategic, multi-functional spaces. ANGSt can provide the basis for a broad standard of provision better than any other available tool.

Natural England does recognise some of the challenges in meeting ANGSt, particularly in dense urban areas where there is little opportunity to create greenspace, and also in remote rural areas away from settlements. It is generally easier to meet the standards in smaller towns, the urban fringe, and in new developments. However, Local Authorities also need to consider how accessibility between rural populations and accessible greenspace can be achieved through linear access and sustainable transport routes. There is a growing recognition of the need to be more ambitious in the provision of greenspace, given the wide range of infrastructure needs that it can deliver. One of the established standards for eco-towns is to provide a minimum of 40% of the land area as green infrastructure, of which 50% should be publicly accessible greenspace. In this context ANGSt is very achievable, and it reflects a long-term aim to improve the level of natural greenspace in stages.

Applying ANGSt as a standard in master planning of growth areas and growth points is another way of raising the bar on greenspace provision. This must be done in conjunction with good design and as a means of meeting drainage and other infrastructure needs. In dense urban areas where the ANGSt criteria are not achievable in the foreseeable future, the emphasis will be on improving the quality, naturalness, usability and access of existing spaces. ANGSt is however a **minimum** recommended standard, and provision above this level should not be regarded as surplus.

ANGSt is a good starting point to ensure that sufficient greenspace is provided, but it is essential to ensure that spaces created in association with new development are designed to meet a wide range of functions. The CABE Space guide [Start with the Park](#) outlines the importance of designing buildings and other infrastructure around green spaces, with consideration being given to where these should be located in the context of local landscape character, and how they can contribute to the wider green infrastructure network.

### How ANGSt can work – Affordability

**Affordability** – Many authorities, in considering the future provision of green spaces, take a traditional view of how these will be managed. They see additional provision, at the levels proposed under ANGSt, as unaffordable in terms of maintenance. They are therefore reluctant to sign up to standards that they perceive as potentially burdensome in the future.

**How it can work** – It is important to recognise that accessibility is not synonymous with public ownership. In considering ways of delivering the Standard, arrangements for future maintenance must be taken into account. Because of its broad approach, many of the strategic green spaces proposed under ANGSt lend themselves well to non-traditional maintenance arrangements and income earning opportunities. Community Interest Companies, trusts, partnership arrangements with the third sector, and joint infrastructure funding can all be considered as ways of funding the future management and maintenance of land provided to meet ANGSt aspirations.

### How ANGSt can work – ‘Additionality’

**‘Additionality’** – The size criteria for sites under the ANGSt model can be seen as potentially additional to similar requirements for amenity open space. This can be seen as increasing the burden on developers and planners unreasonably.

**How it can work** – Integration of ANGSt into other standards is essential if it is to be accepted by developers and avoid difficulties that can arise when trying to interpret two potentially conflicting standards. ANGSt provides a strategic context for green space provision; other parts of an integrated standard can define in more detail how different typologies of green space can be provided.

As well as being a valuable tool for ensuring sufficient greenspace is provided from new developments, ANGSt can provide a strategic framework for identifying and protecting those brownfield sites that represent important habitats or valuable social spaces. It can be used to assess the physical and functional connectivity between existing sites at all levels and right across a town, city or sub-region, shaped by local character and distinctiveness in terms of species, habitats, landscape, geology and townscape.

ANGSt should be seen as a flexible tool which seeks to improve access to nature across the whole country, by application locally. To this end local policy makers should have some freedom to fit the model appropriately into the circumstances in which it must operate.

## 2.3 The wider community benefits of ANGSt

### Protecting important habitats, landscapes and promoting biodiversity

ANGSt provides local opportunities to enjoy “Nature Nearby”, but it is also unique in including standards specifically for natural spaces. These may be areas designated for their special landscape and/or biodiversity importance – National Parks, Areas of Outstanding Natural Beauty, Country Parks, Special Areas of Conservation, Special Protection Areas, Sites of Special Scientific Interests, ancient semi-natural woodland etc. Use of ANGSt will help to give priority to the protection of these areas as well as to local wildlife sites, and will provide opportunities to improve their integrity in order to enhance landscape character and protect and increase biodiversity. It will also assist in meeting NI197, which was introduced in order to ensure that biodiversity is valued, safeguarded and enhanced. It recognises that biodiversity benefits are highly dependent on local action because biodiversity is ultimately lost or conserved at the [local level](#).

Using ANGSt to deliver strategic provision of accessible green spaces will provide opportunities to link fragmented habitats and landscape features to make them more viable; restore degraded sites and habitats; create new wildlife havens; and provide new spaces for recreation to reduce human impact on sensitive sites.

### Conserving nature and the community

#### Ferry Meadows Country Park

Having clear strategic objectives founded on conserving the traditional landscape of the river valley, and developing and maintaining links with local community groups with shared interests, have helped the Nene Park Trust focus its resources to significant effect.

The Trust and the staff of Ferry Meadows have delivered many achievements in the park’s twenty-one years of life. In the first five years over 400 different groups, including schools, youth organisations and local community groups, visited the park. In the summer of 2009 13 different groups held 27 events in the Park, helping bring even more visitors. This is clear evidence that the advice and support offered by the Trust to community groups to help run their own projects, in combination with quick responses to customer comments through its quarterly publication *Park Life*, has established Ferry Meadows Country Park as a key part of community life in the area.

By staying focused on conservation and engaging with the community, the benefits gained are easily measurable. They include improvements to facilities, infrastructure, and completion of the Willow Trail in and around the Park. The culmination of several years work to mark the significance of willow in the landscape and heritage of the area, this project has not only restored ancient willow pollards but is creating 70 new ones.

[visitor.services@neneparktrust.org.uk](mailto:visitor.services@neneparktrust.org.uk)

## Health

There is increasing interest in how contact with the natural environment can improve health and well-being, with this contributing to seven of the Government's public service agreements.

The National Health Service is gradually shifting its emphasis from treatment and cure to prevention, because of the strong economic case, improved clinical outcomes for patients, and political pressure about conditions such as obesity and depression. Reducing our dependence on carbon will encourage more walking and cycling, leading to increased contact with the natural environment. Less traffic will also make the natural environment more appealing.

### Green spaces for exercise

#### Carlisle Walks to Health

Carlisle's city green spaces have become a focus for green exercise, as the Council is encouraging everyone to improve their health by taking part in walking events as part of the city's Walking for Health programme. This initiative is about helping inactive people become active, and is supported by Natural England.

The Walking for Health programme runs throughout the year and is made up of organised walks in the city's parks, and also in and around the city itself. Good co-ordination has been the key to the success of the programme in Carlisle. In the eighteen months the co-ordinator has been in post there has been a growing demand for more walks, and also for more demanding ones. There is now a range of walks lasting from 30 minutes to 2.5 hours, each of which is risk assessed.

With the support of Natural England, the Council has also been successful in encouraging local GPs to link into the programme by referring inactive patients. Patients can also pick up Walking for Life programme leaflets in the surgery. [www.carlisle.gov.uk](http://www.carlisle.gov.uk)

## Older people

Staying active can reduce a person's biological age and enhance their quality-adjusted life expectancy. Elderly people who are inactive are more likely to suffer falls or other injuries. The life span of older people increases when they live near parks and tree-lined streets. Local access to greenspace increases levels of sustainable travel. For every 10% increase in greenspace there can be a reduction in community health complaints equivalent to a reduction of 5 years of age<sup>4</sup>.

Without the benefit of accessible natural spaces these simple and cost effective outcomes cannot be realised. Adopting ANGSt helps to ensure that, through planning for greenspace, we are planning for healthy lifestyles.

Nature Nearby can provide a major health resource to help prevent obesity and rising levels of 21<sup>st</sup> century diseases such as diabetes and depression. Our [Natural Health Service](#) wants to ensure that everyone in the country has good access to greenspace and that our health services make more effective use of it to benefit the health of our people and communities.

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<sup>4</sup> The importance of Greenspace in sustaining Good Health, Dr William Bird, Natural Fit (2004)

## There are two key aims for the Natural Health Service

1. To increase the number of households that are within five minutes walk of an area of green space of at least two hectares.
2. To enable every GP or community nurse to be able to signpost patients to an approved health walk or outdoor activity programme.

### Conservation and exercise are winning

#### Linford Woods

There's no sitting back and watching the world go by in Linford Wood! The Parks Trust, responsible for managing the wood, has introduced a Trim Track to encourage the people of Milton Keynes to get moving. Although only half a mile away from the bustle of Milton Keynes city centre, Linford Wood provides an accessible, peaceful haven for anyone who feels like exercising in a parkland setting. But this has only been achieved because of the Park Trust's focus on actively managing the wood to enhance its value for active recreation as well as wildlife conservation.

Lindford Wood is a great example of balancing the development of exercise spaces whilst conserving ancient woodland. The Parks Trust has thinned the wood to let in more light, whilst wide rides have been cut to accommodate the surfaced footpaths and woodchip riding trail. Other traditional methods of conservation have also been re-introduced. [info@theparktrust.com](mailto:info@theparktrust.com)

### Communities

The participation of friends and other community groups in managing green spaces can highlight the value of greenspace to the community, allow a degree of self-determination in the community, and bring a sense of identity to an area. Activities based in or around green spaces bring people together with a sense of common purpose, and help to cement contacts between different generations.

### A community at work and play

#### Loris Road Community Garden

Hammersmith Community Garden Association has been managing the site since 1984. Established as a local environmental charity, it is managed by a group of trustees, all of whom are local residents. Such has been the Association's success that it now manages two other sites. The Association currently employs a manager, garden manager and two school gardeners, and is also supported by other casual staff who work to deliver environmental projects in Hammersmith.

Activities at Loris Road are very much family affairs. Children's activities include arts projects as well as gardening activities. With the help of the Big Lottery Fund's Local Food Scheme, the Get Growing initiative was launched in October 2009. The Get Growing co-ordinator is now working with children, parent and toddler groups to grow their own fruit and vegetables. Mums are particularly interested in the activities that show them how to make lotions and potions from natural ingredients, while family play schemes are helping build relationships in the community.

[www.hcga.org.uk](http://www.hcga.org.uk)

## Food production

Food has the potential to play a pivotal role in the creation of communities and their long-term sustainability. Working towards meeting the ANGSt criteria can provide an opportunity to showcase the 're-localisation' of sustainable food production and consumption.

Well structured provision of accessible green spaces can create opportunities to forge supply links between residents, local food producers, processors and distributors; and they can ensure that everyone has access to an allotment, Community Supported Agriculture (CSA) or other community space to grow some of their own food. As well as horticulture and cereals, local animal production will also be important in integrating the management of accessible natural spaces (for example grazing with sheep and cattle) with local food production. A focus on local food production can foster a healthy, cohesive community by helping to supply residents with their five-a-day requirement of fruit and vegetables. It can support local retailers, growers and producers, and so help to strengthen the local economy and provide a rich and vibrant food culture that promotes community cohesion.

### A community garden delivering the good life

#### Incredible Edible Todmorden

The people of Todmorden in West Yorkshire are finding new ways to engage with the public green spaces in their town. A community-led initiative is encouraging people to 'grow your own' in a move that is not only transforming public green spaces, but also changing the way local people engage with food. The market town is aiming to be self-sufficient in vegetables, orchard fruits and eggs by 2018, thereby reducing its carbon footprint by sourcing food locally. The response to the challenges of climate change has been amazing. Everyone is involved – businesses, schools, farmers and the community are all getting their hands dirty and vegetables and fruit are quite literally springing up everywhere. It seems everyone wants a bit of the 'good life' experience!

[www.incredible-edible-todmorden.co.uk](http://www.incredible-edible-todmorden.co.uk)

## Education and outdoor learning

Green spaces have long been recognised as having potential for education and outdoor learning, not just as places where youngsters can learn about the environment, but as outdoor classrooms delivering a full range of curricular needs. The use of ANGSt to ensure that there is a sufficient supply of local accessible green spaces can ensure that such opportunities are available to all communities. Research shows that children retain more information if they have been taught outside, and in Denmark there is a network of outside learning spaces integrated into the schools system. Utilising green spaces for learning is yet another way of making the case for accessible greenspace.

Natural England's [One Million Children Outdoors](#) programme aims to encourage more children to visit places such as nature reserves and environmentally friendly farms. It aims to introduce a million children to the natural world over the next three years. In its first year, the programme aims to:

- Double the number of farm visits by school-aged children to 100,000, funded through green farming schemes

- Double the number of children participating in educational visits on National Nature Reserves to 60,000
- Launch a new interactive website for children and families designed around a wildlife gardening accreditation scheme
- Deliver an innovative, nationwide Undersea Landscape Campaign promoting marine conservation to 50,000 children
- Support projects funded through the £23 million Access to Nature grant scheme that aim to connect children, particularly from deprived urban communities, with the natural world.

## Putting fun back into education

### Avon Heath Country Park

The Park Rangers at Avon Heath Country Park in Dorset are pulling the stops out to make learning really fun for children – even maths! They have developed a programme of activities designed around the National Curriculum which can be adapted for other groups if needed. ‘Woodland Maths’ and ‘Fun with English’ are just two of the activities that combine learning about nature with some of the more traditional subjects. The programme has been so successful that the Institute of Commercial Management (ICM) has stepped in to sponsor an exciting new project, designed to enable children to capture the site’s unique features in the form of wooden sculptures. It looks as though this project will carve out even more success for the Park!

[dorsetcountryside@dorsetcc.gov.uk](mailto:dorsetcountryside@dorsetcc.gov.uk)



Photo courtesy of Timberplay

## Housing and growth

Natural England's position is that:

- Necessary housing growth should be accommodated with minimum impact on the natural environment, and should deliver maximum benefits for the natural environment and people together
- The most environmentally sustainable locations should be found for new housing development
- An assessment of environmental capacity should be central to decisions on future development
- The environmental quality of all new housing development should be substantially improved

The provision of green infrastructure should be an integral part of the creation of sustainable communities throughout England.

The quality of much new housing is mediocre and needs to be substantially improved, both in terms of design quality and resource efficiency. The provision of accessible, multi-functional green spaces as an integral part of all new development can considerably enhance the quality of development, and deliver a wide range of benefits for people and the natural environment.

### A new Vision for Torbay

#### Paignton is the 'Garden City'

As part of the New English Riviera Approach for Torbay, Paignton has been designated as the 'Garden City' for the Bay. Paignton was originally a Victorian designed town based on a grid, which the Vision looks to repair and strengthen by creating a strong framework of beautiful gardens and squares. Links with the centre, the sea and the harbour will be strengthened, and inland high quality developments within a strong green setting will create a wonderful place for people to live, work and play.

[www.torbay.gov.uk](http://www.torbay.gov.uk)

## Economic benefits

Natural England's report [No Charge? Valuing the Natural Environment, 2009](#), shows that investment in the natural environment is critical to long-term economic prosperity, and that natural services provide a highly cost-effective solution to growing problems like flood and coastal defence, carbon emissions, and the preservation of soil, water and air quality.

This document pulls together leading research to show that the economic value of nature now runs to billions of pounds in the UK alone, and that there are major savings to be made through looking after it.

For example, investment in schemes to deliver environmental benefits through farming reduces greenhouse gas emissions from agriculture by some 11%, delivering carbon savings estimated to be worth approximately £180m per year. With agriculture currently accounting for nearly 7% of England's total greenhouse gas emissions, the reductions are highly significant.

In the same way, improved management of lowland peat soils would help address an annual loss of carbon estimated to be worth as much as £150 million.

## Regeneration in East London

### Thames Chase Community Forest

Thames Chase, one of twelve community forests in the UK, is a wonderful example of how people and agencies from public, private and voluntary sectors can work together to manage and develop something truly special. This partnership project is working to achieve the goal of regenerating the land at the edge of East London and South Essex. The Thames Chase Partnership (made up of the five local council partners, the Confederation of British Industry, Country Landowners Association, Forestry Commission and the National Farmers) has ensured there are plenty of opportunities for people to get involved in all aspects of the woodland.

The trees, woodlands and green spaces of Thames Chase Community Forest have brought people together who continue to work in partnership to the benefit of the environment and of their local community. Their efforts have created almost two square miles of new woodland, and almost fifty-six miles of new or upgraded paths.

**Tel:** 01708 641880

## ANGSt and climate change

Accessible natural greenspace has a role in reducing the predicted negative impacts of climate change on people within urban environments. The Royal Commission on Environmental Pollution report on the urban environment identifies urban areas as especially vulnerable to climate risk, eg. areas of London where the elderly are at increased risk during heat waves. Accessible greenspace can provide an important respite from the highest temperatures. Adequate levels of green spaces are vital in urban areas to mitigate the effects of climate change. They provide an opportunity to conserve habitats and species as well as important reference sites for monitoring change. They play an important part in the natural processes, referred to as “ecosystem services” that maintain air, soil, and water quality, that reduce the effects of flooding and pollution, and provide cooling and amelioration effects in urban areas. Allocations of green space in urban areas will help alleviate flooding by providing storage areas at times of flood or heavy rainfall.

Green links provide opportunities to increase the use of sustainable transport, thereby reducing road congestion, air pollution, and CO<sub>2</sub> levels, and therefore climate change. The use of sustainable transport such as cycling will also be beneficial for people’s health and well-being.

[Adaptation Strategies for Climate Change in the Urban Environment](#) (ASCCUE) has identified four roles of greenspace in adapting to climate change:

- Flood water retention
- High infiltration capacity
- Evaporative cooling
- Shading by tree canopy.

Applying ANGSt can ensure areas where shade and cooler conditions will be created, in anticipation of hotter summers resulting from predicted climate change impacts. Trees and woodlands will also provide shelter to ameliorate increasingly stormy conditions, and give opportunities for renewable energy generation.



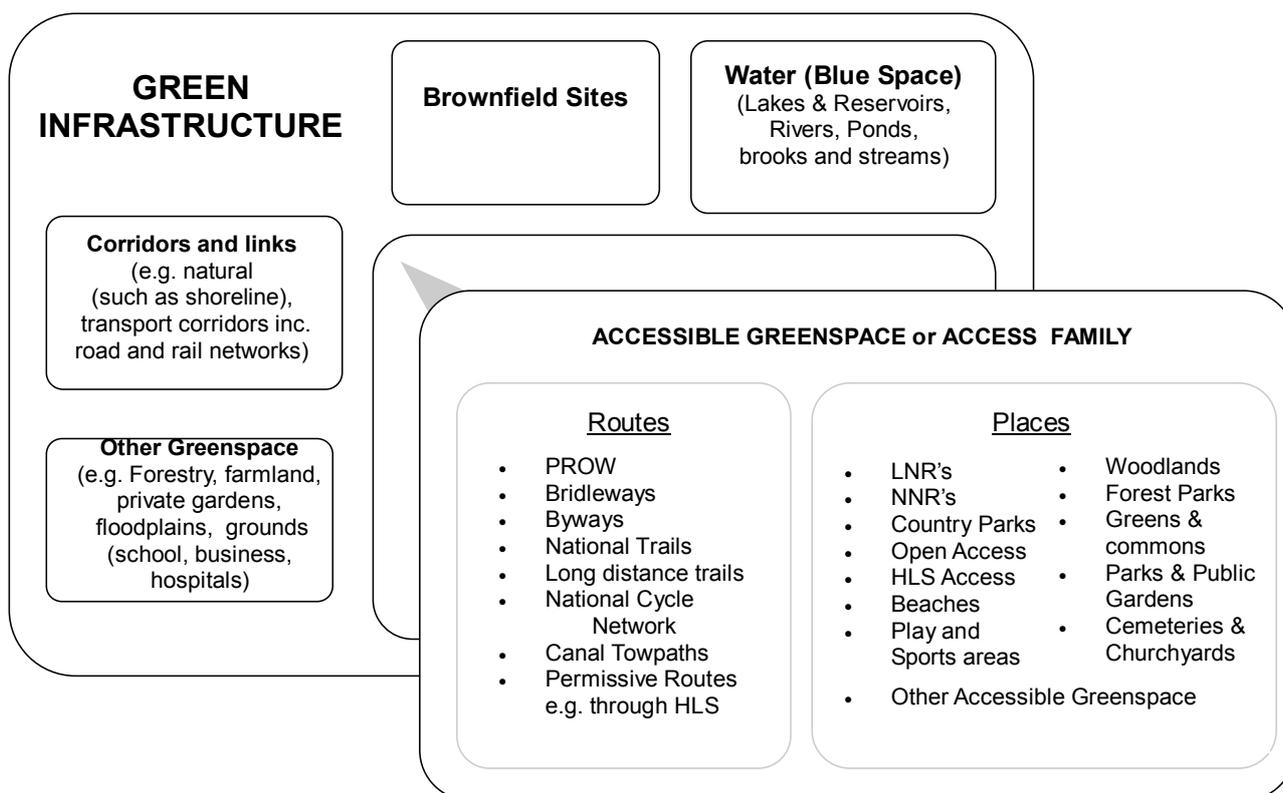
**A shady avenue, Clifton Park, Rotherham**

## 2.4 ANGSt within wider green infrastructure

The definition of green infrastructure, approved by the Natural England Board, is:

*“A strategically planned and delivered network comprising the broadest range of high quality green spaces and other environmental features, designed and managed as a multi-functional resource, capable of delivering those ecological services and quality of life benefits required by the communities it serves and needed to underpin sustainability. Its design and management should also respect and enhance the character and distinctiveness of an area with regard to habitats and landscape types.”*

There is a clear distinction between open/green *space* strategies, and green *infrastructure* strategies, although sometimes these distinctions can appear subtle. All green spaces can form part of green infrastructure networks, but the scope of open/green space strategies and green infrastructure strategies are quite different. Open/green space strategies work within the typology of recreational, amenity and public open spaces that was identified by PPG 17: *Planning for open space, sport and recreation* (2002). They evaluate publicly accessible open space provision within these typologies at the local authority scale, noting issues in relation to condition, quality and access, often to inform a strategy and action plan that sets out future management and regeneration policies. They form a complementary strategy to rights of way improvement plans. [Open Space Strategy Guidance](#) is provided by CABE Space.



Green infrastructure strategies go beyond the site-specific, considering also the ‘big picture’ of landscape context, hinterland and setting, as well as strategic links of sub-regional scale and beyond. Green infrastructure considers private as well as public assets and provides a multi-functional, connected network delivering ecosystem services. See our [Strategy Guidance](#).

ANGSt is of particular relevance to green infrastructure planning and is being used widely and to good effect in establishing benchmarks for accessible green spaces.

### Peterborough Green Infrastructure Strategy

In building Peterborough's Green Grid Strategy, the following GIS analysis was undertaken against 8 **Accessible Green Space Applications**, derived in part from the ANGSt model:

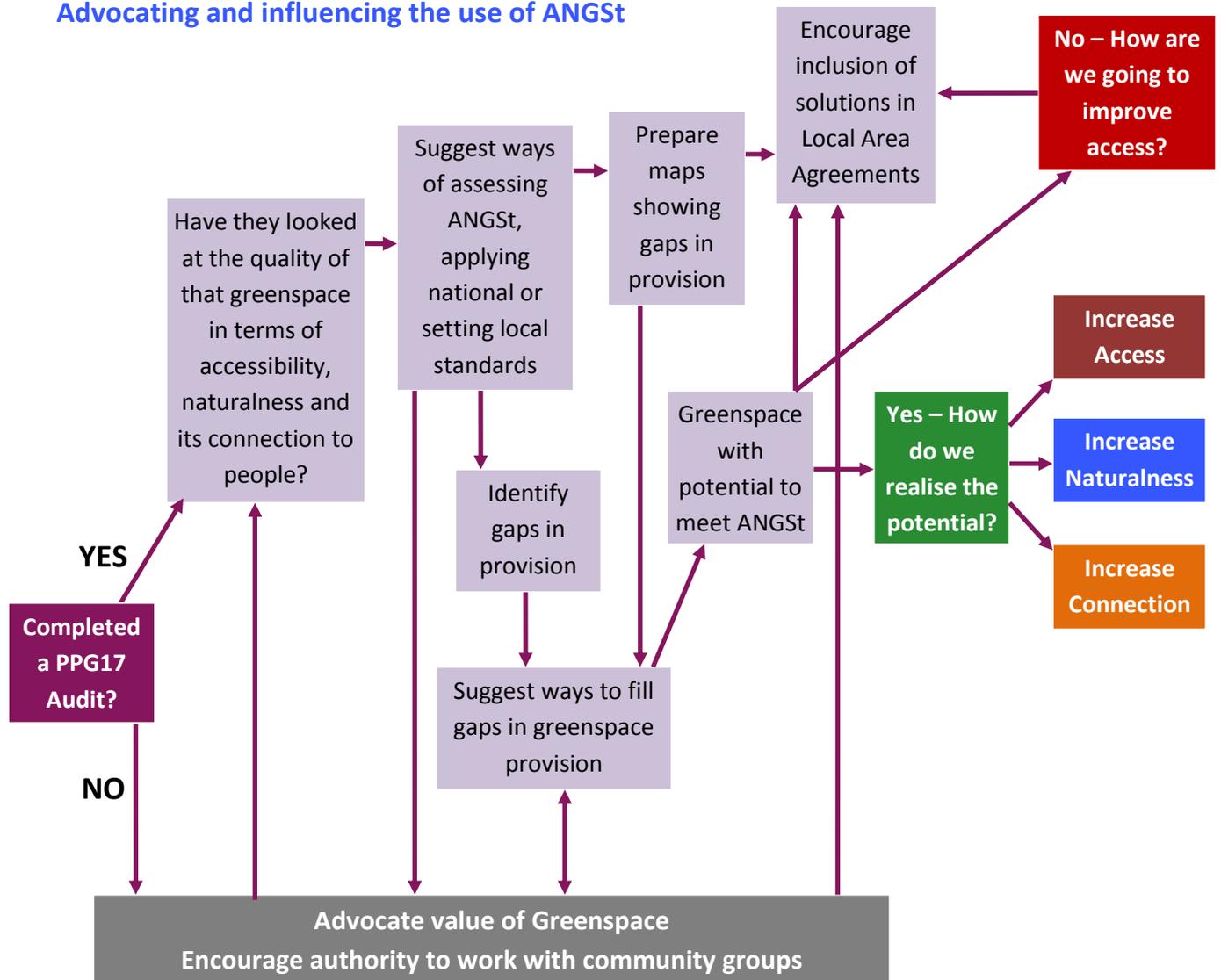
1. City-scale open space: to indicate the catchment areas at 5km from the identified existing green infrastructure sites in excess of 100 ha.
2. District-scale provision: to indicate the catchment areas of 2km from all identified green infrastructure sites in excess of 20 ha.
3. Neighbourhood-scale provision: to indicate the catchment areas of 300m from all identified green infrastructure sites in excess of 2ha.
4. Country Park provision: to indicate the catchment areas of 5250m straight-line distance from all identified Country Park sites, as identified in the Atkins *Peterborough Open Space Strategy*.
5. Neighbourhood Park provision: to indicate the catchment areas of 560m straight-line distance from all identified Neighbourhood Park sites, as identified in the Atkins *Peterborough Open Space Strategy*.
6. Quantity of green infrastructure: population based on the population figures from Peterborough City Council for all wards (both rural and urban) within the authority to assess the existing provision of areas of accessible green infrastructure for the 2004 population. There is no size threshold in this application and it therefore applies to all areas of accessible open space.
7. Analysis of heritage and culture: to identify accessibility to, and the potential visual influence of, important heritage and cultural features. To indicate a 1km buffer of Registered Parks and Gardens, Scheduled Ancient Monuments and Conservation Areas.
8. Analysis of linear corridors: to identify accessibility to the strategic ROW network using the following categories of facility:
  - Published Strategic Routes
  - Sustrans Routes and the Green Wheel cycle network
  - Footpaths, bridleways and permissive routes.

Establishing standards for accessible greenspace is especially relevant to the housing and economic growth agendas (particularly the Growth Areas and Growth Points) and to the regeneration of urban areas. Here green spaces will provide opportunities for development to go hand-in-hand with the protection and enhancement of existing environmental assets, and the creation of new ones.

Taking the ANGSt approach puts the environment right at the centre of the planning process, and can produce a strategic and linked, multi-functional network of spaces with benefits for people and wildlife. It underpins the sustainability of a town or city, including making it resilient to the effects of climate change, and enables local authorities to meet their duty to conserve biodiversity under Section 40 of the Natural Environment and Rural Communities Act (NERC) 2006.

## 2.5 ANGSt and other agendas

### Advocating and influencing the use of ANGSt



A strategy for generating political support for a good accessible greenspace network needs to be based on the wider benefits that green spaces can bring to the community. This can evolve from the leverage power of the health agenda, local area agreements, rights of way improvement plans, greenspace and green infrastructure strategies etc. Policy hooks for accessible greenspace will include the delivery of ecosystem services, health services, education, cultural services, and reducing crime and disorder.

This evidence base will demonstrate the social and economic needs and benefits of the designation of land for health, leisure and physical activity. It will explain how they need to be sufficiently robust to be used as part of the planning rational for this type of use, against other, more commercially attractive alternatives. Examples of elements to be addressed will include:

- Identifying common agendas with the authority and with external bodies; mechanisms for delivery of shared agendas through the green infrastructure. Shared agendas will include health, community safety, environmental management, housing growth, economic prosperity, education, recreation, tourism, and children's play.
- Examination of current partnerships; identification of potential partners; developing better mechanisms for working together and influencing in key policy areas. Recommendations for engagement with community groups, particularly how the Strategy will address issues of community empowerment through asset transfer in accordance with the *Communities in Control* White Paper, and the role of Community Land Trusts in green infrastructure delivery.
- Developing and promoting the use of green infrastructure for all suitable forms of creative entertainment, and events that provide an alternative access to learning and entertainment, and facilities for physical and informal recreation and play for all ages.
- Promoting community involvement, particularly through existing partners and developing a framework of user groups to recognise the community who will use these spaces. The form of partnerships at local, sub-regional and regional levels that will champion multi-agency problem solving to address the identified issues within green spaces and wider social aspects.

The **Sustainable Community Strategy (SCS)** is the overarching strategy for promoting and improving the well-being of a local area, and provides the vision to inform the spatial planning process (including the Local Development Framework). It is therefore imperative that standards for the provision of green spaces are incorporated in the SCS. The standard community consultation regularly undertaken by local authorities may not identify green infrastructure as a priority. Lead officers within the local authority and other stakeholders should therefore actively engage with the Local Strategic Partnership (LSP) to ensure that the importance of adopting standards for accessible green spaces is understood.

Local area agreements (LAAs) set out the priorities for a local area agreed between central government and a local area (represented by the LSP). These priorities are translated into a set of LAA targets. LSP partners choose indicators that will best help achieve the agreed priorities, and set targets for each indicator, for each year of the LAA's three-year time frame. The current round ends in March 2011.

LAAs contain designated and non-designated targets. Designated targets are selected from the set of 199 National Indicators, and there is scope for local authorities to link accessible green spaces to a variety of these (for example those related to health, climate change, flood risk management and improved local biodiversity). Non-designated targets, also called local targets, are chosen by LSP partners to achieve priorities considered not to be addressed by the National Indicator set. These can be more directly linked to the benefits that local and strategic green spaces can deliver.

There are many opportunities to engage other partners in the benefits that adopting ANGSt will bring. For example, providing cycle routes within green links could help to meet objectives within a local transport strategy for more sustainable travel, and objectives within a local health strategy to increase the amount of exercise taken by local people. This further highlights the importance of ensuring that the need for accessible spaces that provide opportunities to enjoy 'Nature Nearby' are embedded in the SCS as well as in the Local Development Framework (LDF), and that they are reflected in LAA targets.

## Social return on investment

Local authorities need to be able to put a meaningful value on accessible greenspace. They need to demonstrate to their members and to the electorate that green spaces add value to their area, more so than many other areas of service provision. SROI can be used to provide a range of quantitative measures that place definable values on activities previously accepted as 'good for our quality of life'. For instance, carbon reduction within a local authority area can now be given a cash value. Especially significant is the ability of SROI to calculate the true value of volunteering, and of the health benefits derived from access to greenspace. SROI may offer a medium to long term approach to ensuring ANGst is adopted (and sustainably funded) as a national standard.



Trees in close up, Westonbirt Arboretum

# 3. Accessible greenspace and spatial planning

## 3.1 The Spatial Planning System and accessible greenspace

Planning Policy Statement 12 defines green infrastructure as “a network of multi-functional greenspace, both new and existing, both rural and urban, which supports the natural and ecological processes and is integral to the health and quality of life of sustainable communities”. It goes on to state that the local planning authority’s core strategy should be supported by evidence of what physical, social and green infrastructure is needed to enable the amount of development proposed for the area, taking account of its type and distribution.

The standards set out under ANGSt can provide a national set of criteria, against which these local standards of provision for greenspace can be set. Planning policies likely to arise from such documents will include:

- Application of standards of provision by typology in the spatial planning context
- Green infrastructure provision in the urban extension areas
- Application of standards of provision in the context of developer contributions
- Design guidance on provision by outcomes, biodiversity, climate change, health opportunities, crime reduction, flood alleviation, climate change mitigation, ecosystem services, social development, and community cohesion.



SUDs scheme providing natural greenspace - Upton urban extension, Northampton

In planning terms, green infrastructure includes established green spaces and new sites, and should thread through and surround the built environment and connect the urban area to its wider rural hinterland. Consequently, it needs to be delivered at all spatial scales, accommodating both accessible natural green spaces within local communities and often much larger sites in the urban fringe and wider countryside. Delivering the requirements of green infrastructure is only part of the story; unless a sufficient quantity of greenspace is accessible to the public, the needs of local people will not be met.

Thames Chase Community Forest [www.designforlondon.gov.uk/uploads/media/ELGGarea3.pdf](http://www.designforlondon.gov.uk/uploads/media/ELGGarea3.pdf)

This important distinction, between overall provision of green areas and provision of publicly accessible space that is connected, and which delivers “naturalness”, can be illustrated through the use of ANGSt.

For significant sites of accessible natural greenspace, provided under ANGSt as part of a wider planning process, Natural England recommends that concept statements are prepared. These are written either by local authorities or by developers, prior to submitting a planning application. They are effectively development briefs for sites, and can distil the high level green infrastructure principles in a green infrastructure strategy to influence site planning and design.

[Concept Statements](#) can be valuable in setting a framework for high quality development that fits with the green infrastructure approach. They can also be used as a basis for Design and Access Statements, which explain the design intention and concepts of application schemes. These statements can make it clear that the Accessible Natural Greenspace Standards for provision of on- and off-site open space will be applied to the development.

#### ANGSt can be used to demonstrate to planners a means of:

- Securing sufficient accessibility and quantity of natural greenspace
- Improving the quality of people’s experiences in visiting any greenspace, and
- Delivering the benefits of a ‘Natural Health Service’ close to home, and Natural England’s ‘One Million Children Outdoors’ programme.

# 4. Delivering accessible greenspace

## 4.1 Securing funding streams through partnership

This can be done through planning obligations, planning conditions and strategic infrastructure tariffs, but councils must also recognise that much more can be achieved by working together on greenspace issues with neighbouring areas. Existing regional partnerships provide clear governance structures for sub-regional working, and cross-boundary greenspace working should follow this approach. By working together and pooling resources and expertise, partners are in a stronger position to obtain greater commitment and investment from government, helping them to deliver the major greenspace improvements that the area needs. The remit of such bodies will include:

- Securing alternative funding streams through multi-agency working, attracting inward investment; continued use of the planning process to make effective contributions to maintain and develop parks and greenspace; a targeted bidding process for government/agency funding; landfill tax credits funding and commercial income.
- Developing new and innovative ways to manage greenspace including the potential of new and existing trusts and partnerships options. To expand, where feasible, established successful models such as countryside management, regeneration partnerships and friends' groups, and expand new initiatives such as an urban forestry programme where practical.

As well as public sector partners, many local and national organisations have an interest in biodiversity and geological conservation, and the GI partnership approach needs to draw upon these established partnerships. Councils will provide leadership in establishing and maintaining partnerships and systems to identify and manage green infrastructure. Partners might include representatives from the voluntary and community sector, such as Wildlife Trusts, who are actively involved in the area, or statutory agencies and bodies, such as Natural England, Environment Agency and Forestry Commission, which can provide information and expertise and have an important role in practical input to greenspace delivery and development. Landowners, both private and public, can contribute significantly to the partnership, and their

### Delivering accessible green spaces at a sub-regional level

#### South East Dorset

Six local authorities in South East Dorset have recently come together to address issues relating to RSS growth figures and the requirement for developer contributions towards accessible greenspace. The key to this is the development of a standard for green infrastructure. Following on from this will be how to deliver on this standard, including opportunities for funding.

Infilling will be a major contribution to new growth and generally there has been, and will continue to be, decreasing private space, which will require a corresponding increase in publicly accessible open space. There is also a need to increase the capacity of existing public open space. Proposed urban extensions will require planned green infrastructure within each extension. There may also be a range of measures needed to reduce pressure on heathlands. The provision of new accessible green spaces will be very important to ensure that these help to reduce pressure on heathlands.

engagement has been mapped through environmental stewardship schemes, access agreements etc.

Partnerships aimed at delivering accessible green spaces can also provide a framework for establishing and administering a Local Sites system to meet the requirements of NI 197. Councils will need to work with a Local Sites Partnership to report on this indicator, and this could be a function of any proposed delivery partnership. Information relating to the positive management of all Local Sites selected will be 'owned' by the Partnership, and will be managed by one of the partners such as the local council, Wildlife Trusts, National Trust, Forestry Commission RSPB (as in the case of Basildon) or private landowners.

The nature of the management activity appropriate to interest features of a site will commonly be defined within one, or more of the following:

- A site management plan.
- Management schemes – agri-environment or conservation management agreement or scheme.
- A relevant Biodiversity Action Plan (including habitat action plan, species action plan or local biodiversity action plan).

### Sustainability through partnership

#### Wat Tyler Country Park

Through the collaborative efforts of Basildon Council, supported by 10 key partners, Wat Tyler Country Park has been developed as an example of how sustainable technology can be used to bring new and exciting opportunities for the local community to learn about the natural environment. Several refurbished buildings are now carbon neutral and are part of an exciting development delivering new opportunities for education and learning. This programme of restoration, landscaping and interpretation is transforming Wat Tyler Country Park into one of the most popular and dynamic visitor attractions in the Thames Gateway.

[info@wattylercountrypark.org.uk](mailto:info@wattylercountrypark.org.uk)

### The role of partnerships in delivering accessible green spaces might include:

- To actively promote and support site management.
- Co-ordinate funding provision and/or identify and promote the taking up of funding opportunities.
- Promote educational use of green spaces where appropriate.
- Establish a process for monitoring the condition of important sites.
- Promote the role and importance of green spaces at a strategic level (for example in delivering BAP targets, targeting of agri-environmental schemes).
- Promote the enhancement of sites through buffering and increasing connectivity.