

A Green Infrastructure Study for the Haven Gateway

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thelandscapepartnership

Quality control
Green Infrastructure Strategy
for
Haven Gateway Sub-region

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Executive summary

What is green infrastructure?

The Haven Gateway sub-region has been set challenging growth targets in the Draft East of England Plan and has, for this reason, recently been afforded New Growth Point status by the Government.

The Haven Gateway Partnership is confident it can deliver this growth in accordance with the objectives of the Government's Sustainable Communities Plan. However, a key component of achieving sustainability will be the sub-region's ability to deliver a multi-functional greenspace network or 'green infrastructure'. Production of a Green Infrastructure Strategy was a condition of New Growth Point status for the Haven Gateway.

Green infrastructure is a connected system of protected sites, nature reserves, greenspaces and greenway linkages. By providing for multi-functional uses, e.g. wildlife, recreation, and cultural experience, green infrastructure contributes to quality of life whilst also delivering landscape, historic and ecological benefits. Green infrastructure will be particularly important in settlements and surrounding areas proposed for regionally or sub-regionally significant development.

Our vision

To establish a framework for the delivery of high quality green infrastructure over the next 20 years, complementing and supporting planned housing and development growth.

To contribute to quality of life through ensuring that everyone living and working in the Haven Gateway has access to a high quality natural and historic environment.

The success of these aims can only be secured by sustained support by all communities of interest in Haven Gateway namely all the partner local authorities, developers, residents, businesses, central and regional government and government agencies, and the voluntary sector.

Principles

The principles have been developed by the Steering Group and will guide planning, design and maintenance of the green infrastructure network. The overarching principles are to:

- integrate green infrastructure provision and management into development proposals
- champion the role that green infrastructure assets play in delivering a high quality of life
- promote an integrated approach to green infrastructure provision and management that provides recreational opportunities for people whilst maintaining and enhancing the exceptional natural and historic environment within the Haven Gateway
- create green infrastructure that reflects the ethos and character of the Haven Gateway
- increase everyone's understanding of, and ability to take action for, green infrastructure

These principles are elaborated under the themes of access, biodiversity, historic environment and landscape.

The Haven Gateway Green Infrastructure Steering Group

The Haven Gateway Green Infrastructure Strategy is supported by a Steering Group of partners comprising local authorities, government agencies, the local wildlife trusts, and Suffolk Coast and Heaths Area of Outstanding Natural Beauty Unit. Suffolk County Council has acted as the lead authority for this project on behalf of the Haven Gateway Partnership. The Steering Group is accountable to the Planning Officers Group of the Haven Gateway Partnership.

The green infrastructure resource

The strategy identifies the resources that define or give character to the existing green infrastructure. In doing so it also provides the building blocks for identifying the opportunities for enhancement. The following resources were identified and mapped using a geographical information system.

River patterns, estuaries, reservoirs and topography including flood risk

- Landscape character
- Designated wildlife sites and landscapes and Biodiversity Action Plan habitats
- Agricultural land classification
- Historic landscapes
- Designated historic features
- Promoted access routes
- Key built-up areas and growth potential
- Existing accessible natural greenspace

Accessible natural greenspace

Accessible natural greenspace (ANG) provides opportunities for informal recreation in a natural setting, therefore giving people the opportunity to experience wildlife close to where they live. This is important for quality of life, healthy living and sense of place. Natural England believes that the provision of natural areas should be part of a balanced policy of greenspace provision.

The strategy appraises and identifies standards for delivering enhancements to the existing ANG network. The criteria for defining ANG were developed in liaison with the Steering Group. The existing ANG provision was appraised to identify deficiencies in provision based on four accessible natural greenspace standards (as developed by English Nature [now Natural England] in 2003, adapted by the Town and Country Planning Association and agreed by the Steering Group).

- 2ha+ of ANG within 300m of home – the Neighbourhood Level
- 20ha+ of ANG within 1.2km of home – the District Level
- 60ha+ of ANG within 3.2km of home – the Sub-regional Level
- 500ha+ of ANG within 10km of home – the Regional Level

The deficiencies were appraised to see where they corresponded to areas of population density and anticipated economic and spatial growth.

Opportunities

Consultation was carried out with the Stakeholder Group to identify and analyse the resource data and to determine indicative project opportunities. The Opportunities Map identifies seven types of opportunity for accessible and non-accessible green infrastructure:

- potential green corridor projects with access
- potential green corridor projects without access
- potential river corridor projects
- potential access projects
- potential site projects
- potential green bridges – these include so-called 'living' bridges and non-vehicular bridges that provide links e.g. over water for access projects
- potential area-based initiatives

The Opportunities Map identifies opportunities and indicative vision projects across the Haven Gateway area. A series of map inserts highlight the project opportunities in the main growth nodes at Ipswich, Colchester, Felixstowe/Harwich and Clacton. The schedule of projects identifies the current lead organisation, the indicative cost of the project, and its priority as judged against criteria related to the over-arching principles and the benefits of green infrastructure to the sub-region.

The Concept Map identifies key existing assets such as ANG, rivers, promoted walks and cycleways, and key strategic opportunities:

- key areas for ANG creation at the Regional, Sub-regional and District Levels
- key potential access routes

Steps to delivery and further actions

The strategy represents the first step in delivering a high quality green infrastructure in the Haven Gateway. Success in delivery will depend on how the strategy is taken forward over the next few years. This includes promoting the strategy to key stakeholders and the community by a variety of methods; developing 'best practice' examples of green infrastructure to raise standards and expectations, and developing a governance model and a funding strategy. It also involves ensuring links, including Public Rights of Way (PRoW), to ANG are in place or developed in line with the Rights of Way Improvement Plan (ROWIP) and using the planning system to embed the green infrastructure principles in Local Development Frameworks and promoting and enforcing key tools for delivery.

Holbrook Creek, Suffolk County Council



1.0 Introduction

1.1 Background to growth

The Haven Gateway Green Infrastructure Strategy has been prepared for the Haven Gateway Partnership, with Suffolk County Council as the commissioning authority for the work. The Haven Gateway Partnership was established in 2001 and brings together the ports of Felixstowe, Harwich, Ipswich, Mistley and their surrounding hinterlands including the regional centres of Colchester and Ipswich (see figure 1). The Partnership is an association of public and private sector organisations that are working together to secure the future economic prosperity of the sub-region. The Haven Gateway Partnership is formally recognised as a sub-regional economic partnership by the East of England Development Agency. For more information on the Haven Gateway Partnership see www.haven-gateway.org

The Haven Gateway is one of four planning sub-regions identified in the emerging East of England Plan. In 2006 it was awarded New Growth Point status by the Government in recognition of its ambitious housing targets as set out in the emerging East of England Plan. The Haven Gateway sub-region is one of the fastest growing areas in the eastern region with a population projected to increase from 611,300 in 2001 to 684,500 in 2021.

The Haven Gateway has four main economic drivers: the urban areas of Ipswich and Colchester, and the ports of Felixstowe and Harwich, where major expansion is proposed. Haven Gateway covers an area of about 1,200sq km of north-east Essex and south-east Suffolk. It has a unique and exceptional natural and historic environment, which is expected to come under pressure from planned growth. Some significant areas of the sub-region, especially along the coast, are protected under various wildlife and/or landscape designations. There are two Areas of Outstanding Natural Beauty within the area, and a number of internationally important wildlife sites such as the Stour and Orwell Estuaries, Colne Estuary, Hamford Water and Suffolk Sandlings.

The planned growth in the Haven Gateway could impact on both the quality of life of the existing and proposed future communities, and the natural and cultural assets of the area. The production of a Green Infrastructure Strategy is therefore a condition of New Growth Point status and is seen as an important document ensuring that a balance is struck between new development and meeting community needs.

1.2 What is green infrastructure?

The Draft East of England Plan defines green infrastructure as,

'the sub regional network of protected sites, nature reserves, green spaces, and greenway linkages ... by providing for multi-functional uses i.e. wildlife, recreation and cultural experience, it contributes to liveability whilst also delivering ecological benefits. Green infrastructure will be particularly important in settlements and surrounding areas proposed for regionally or sub-regionally significant development, notably the Key Centres for Development and Change.'

It further identifies that:

'The linkages include river corridors and flood plains, migration routes and features of the landscape, which are of importance as wildlife corridors.'

'(Green Infrastructure) should also operate at all spatial scales from urban centres through to open countryside.'

This definition of green infrastructure has been developed within the Haven Gateway, to also include the historic environment as a key element.



Woodlark, Forestry Commission, Giles Brockman

1.3 Policy context

Green infrastructure is recognised as integral to the development of sustainable communities due to its importance for quality of life. This is clearly set out in national policy and documents such as **Sustainable Communities: Building for the Future** (Communities and Local Government, 2004 (CLG)), **Planning Policy Statement 1: Delivering Sustainable Development** (CLG), **Planning Policy Statement 9: Biodiversity and Geological Conservation** (CLG, 2004), **Planning Policy Guidance 17: Open Space, Sport and Recreation** (CLG 2002), and also in regional policy within the **Draft East of England Plan, A Regional Spatial Strategy for the East of England**, (East of England Regional Assembly, 2004) and within local development documents that are emerging as part of **Local Development Frameworks**. The importance of green infrastructure for quality of life has been highlighted through research into a range of issues, such as health, by organisations such as the Royal Society for the Protection Birds and Commission on Architecture and the Built Environment. Further details on relevant policies and national guidance can be found at **appendix 1**.

1.4 Strategy brief

The main purpose of this strategy is to:

- assess the interplay of the five main components of green infrastructure: physical resources and natural systems, ecological assets, landscape character, historical and cultural assets, and access networks and recreational facilities
- establish a holistic and coordinated spatial framework for the delivery of high quality multi-functional green infrastructure over the next 20-25 years, complementing and supporting planned housing and employment growth
- inform the preparation of Local Development Frameworks as envisaged in Policy ENV1 of the Draft East of England Plan
- provide an evidence base for future funding

This strategy will form part of a framework for growth along with other studies (water cycle, culture, tourism, etc.). Together, these will form part of an evidence base to inform the strategic planning process for housing and economic growth planned for the Haven Gateway area to 2021.

Aldeburgh, Natural England, Chris Gibson



1.5 Governance

The Haven Gateway Green Infrastructure Strategy is supported by a Steering Group led by Suffolk County Council, and is composed of:

- Babergh District Council (Peter Berry)
- Colchester Borough Council (Beverley McClean)
- Environment Agency (Andrew Hunter)
- Essex County Council (Martin Wakelin, Adrian Gascoyne and Nigel Brown)
- Essex Wildlife Trust (Claire Cadman, Gemma Slaven)
- Forestry Commission (Giles Drake-Brockman)
- Ipswich Borough Council (James Baker, Sarah Barker)
- Mid Suffolk District Council (Stephen Andrews)
- Natural England (Graham King, Chris Gibson)
- Royal Society for the Protection of Birds (Chris Tyas)
- Suffolk Coast and Heaths Unit (Bill Parker)
- Suffolk Coastal District Council (Steve Brown, John Davies)
- Suffolk County Council (Sarah Jennings (Chair), Peter Holborn, Edward Martin)
- Suffolk Wildlife Trust (Simone Bullion)
- Tendring District Council (Sandra Scott)

The Steering Group is accountable to the Planning Officers Group of the Haven Gateway Partnership reporting through two planning officers. The Planning Officers Group is responsible for ensuring that the Haven Gateway Board is kept informed of progress with the green infrastructure work, and that each of the related studies supporting the overall framework for growth informs each other at key stages through their development.

2.0 Vision and principles

2.1 Aims and objectives

The overall objective of the Haven Gateway Green Infrastructure Strategy is:

to establish a framework for the delivery of high quality green infrastructure over the next 20 years, complementing and supporting planned housing and development growth.

The aim is to contribute to quality of life by:

ensuring that everyone living and working in the Haven Gateway has access to a high quality natural and historic environment.

This is a vision that aims to champion the role that green infrastructure plays in delivering sustainable communities, in attracting investment, delivering life-long learning and bringing a sense of well-being to all who live, work and visit the area. The vision is to create green infrastructure that strengthens the character and sense of place of the Haven Gateway, maintains and enhances the exceptional natural and historic environment (especially the beauty of its heaths and estuaries), integrates open and accessible green space within new developments, integrates development into existing neighbourhoods and landscapes, embraces sustainability, enhances recreational opportunities for people, and increases community understanding and engagement with their greenspace.

2.2 Principles for green infrastructure in the Haven Gateway

Role of principles

The principles were developed by the Steering Group and are intended to guide the planning, design and management of green infrastructure in the Haven Gateway. They should be incorporated within policies in Local Development Frameworks, supplementary planning documents, master plans, project briefs, and other guidance at the strategic or local level e.g. developer guidelines.

Overarching principles

Green infrastructure planning, design and maintenance in the Haven Gateway should:

- **integrate green infrastructure provision and management into development proposals**
- **champion the role that green infrastructure assets play in delivering a high quality of life**
- **promote an integrated approach to green infrastructure provision and management that provides recreational opportunities for people whilst maintaining and enhancing the exceptional natural and historic environment within the Haven Gateway**
- **create green infrastructure that reflects the ethos and character of the Haven Gateway**
- **increase everyone's understanding of, and ability to take action for, green infrastructure**
- **ensure that sustainability issues are considered e.g. in construction, location, access, management and use**
- **protect and enhance the distinctive landscape character of the sub-region as defined in landscape character assessments**
- **contribute to both the Suffolk Coast and Heaths and the Dedham Vale Areas of Outstanding Natural Beauty management plans**

Albany Gardens, Barrett Homes



Access principles

Green infrastructure planning, design and maintenance in the Haven Gateway should:

- create new, or extend existing, accessible natural green space in order to address shortfalls in provision, and when opportunities arise, at both strategic and local levels
- create new, or extend existing, accessible natural green space in order to reduce recreational pressure on sensitive wildlife or historic sites
- ensure that accessible natural green spaces are protected, managed and promoted appropriately for people, wildlife and historic interest
- create and enhance, manage and promote strategic routes for non-motorised users, especially:
 - within and between main settlements
 - from main settlements to, and between, accessible natural green spaces and the coast
 - with regard to PRow, in line with ROWIP
 - to provide circular routes of varying lengths and demands to meet the needs of different users, including walkers, cyclists and equestrians of varying abilities
 - to provide multifunctional green corridors
 - to provide improved access to rivers and estuaries, where appropriate
 - to maximise opportunities to use existing public transport links and encourage the creation and promotion of new links, e.g. community bus links

Biodiversity principles

- Green infrastructure planning, design and maintenance in the Haven Gateway should:
- enhance, manage and protect existing key habitats and species (statutory and non-statutory designated sites and Biodiversity Action Plan habitats and species) as key components of the green infrastructure network
- reduce fragmentation of wildlife habitats by creating ecological corridors and networks
- contribute to Essex and Suffolk Biodiversity Action Plan habitats and species targets
- reduce disturbance to ecologically sensitive sites through improved management of access, and the creation of alternative accessible natural green spaces
- be informed by ecological surveys and Biodiversity Action Plan priorities to guide the design and implementation of green infrastructure improvements and development schemes
- create new areas of habitat as part of new development

Historic environment principles

Green infrastructure planning, design and maintenance in the Haven Gateway should:

- enhance, restore, manage and protect the historic environment as a key component of the green infrastructure network
- be based on a sound understanding of the historic environment of the Haven Gateway (e.g. historic landscape characterisation work)
- promote the recognition of the historic environment as an integral part of green infrastructure

Landscape principles

Green infrastructure planning, design and maintenance in the Haven Gateway should:

- protect and enhance the distinctive landscape character of the sub-region as defined in landscape character assessments
- contribute to both the Suffolk Coast and Heaths and the Dedham Vale Areas of Outstanding Natural Beauty management plans

Dedham Vale, Flatford to dedham, Natural Engalnd, Chris Gibson



Cattawade Marshes, Natural Engalnd, Chris Gibson



Dunwich Heath, Natural Engalnd, Chris Gibson



3.0 Approach to the study

3.1 Baseline data

The following data was collated in order to provide a baseline for the review and analysis of existing green infrastructure assets within the Haven Gateway area, and to identify opportunities for future enhancement (as discussed further in Section 4).

Information considered in the baseline study included:

- policies and relevant strategies. The documents reviewed are listed at **appendix 3**
- environmental resources, e.g. physical attributes and resources such as river patterns and flood zones; geology, soils and agriculture; landscape character and designations; wildlife designations and biodiversity habitats; and historic landscape character
- existing ANG sites (see below)
- strategic access routes and networks
- key built up areas and directions of existing and future growth
- population data from 2001 Census
- feedback from consultation exercises, workshops, etc.

Environmental data was mapped digitally using a geographical information system. By using a geographical information system, the various sets of spatial data relevant to the sub-region were easily captured, stored, shared, managed, analysed and displayed.

The data sets used within the geographical information system model are listed at **appendix 4**.

3.2 Policy context

The policy context provides a review of existing and emerging government policy relevant to green infrastructure in the Haven Gateway at the national, regional, sub-regional and local levels. At the national level, green infrastructure policy and guidance documents prepared by government agencies and non-governmental organisations were assessed, in addition to central government planning policy statements. The policy topics considered encompass the environmental, social and economic benefits of green infrastructure, the creation and enhancement of the green infrastructure network and the management and maintenance of green infrastructure. The review of existing and emerging policy provides guidance on the implications of the current planning context for the Green Infrastructure Strategy.

3.3 Environmental resources

The baseline data relating to the environmental resources within the Haven Gateway was reviewed and analysed. The following paragraphs contain a summary of the findings, together with notes on key issues that might affect current or future green infrastructure resources.

Topography, river patterns and flood zones

The Haven Gateway embraces five estuaries: the Alde and Ore, the Deben, Orwell, Stour and the Colne. A large part of this estuarine landscape, east of the A12, is low-lying, the coast itself consisting of crumbling cliffs, shingle beaches and coastal lagoons, as well as the mud-flats and creeks of the salt-marsh fringed estuaries themselves. Low-lying, level landscapes are particularly sensitive to intrusion by large-scale development e.g. at the fringes of urban areas, from port development and other infrastructure. Access is constrained by the river and estuary patterns. Further inland, the landscape varies between forest, heath and agricultural land incised by the valleys of the Colne, Gipping, Deben and Alde, for instance.

Many low-lying parts of the Haven Gateway have been identified as being at risk from flooding from the sea or rivers, by the Environment Agency (**see figure 2**). This risk will increase with climate change. There is already an economic debate about which undeveloped areas can be protected and which may have to be allowed to become inundated over time. This debate also extends beyond economics to the conservation of the dynamic coastal landscape of estuary, mudflat and salt marsh, which can often conflict with the provision of hard defences.

The UK Climate Impacts Programme is predicting changes to UK weather patterns and levels of precipitation over the coming decades. The Inter-governmental Panel on Climate Change has predicted that the East of England may experience hotter, drier summers, milder, wetter winters, more extreme climate events and increased risk of flooding. Despite being classified as semi-arid, current predictions suggest that the eastern region is likely to experience both water shortages during drier summers and increased risk of flooding during the winter months due to climate change.

The Haven Gateway Partnership has commissioned Royal Haskoning consultants to undertake a water cycle study of the sub-region. This water cycle study is needed to ensure that water supply, water quality, sewerage and flood risk management issues can be addressed in a sustainable way to accommodate the planned growth up to 2021 and beyond.

Key issues include: Flood risk, economics of flood defence renewal, conservation and re-creation of salt marsh and other key elements of coastal landscapes. The loss of some landscape character types to rising sea level particularly coastal levels and freshwater grazing marshes. Threats to coastal and estuarine access, conservation of the coast and estuaries, sensitivity of low-lying areas to visual intrusion from development, and water management issues arising from increased levels of flooding and drought as a result of climate change.



Dovercourt, Natural England, Chris Gibson



Wivenhoe, Barrett Homes



The Naze, Walton, Natural England, Chris Gibson



Hanningfield coopers

Geology, soils and agriculture

The geology of Essex is dominated by three distinct types of deposit; London Clay; boulder clay, sands and gravels mostly of very ancient origin; and coastal muds and silts laid down over the past few thousand years.

A broadly flat, but undulating plateau covered by till dominates the northern part of Essex. The eastern edge of the plateau is marked by a shallow wooded ridge, which sweeps round in a curve to Tiptree. The ridge grades northwards to beyond Colchester into heathlands developed on sands and gravels, which in turn give way to the London Clay which underlies most of the coastal region. More recent muds, silts and sands cover the London Clay and give rise to mudflats and salt marsh all along the Essex coast.

The geology of Suffolk is relatively simple. Extensive spreads of till, or boulder clay, deposited over the last million years, cover the gently undulating plateau that forms much of the county. The till plateau is bordered on its eastern edge by marine sands and gravels. These deposits support a mosaic of heathland and conifer plantation and pass eastwards into a largely undeveloped coast comprising a mosaic of estuaries, salt marsh, eroding cliffs and steep shingle banks. In the far southeast of the county, rocks of Tertiary age occur, but they only outcrop in a relatively few places along the shores of the larger estuaries.

This underlying geology affects both the local soils and the quality of the land for agriculture (see figure 3).

Large areas of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty are Agricultural Land Classification Grade 4 or poorer because of the free-draining, acidic nature of the soils. However these soils are now capable of producing high value vegetable crops through the application of modern irrigation and husbandry. Tracts of Grade 3 land correspond to some of the drained estuary and coastal marshes; this better quality and more diverse land is found north of Felixstowe, south of Ipswich and on the Tendring peninsula with large pockets of Grade 1 and 2 land east of Colchester.

Key issues include: Water abstraction for agriculture resulting in diminished fresh water flow from rivers in spring and summer and thus increased saline concentrations in estuaries; increased development resulting in increased water demand, which could reduce groundwater supplies for agricultural irrigation and impact on the natural environment; wind blow on light soils causing erosion; intensive cropping and run-off from arable land and areas used for outdoor pigs; loss of grazing by traditional livestock in areas such as heaths and marshland resulting in invasion of inappropriate species or reduced species diversity, and thus changes to the landscape and ecological character.

Landscape character

At a regional level, the landscape character of the Haven Gateway falls into five character areas as defined under the Countryside Agency/English Nature/English Heritage 'Character Map of England'. These are shown at figure 4. The five regional character areas are:

The Greater Thames Estuary: this extends around the coast from the Thames up to, but not including, the Stour Estuary. It is a low-lying landscape characterised by extensive open spaces dominated by the sky, often with a strong sense of remoteness. Its distinctive features include the mudflats and salt marshes populated by large and varied bird populations, traditional unimproved wet pasture or open grazing pastures patterned by creeks, ditches and dykes; and the distinctive sea walls.

Suffolk Coast and Heaths: this area has a distinctive topography and land cover forming free draining and easily worked acidic sands and gravels. Much of the area is a largely unspoilt mosaic of estuaries, salt marsh, grazing marsh, reed bed, river valleys, arable, heath and woodland with a strong coastal influence.

Northern Thames Basin: this character area forms the higher land behind the coastal lands of the Greater Thames Estuary character area. This is a predominantly plateau landscape divided by a series of broad river valleys and extensive areas of broadleaved woodlands. Many of the plateau areas are used for arable agriculture, often with large fields where the hedgerows have been removed. The distinctive character of the river valleys can be compromised by reservoirs, gravel pits, artificial wetlands, river realignment or canalisation of watercourses.

South Norfolk and High Suffolk Claylands: this is a large area of chalky boulder clay plateau with a slightly undulating topography, generally flat but more varied along valley sides. There is a strong contrast between the small-scale wooded valleys which fringe the Suffolk Coast and Heaths area, and the open, arable plateau. There is a mix of remnant medieval ancient countryside, early co-axial field patterns and large modern fields devoid of hedges and trees. The area is almost entirely arable, except for pasture in river valleys, remnant parkland, commons and greens.

South Suffolk and North Essex Clayland: the area is a broadly flat, chalky boulder clay plateau dissected by undulating river valley topography. It is predominantly arable with irregular field patterns and a wooded appearance. There is some pasture in the valley floors. The area has a cultural association with Constable and the popular Dedham Vale.

Within this regional context, landscape character assessments have been carried out at the county level in both Suffolk and Essex, for Colchester and Tendring and for the Essex coast. The characteristics of the local landscape types are outlined at appendix 5.

Key issues include: Maintaining and strengthening local distinctiveness that is under pressure from standardised housing, retail and commercial development, and infrastructure such as roads. Suburbanisation of the countryside through the subdivision of fields and erection of buildings for use as pony paddocks and extended gardens. Careful siting of development is needed and appropriate mitigation, such as screening using subtle landform and appropriate planting, especially at the urban fringe.



Scout jam, Essex Wildlife Trust



Stour Wood Anemones, RSPB, Rick Vonk

Designated wildlife sites and Biodiversity Action Plan habitats

There are a number of different conservation designations providing legal protection to the most ecological rich terrestrial and coastal and estuarine areas within the Haven Gateway. These identify, within a specified area, the important species and/or habitats, and set out the condition in which they should be maintained. The Haven Gateway area contains some of the most important habitats in the UK, notably for over-wintering birds. Designated sites are shown at **figure 5**. All international sites are also Sites of Special Scientific Interest.

Special Areas of Conservation: Special Areas of Conservation are sites that have been given special protection under the European Union's Habitats Directive. They provide increased protection for rare, endangered or threatened flora and fauna, other than birds. However, many of these sites are also recognised as Ramsar sites, designated for their internationally important wetlands including their fowl populations. Special Areas of Conservation within the Haven Gateway include the Alde/Ore and Butley estuary, Orfordness – Shingle Street (designated for its coastal lagoons, and stony banks); part of the Minsmere to Walberswick heaths and marshes Special Areas of Conservation (designated for the mixed sand and shingle strandline, of which it is the best example of this type, and for its lowland European dry heaths) and the Mid Essex Estuaries, including part of the Colne Estuary.

Special Protection Areas: Special Protection Areas are designated under the European Union's Directive on the Conservation of Wild Birds. Special Protection Areas in the Haven Gateway, include the Alde/Ore Estuary (including Orfordness and Havergate Island), the Stour and Orwell Estuary, Minsmere to Walberswick, Sandlings, the Deben estuary, Hamford Water, Abberton Reservoir and the Colne Estuary.

Sites of Special Scientific Interest: Sites of Special Scientific Interest are the UK's finest wildlife and geological sites and support our most characteristic, rare and endangered species, habitats and geological features. There are numerous Sites of Special Scientific Interest in the Haven Gateway some of which also have international protection- large wetlands, gorse and heather-clad heathlands and shingle beaches many of which are also international sites. Sites of Special Scientific Interest in the area include Abberton Reservoir, the Orwell estuary, the Stour estuary the Colne Estuary, Hamford Water, the Harwich Foreshore, and the Roman River.

National Nature Reserves: National Nature Reserves are usually chosen because they represent the best example of a particular wildlife habitat and, as the name suggests, are consequently of national importance. Most National Nature Reserves are accessible to the public. Those in the Haven Gateway include the Colne Estuary, Orfordness, Hamford Water, and Havergate Island National Nature Reserves.

Local Sites, (County Wildlife Sites in Suffolk) and Local Nature Reserves were also mapped and these are also included in the designated sites mapped at **figure 5**.

Biodiversity Action Plan: The Biodiversity Action Plans for Suffolk and Essex detail the set priorities for nationally and locally important habitats and wildlife. Each plan includes actions and targets that are monitored and progress reported on a 3-5 year cycle. The Plans identify species that are disturbance sensitive and which present a serious possible conflict between biodiversity and recreational need. Priority Biodiversity Action Plan habitats within the Haven Gateway have been mapped and are shown at **figure 5**. These include coastal habitats such as salt marsh, grazing marsh, mudflats and saline lagoons as well as ancient woodland and lowland heathland.

Key issues: Many species are sensitive to disturbance; certain recreational activities, such as dog walking may cause particular harm to fauna and require access to be managed through redirection of routes or reinforcing of the existing ones. The provision of ANG within or close to new development will have a particularly important role to play in redirecting some activities away from sensitive habitats. Other pressures include development pressure and fragmentation of habitats and migration routes due to roads and railways.

Dovercourt beach huts, Natural England, Chris Gibson



Landscape designations

There are two Areas of Outstanding Natural Beauty (AONB) in the Haven Gateway Area: Suffolk Coast and Heaths and the Dedham Vale. These are shown at **figure 5**. The primary purpose of the designation is to conserve and enhance the natural beauty of the landscape, with two secondary aims: meeting the need for quiet enjoyment of the countryside and having regard for the interests of those who live and work there.

The Suffolk Coast and Heaths Area of Outstanding Natural Beauty extends from the northern side of the Stour Estuary to the eastern fringe of Ipswich and as far north as Kessingland, beyond the Haven Gateway boundary. It covers approximately 389sq km, mainly between the A12 and the sea.

The Area of Outstanding Natural Beauty consists of a mosaic of different habitats; farmland, heathland (the Sandlings), ancient woodland, commercial forestry, reed beds, estuaries and grazing marsh. Part of its distinctive character is the numerous small traditional towns, such as Aldeburgh, and the villages with their colour-washed houses. The economy is based on agriculture and tourism.

Dedham Vale Area of Outstanding Natural Beauty covers 90sq km of the eastern end of the Stour Valley. It protects an area of exceptional lowland river valley. The Area of Outstanding Natural Beauty boundary generally coincides with the part of the Stour Valley associated with the landscape paintings of John Constable. It includes the valley itself and the tributary valleys that feed into it. The northern and southern limits correspond with the skyline edge of the low arable plateau.

Key issues include: Changing agricultural practice, winter storage reservoirs impacting on landscape character, 'horsiculture', infrastructure development and inappropriate development, including housing. It is vital that great care is given to siting, scale and detail design of new development to reflect local character and maintain the distinctiveness of the Areas of Outstanding Natural Beauty. Major infrastructure development associated with the ports is a threat to sensitive coastal landscapes of the Suffolk Coast and Heaths AONB. An issue within the Suffolk Coast and Heaths AONB is increased visitor numbers causing increased vehicular traffic. More use of public transport, cycleways and pedestrian access is needed.



River Deben saltmarsh, Natural England, Chris Gibson

Historic landscape

The remains of the historic landscape can be identified over much of the Haven Gateway area.

Within Essex, 28 of the county's historic landscape areas occur wholly or partly in the Haven Gateway. These are shown at **figure 6**. The historic landscape includes the Iron Age tribal capital of Camulodonum, and the historic town of Colchester. East of Colchester are large areas of later enclosure of former heathland. To the north, the Stour river valley and Dedham Vale are characterised by extensive meadow pastures with largely pre-C18th irregular fields, probably of medieval origin.

The Colne Valley has extensive meadow pasture and pre-C18th irregular fields, with the adjoining Roman River Valley extensive areas of ancient woodland and meadow pasture. South of Colchester, much of the area was formerly a huge area of common rough pasture and wood-pasture, with parts of Tiptree Heath not finally enclosed until the C19th. The southern edge of Colchester District comprises salt marsh, and grazing marsh with boundaries formed by drainage ditches. Mersea Island forms a gently domed ridge rising from the marshes.

On the Tendring peninsula, the settlement pattern was very dispersed. The core of the district comprises a plateau dissected by streams, often forming quite steep sided valleys. There are numerous greens and a mix of pre-C18th irregular fields, probably of medieval origin and later enclosure. Post-1950's boundary loss is generally moderate. To the west is a mix of pre-C18th irregular fields and later enclosure of common fields with meadow pasture in stream valleys. There are extensive areas of mineral extraction to the south.

The C20th trend for seaside-based holidays is evident around Point Clear. Coastal urban areas comprise the port and town of Harwich and the resort towns of Clacton, Frinton and Walton. The remainder of the coastline is made up of present and former grazing marsh and saltmarsh. Hamford Water, in particular, represents a complex historic landscape.

In Suffolk 17 historic landscape types have been identified within the Haven Gateway. These are shown at **figure 7**. The historic landscape includes extensive areas of pre-C18th enclosure (land that was enclosed for agriculture before 1700). These ancient enclosures include areas of former medieval deer park or former marsh and fenland. These types dominate the western part of the Haven Gateway region in Suffolk. C18th and later enclosure tend to have rectilinear hedgerow boundaries. These associate with landscapes further to the east of the Haven Gateway area. Where both these earlier types of landscape have been damaged due to C20th post-war agricultural practice, generally through hedge removal, more open landscapes have been created.

Relevant designated historic sites and features are mapped at figure 8.

Key issues include: Maintaining the integrated management of the historic and natural environment including hedges, woods and grazing marshes which are important nature conservation and cultural features; conservation of extensive cropmarks complexes through environmental stewardship or incorporation into new ANG such as Gosbecks Archaeological Park; recognition and enhancement of the contribution of the historic environment to local character and sense of place.



Flatford Mill, Natural England, Chris Gibson

3.4 Accessible Natural Greenspace (ANG)

The concept of Accessible Natural Greenspace (ANG) was developed by English Nature (now Natural England) in 2003 in their publication '**Accessible Natural Greenspace Standards in towns and cities**'. The concept was adapted by the Town and Country Planning Association in their publication '**Biodiversity by Design**' as one of the ways of delivering green infrastructure to communities.

ANG plays a vital role in improving quality of life by providing access to informal recreation in a natural setting, thereby promoting healthy living and a sense of place. ANG also enables people to experience wildlife close to their homes and have everyday contact with nature; provides an educational resource; helps to ensure that urban areas function ecologically and that greenspace and wildlife is protected; and plays an important role in reducing pressure on more sensitive wildlife sites by providing an alternative attraction. Natural England believes that the provision of natural areas should be part of a balanced policy of greenspace provision.

Given its importance, it is thus essential that ANG provision in the Haven Gateway area is robustly addressed in the framework for future delivery of high quality green infrastructure over the next 20 years, to complement and support the planned housing and other development growth.

Part of the brief for the Haven Gateway Green Infrastructure Strategy was to assess ANG provision in the Haven Gateway area, and consider future needs in light of planned growth. Such information can then be used, together with the other baseline analysis, to suggest opportunities to enhance ANG provision and to address any existing or future deficiencies.

A number of definitions exist to describe what ANG actually is. For the purposes of the current strategy, the Steering Group agreed that the following test should be applied to areas of open space within the sub-region. To be considered as ANG, sites must comply with each of the following parameters:

- be 2ha or greater in size. Anything under 2ha in size is not included, as these sites will not have a significant impact at the strategic scale. However, consideration will be given to strategic corridors created by the amalgamation of a number of sites each of less than 2ha in size
- have a public right of access that is not subject to admittance, membership or subscription fees, and a security that such access will remain in perpetuity
- have an access network that allows public infiltration across a substantial part of the site
- be positively managed for public access (as appropriate to the site)

The potential ANG sites must also comply with one or both of the following:

- have a natural or semi-natural land covering, e.g. a woodland or meadow
- be a park or other green space, with a significant part thereof managed for wildlife

The identification of potential ANG, and application of the test, was undertaken by Suffolk County Council in discussion with county, district and borough countryside officers and the Essex and Suffolk Wildlife Trusts. The selection of sites was verified by the Steering Group. The agreed ANG sites are shown at **figures 9 and 10**.

A number of different types of ANG have been identified including: country parks; urban parks and gardens with areas managed for wildlife; nature reserves; forests and woodlands; beaches; commons, village greens and millennium greens; and open access land (under the Countryside and Rights of Way Act 2000), e.g. heaths.

3.5 Access: strategic links and promoted routes

The Haven Gateway is criss-crossed with a network of Public Rights of Way (PRoW) and cycle routes (**see figure 11**). These include sections of the Essex Way, the Stour Valley Path, the Suffolk Coastal Path and coastal cycle routes, sections of the National Cycle Network as well as local Sustrans' routes. Some coastal trails are at risk of erosion from the sea and may need to be realigned. More routes are also needed to connect existing and proposed development with existing and potential greenspace.

The Haven Gateway is linked northeast and southwest by both the A12 and the mainline railway from London to Ipswich and Lowestoft with branches serving Chappel/Sudbury, Wivenhoe-Clacton-Walton, Harwich, and Felixstowe. These branch lines are vital in enhancing the connectivity of the walking/cycling routes and the sustainability of the overall transport system. Most are promoted for their tourism value as well as providing vital commuting services for residents.

The Government has recently set out a vision of the right to walk along the length of the English coast within a wildlife and landscape corridor that offers enjoyment, understanding of the natural environment and a high quality experience, and which is managed sustainably in the context of a changing coastline. If brought forward through legislation, this vision will impact on approaches for access provision in coastal areas.

Key issues: Indented coastline and estuaries are a barrier to movement without connecting ferry services; flood risk and its effect on maintenance of river bank walks may require new PRoW routes to be found inland in some areas; connectivity between built-up areas and greenspace needs to be improved; conflict between recreation and nature conservation (especially along estuaries), for instance through the introduction of coastal access.



Red Rose Chain production of Midsummer Night's Dream

3.6 Key built-up areas and direction of strategic growth

The Strategic Growth Options have been identified by the Haven Gateway Partnership and form part of its adopted Framework for Growth – a non-statutory sub-regional strategy. The East of England Plan indicates that development should continue to be concentrated in the larger towns of Ipswich, Colchester, Felixstowe, Harwich and Clacton. The most significant housing growth will be provided for at the key centres of development and change (Colchester and Ipswich) (**see figure 12**).

3.7 Assessment of ANG provision

Access to a range of sizes and types of ANG is recognised as being important in order to satisfy people's various recreational needs and aspirations. ANG can be located at varying distances from where people live, but to achieve a good quality of life, people should have easy access to small neighbourhood sites that they might walk to for daily activities such as dog walking or play, with larger scale sites available (such as country parks) for longer walks, picnics, etc. It is accepted that people would be prepared to travel longer distances to use the larger, better-equipped facilities.

ANG Standards

In order to analyse ANG provision in terms of size and function, assess the population it serves, and identify areas of ANG deficiency, a set of standards was promoted by Natural England (as published in the document 'A Space for Nature', 1996), and in turn developed by the Town and Country Planning Association ('Biodiversity by Design: A Guide for Sustainable Communities', 2004) and others (e.g. the Woodland Trust). These standards promote the size of ANG that should be available to people within a given distance of their home.

For the purposes of analysing ANG within the Haven Gateway, the following set of standards (based on those promoted by the Town and Country Planning Association) has been used.

People should have access to:

- 2ha+ of ANG within 300m of home – this has been termed the Neighbourhood Level
- 20ha+ of ANG within 1.2km of home – the District Level
- 60ha+ of ANG within 3.2km of home – the Sub-regional Level
- 500ha+ of ANG within 10km of home – the Regional Level

ANG deficiency

In order to identify which areas of the Haven Gateway are deficient in ANG at each of the above four Levels (Neighbourhood to Regional), appropriately sized catchment areas were mapped around each of the agreed ANG sites. Thus, a

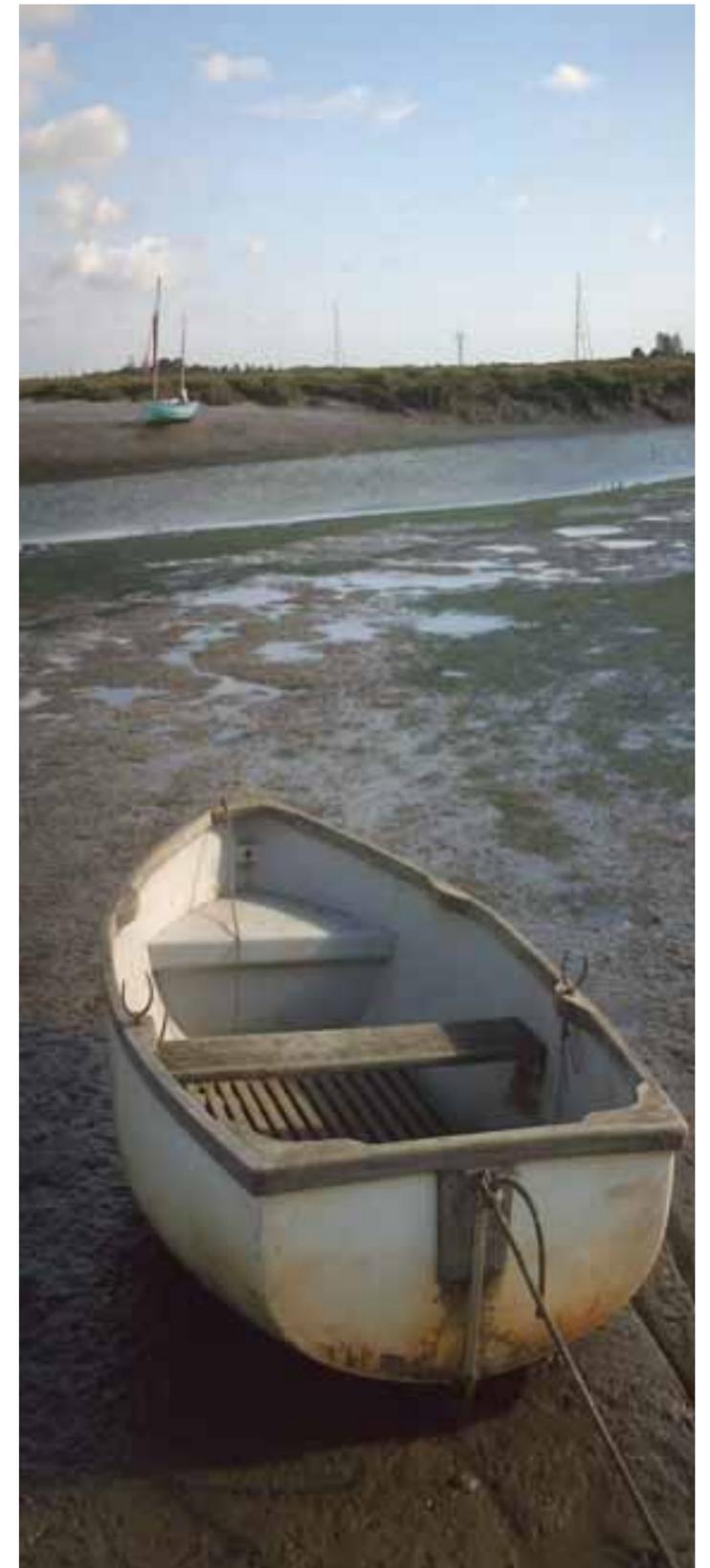
- catchment of 300m was mapped around all sites of 2ha+ (**see figure 13**)
- catchment of 1.2 km was mapped around all sites of 20ha+ (**see figure 14**)
- catchment of 3.2 km was mapped around all sites of 60ha+ (**see figure 15**)
- catchment of 10km was mapped around all sites of 500ha+ (**see figure 16**)

The resultant maps clearly show which populations are within the catchment of an individual ANG site. For each Level, those people who live outside of a catchment could thus be considered to be deficient in terms of access to that scale of ANG. For example, all those outside the shaded catchments at figure 15 are deficient in access to Regional Level ANG sites (sites of 500ha or more).

ANG in relation to population

ANG provision was also assessed in relation to population. Population densities (obtained from the 2001 Census) for each ward within the Haven Gateway were mapped. The above catchments were then overlaid in order to identify wards, which were both lacking ANG and had a high population density. The results of this analysis showed how some of the major areas of population with the highest densities, such as parts of Colchester, Clacton and Ipswich, are also those with the greatest deficiencies in terms of ANG.

Since populations within the Haven Gateway area could also take advantage of ANG beyond the sub-region boundary, the study area for assessing ANG provision for the Haven Gateway Green Infrastructure Strategy included identifiable ANG within a zone 10km beyond the boundary.



Rowing boat, Essex Wildlife Trust

3.8 Stakeholder consultation

Consultation took place throughout the development of the strategy and consisted of a series of workshops to discuss the opportunities and constraints and identify a vision for green infrastructure within the Haven Gateway.

The workshops included a:

- planning workshop (for the Haven Gateway Planning Officers Group)
- green infrastructure workshop (for green infrastructure specialists)
- stakeholder workshop (to ensure that all stakeholders had the opportunity to view the emerging strategy and input into the process)

Full details of the stakeholder consultation are included at **appendix 6**.

3.9 Development of the Principles

On completion of the analysis of the baseline data, a set of principles were developed to guide future green infrastructure provision (including location, form, resources and linkages) in terms of:

- access (principles to promote, enhance and create greenways, corridors and linkages, including Public Rights of Way (PRoW), with a view to developing and delivering multi-purpose sites) for different users including walkers, cyclists and equestrians
- biodiversity (principles to protect, enhance, create, mitigate and monitor biodiversity resources) which to keep consistent with previous info on principles.
- landscape (principles to safeguard protected landscapes and landscape character types, promote landscape distinctiveness and explore landscape capacity)
- historic environment (principles to understand, protect, manage and enhance historic resources)

These principles will guide the provision and management of a spectrum of greenspace, from ANG (managed primarily for people) to greenspace managed primarily for wildlife, as well as other green infrastructure resources. The promotion/enhancement of existing green infrastructure and the creation of new/alternative ANG and other green infrastructure will offset the direct and indirect effects of new development in the sub-region.

The principles are detailed at **Section 2**.

3.10 Visioning

The results of the analysis, consultation feedback, discussions with stakeholders and the development of the set of principles were then collated and appraised in order to propose opportunities for the promotion, enhancement or creation of existing and new ANG and other green infrastructure, having due regard to:

- opportunities to reduce existing and prevent future ANG deprivation
- opportunities to create green links or enhance corridors, including Public Rights of Way (PRoW), between existing or future green infrastructure resources
- opportunities to secure sites with ANG potential and other green infrastructure, or the linkages and corridors between them
- opportunities to provide alternative resources to relieve pressure on sensitive wildlife and historic sites.
- opportunities to create green infrastructure resources primarily for nature to offset indirect effects of new development
- opportunities to create new strategic links, including PRoW, particularly to and between the principal areas of population, key green infrastructure and the countryside
- opportunities to promote historical resources and landscape distinctiveness and strengthen weak landscape character

The various opportunities proposed are detailed in the schedule at **Section 4**.

Flock of Knot, Natural England, Chris Gibson



Coppice, RSPB, Rick Vonk



3.11 Strategy

A Green Infrastructure Concept Map was developed to provide a framework for future green infrastructure provision in the Haven Gateway (**see figure 17**). The Concept Map included:

- key existing ANG
- strategic promoted walks and cycle routes
- key potential access corridors
- areas where searches for opportunities to create new ANG should be focussed, in order to address current and predicted deficiencies

The opportunities identified during the visioning exercise were mapped and reference on the Opportunities Map (**see figure 18**). This map identifies opportunities and indicative vision projects across the Haven Gateway area at the current time. This list of projects will need to be amended over time as new opportunities arise and projects are completed. A series of map inserts highlight the project opportunities in the main growth nodes at Ipswich, Colchester, Felixstowe/Harwich and Clacton (**see figures 19-22**). The schedule of projects identifies the current lead organisation, the indicative cost of the project, and its priority as judged against criteria related to the over-arching principles and the benefits of green infrastructure to the sub-region.

The Opportunities Map identifies seven types of opportunity for accessible and non-accessible green infrastructure:

- potential green corridor projects with access
- potential green corridor projects without access
- potential river corridor projects
- potential access projects
- potential site projects
- potential green bridges – these include actual green bridges and bridges that provide links over water for access projects
- potential area-based initiatives

The Opportunities Map was accompanied by a Schedule of Opportunities (**figure 23**). Here, each potential project was tabulated together with the following information:

- project type (e.g. ANG, river enhancement project)
- project title
- potential partners (with the lead partner identified, when known)
- approximate cost of the project
- project status, i.e. whether the project is active, imminent or aspirational
- notes regarding project attributes, i.e. whether it reduces ANG deficiency, improves strategic access links, and whether it is located within a growth node
- ability to contribute to the delivery of the Green Infrastructure Concept Plan
- notes relating to the project, e.g. brief description, possible funding sources

A number of the key projects identified on the opportunities map are discussed in more depth in the next section.

Brightlingsea Creek, Natural England, Chris Gibson



4.0 The Green Infrastructure Plan

4.1 Introduction

The results of the visioning exercise are presented on the Opportunities Map and associated insets (see figure 18-22) and detailed on the accompanying Schedule of Opportunities (see figure 23). All project numbers referred to in the text below relate to figures 18-23.

The following paragraphs provide an overview to as to how existing and future green infrastructure provision and opportunities within the Haven Gateway relate to:

- significant areas of ANG, i.e. Regional Level ANG of 500ha+
- key potential access corridors
- green infrastructure in the principle settlements and growth nodes

4.2 Regional Level ANG

The analysis demonstrates that there are currently only two Regional Level ANG (500ha+) sites within the Haven Gateway; a complex of sites to the south-east of Colchester that includes the Essex Wildlife Trust nature reserve at Abbots Hall, and the Forestry Commission woods at Rendlesham and Tunstall, north-east of Woodbridge.

The visioning process has identified a number of potential projects that could address, provide new, or enhance existing, Regional Level ANG, and thus play a role in alleviating some of the identified deficiencies with the Haven Gateway. Such projects are considered below.

Abbots Hall

Abbots Hall farm is a 283ha coastal farm lying adjacent to the northern shore of the Blackwater Estuary in Essex. It has been bought by the Essex Wildlife Trust who took it over in Spring 2000. It is being managed as a viable farm but with emphasis on improving the conditions for wildlife. Part of this work includes a 'managed realignment' over 84ha of former farmland where breaches in the sea wall took place in November 2002. The site currently has limited capacity to accommodate large numbers of visitors due to the sensitivity of the wildlife habitats. Essex Wildlife Trust has far sighted initiatives aimed at encouraging more visitors to Abbots Hall (Project 163) while safeguarding the fragile balance with nature conservation objectives. As the Abbots Hall site will never be able to accommodate the same number of visitors as Tunstall and Rendlesham forests, it is necessary to view the Abbots Hall facilities as part of a wider complex or network of sites. This would or could include Abberton Reservoir, possibly Ardleigh Reservoir and new initiatives possibly based around Fordham's Community Woods to the northwest of Colchester and Martins Farm Parish Park near St Osyth in Tendring.

Rendlesham and Tunstall Forests

Rendlesham and Tunstall forests are capable of accommodating significant numbers of visitors if additional facilities are provided. A new Visitor Centre at Tangham (Project 14) with associated car parking would be required as would additional trails and activity areas (e.g. Project 11 – completion of a corridor linking Snape and Melton via the woods). Another advantage of these woodlands is their location adjacent to but inland from such sensitive coastal locations as Orford, Shingle Street and the Deben Estuary. By intercepting visitors and traffic accessing the coast via the A12, it would be possible to create a hub at Tangham whereby visitors could leave their cars and visit the more sensitive coastal sites by more sustainable, less intrusive means of public transport. The Forestry Commission has recently prepared a Recreation Strategy for the Rendlesham, Tunstall and Dunwich forests; this anticipates increasing numbers of visitors and recognises the forests' role within the context of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty as a recreation hub. Therefore, it would seem expedient to give priority to extending the potential of the visitor facilities, particularly in Rendlesham and Tunstall. A further, far-reaching initiative is proposed to 're-wild' the Sandling conifer plantations and the adjacent areas thus increasing the biodiversity interest of the forests (Project 13) by improving links to the surrounding heathland and farmland.

Alton Water

As the ANG analysis shows, there is a deficiency of Regional Level (500ha +) ANG within the catchments of much of Ipswich, Colchester and Clacton. This is a particular problem because it is within these areas where much of the growth in housing is envisaged. Therefore, in addition to the initiatives mentioned above it will also be necessary to create another major ANG resource to serve Ipswich and Colchester. One area with considerable potential for enlargement is the Alton Water Reservoir, which is currently managed as a multi purpose facility providing water supplies, wildlife conservation, aquatic sports and passive recreation. If additional land could be acquired, particularly on the north and northwest sides of the reservoir, substantial benefit would accrue to the existing and future populations of both Ipswich and Colchester.

Fishing, Essex Wildlife Trust



4.3 Key potential access corridors

Throughout the development of the Haven Gateway Green Infrastructure Strategy, the identification of strategic routes has been considered to be of prime importance in order to provide links out of and between areas of population, and to and between areas of ANG.

Key potential access corridors were identified by Suffolk and Essex County Councils' Access Officers, and these are illustrated on the Concept Map (see figure 17). Wherever possible, such corridors should be multifunctional, providing access for wildlife, pedestrians and cyclists.

The concept was developed during the visioning exercise, and potential projects were identified that might help deliver the aims and objectives. For some of these projects, negotiations will be required to secure particular sections of access. The projects that would aid the delivery of key potential corridors are noted in the Schedule of Opportunities (see figure 23).

Key green corridors in the vicinity of Colchester, Ipswich, Felixstowe, Clacton, and Harwich and Dovercourt are considered in more detail below in the section regarding principle settlements and growth nodes.

4.4 Green infrastructure in the principle settlements and growth nodes

Colchester

Although the town is well served in terms of Sub-regional Level ANG (60ha+ within 3.2km of home), at the District Level (ANG of 20ha+ within 1.2km of home), deficiencies are recorded at the western outskirts (Stanway and Lexden). The greater part of the town is outside of any Regional Level (ANG of 500ha+ within 10km of home) catchment (see comments in section 4.2); the southern part of the town (Stanway, Garrison area, and Rowhedge) being within the catchment of the Abbots Hall complex.

Colchester benefits from Highwoods Country Park, which penetrates from the northern boundary of the town virtually into its centre. This provides a very significant feature, particularly when viewed in association with the flood plain of the River Colne, which is wide and well managed at the upstream end of the town (e.g. the Lexden area), and Castle Park adjacent to the town centre.

Enhancements and extensions to the Colne Valley access routes have been proposed through the town centre, to link up with a potential new cycle access to Rowhedge and a new non-vehicular bridge across the River Colne (Project 160). Links could be developed to an extended Cymbeline Meadow (Project 155), and at Hythe Lagoons (Project 128) a potential new area of ANG close to the Roman River Valley.

On the northern bank of the Colne, the Wivenhoe trail currently provides a further access route out of the town, along the Colne, as far as Brightlingsea, where a ferry provides a link to Mersea Island.

The Garrison provides a further significant area of open space in Colchester, with excellent new cycling and pedestrian paths. This green corridor enhancement (with cycle access) (Project 159) through the Garrison links the town centre with Friday Woods and the Roman River Valley to the south of the town although opportunities exist to enhance these existing networks even further. A number of new initiatives are proposed, including the provision of a green corridor, incorporating pedestrian and cycle provision, linking Copford in the west with Fingringhoe in the east (Project 150). From Wivenhoe further cycle links are available linking into national cycle trail Route 1. Further links would be possible to the proposed Westlands Country Park at Stanway (Project 152), and an extended Gosbecks Archaeological Park (Project 158).

A green corridor is proposed to link the Roman River Valley with Abberton Reservoir (Project 161), and then onto Abbots Hall Farm (Project 163), thus providing recreational access from Colchester to a significant area of ANG.

During the development of new proposals, consideration should be given to providing new/enhanced links to the green areas in the vicinity of the university campus, and housing areas on the western, southern and south-eastern margins of the town, at Stanway and adjacent to the Garrison.

Further research is needed to investigate the potential to create a green corridor around the town's northern edge (Project 134). This could offset some of the impacts of the A12, and promote a new, green urban edge for Colchester. It would provide a link between a new open space at Little Braiswick (Project 136), and proposed access enhancements for Ardleigh Reservoir (Project 132). From Ardleigh Reservoir, a green corridor (Project 131) could provide links to Dedham Vale, and on to Alton Water (Project 75).

A further green corridor (Project 154) could provide pedestrian and cycle access from the town's station, via West Bergholt to Ford Street and an extended Fordham Hall Community Woodland (Project 141).



Pond dipping, Essex Wildlife Trust

Clacton

Although Clacton benefits from its extensive beach and seafront, there is relatively little other natural green space. The Pickers Ditch corridor (Project 113) offers the potential to create a greenway around the eastern and northern fringes of the town, which could possibly be extended to link with Jaywick. Further green links could be made westwards (e.g. Project 118) to Martins Farm Parish Park and Brightlingsea.

There is a need to provide additional ANG and it is anticipated that this might be achieved in association with new development, e.g. a new country park to the north of the town (Project 114).

Harwich and Dovercourt

Despite the presence of a beach and a river frontage that affords fine views across the estuary, Harwich and Dovercourt currently have little or no ANG over 2ha in size, and thus register District and Regional Level ANG deficiency. Further, strategic links into other parts of the Tendring peninsula are poor.

Completion of the cycle route between Mistley and Harwich (Project 100) and a new link to Copperas Wood along the line of the dismantled railway (Project 103) would improve recreational access into and out of the towns. There is the potential to create a significant area of new ANG via St Michael's Country Park at Parkeston (Project 102), and other new ANG via the restoration of Beacon Hill (Project 105). It will be important that such initiatives are supported by appropriate green corridors and access routes to link with residential areas.

Christchurch Park, The Landscape Partnership, Stuart Pryke



Ipswich

Like Colchester, being located for historical reasons at the lowest bridging point of a river estuary, Ipswich has the benefit of a river corridor running through it. Although the Gipping/Orwell flood plain is more urbanised than the Colne within Colchester, an access route, the Gipping Path, runs along its length, linking with the various settlements within the Gipping Valley beyond the town boundary (Sproughton, Bramford, Claydon, etc.). Ipswich is well blessed in terms of parks within the centre of the town, with Christchurch, Holywells, Chantry, Alexandra Parks, for instance, providing easily accessible and popular resources. Similarly, Orwell Country Park provides a sizeable area of greenspace and semi-natural habitat on the eastern bank of the Orwell. To the east are important heathland habitats such as Purdis and Rushmere Heaths.

However, the outer perimeters of the town are less well served, particularly to the north and east. Here, ANG deficiencies at the Regional, Sub-regional and District Levels are recorded.

The creation of a green corridor around the north of the town (Project 59), together with a new green bridge (Project 60) to overcome the potential barrier afforded by the A14 (T) at Whitehouse could significantly enhance access provision, intercept with the various existing and proposed pedestrian and cycle routes that radiate out from the town centre and link existing ANG. There is the potential to address the ANG deficiency in the northwestern parts of the town via new country parks in the vicinity of White House (Project 61) and Henley Rise (Project 62). Such a green corridor could provide an enhanced urban edge for the town and safeguard the green separation of Ipswich and surrounding villages (Claydon, Westerfield, Tuddenham, etc.).

Further to the east there are a number of opportunities to improve recreational access into/out of the town, linking with Kesgrave/Grange Farm, Martlesham, and out to Woodbridge, for instance, (e.g. Projects 49 and 53). Such initiatives include exploration of opportunities to provide access along the Mill River Valley (linking Purdis Heath with the River Deben) (Project 38), heathland enhancement schemes (e.g. Projects 51 and 57), and the creation of a number of potential new ANG sites including the establishment of the country park on the restored Foxhall Landfill Site (Project 48) and Walk Farm Open Space (Project 36) immediately to the east of Adastral Park.

Improvements to the waterfront corridor (Project 68) would provide a green access corridor linking the Gipping Valley and the town centre with an extended Orwell Country Park (Project 69).

To the southwest, extensions to the Belstead Brook Park (Projects 78 and 79) and the creation of a western green corridor/new country park/extension to Chantry Park in the vicinity of Hadleigh Road (Project 67) would provide a necklace of ANG within the urban fringe. These facilities could link with other initiatives, including a new country park at Wherstead (Project 77) and potential open space at Belstead Grove (Project 86), together with a network of green corridors out to the south (e.g. Projects 76 and 81), which would provide enhanced links to the improved Alton Water (Project 75, which has the potential to provide a significant area of ANG), and on to the Shotley peninsula and Dedham Vale.

Ipswich's new urban edge could continue round from Chantry Park to an open space/nature reserve on the former sugar beet factory 'Island' site at Hadleigh Road (Project 64), and so back to the new country park at White House (Project 61).

Felixstowe

Like Clacton, Felixstowe benefits from its seafront, but has very little ANG inland, and thus records ANG deprivation at the District and Regional Levels. It is hoped that a new green bridge (Project 43) over the A14(T) at Trimley would complete the creation of a strategic access route linking the Orwell and Deben estuaries. Other potential initiatives include a green corridor around the northern edge of the town (Project 40), creating a new urban edge and improved access, and the extension of Trimley Marshes (Project 42) with associated access improvements.

5.0 Steps to delivery and future actions

5.1 Introduction

The Haven Gateway Green Infrastructure Strategy sets the framework for delivery of a network of high quality green space to 2021. In order to make that strategy happen on the ground, this section sets out some recommendations from the consultant for 'making it happen' based on success achieved elsewhere.

5.2 Governance

In order to sustain the momentum generated by the partners in coordinating the development of the Green Infrastructure Strategy to date, it is important that a governance structure is maintained in some way, to oversee delivery of the Strategy. Some options are identified below:

Role of Steering Group

One way this could be taken forward is through maintenance of the existing Steering Group, whose role would now change to ensure:

- overseeing of the overall delivery of the strategy
- the setting of targets and outputs for the strategy e.g. hectares of land improved, kilometres of footpaths created or improved etc. and the monitoring of impacts of the priority projects e.g. the benefits in social, environmental and economic terms. These could be linked to Local Area Agreement indicators
- coordination of project development and bidding to the Department of Community and Local Government
- funding is sought for dedicated staff to oversee delivery of the Haven Gateway Green Infrastructure Strategy
- coordination of promotion and community engagement
- engagement is sought from the private sector
- buy-in at Haven Gateway Partnership Board level and with local authority members
- a broader network/forum is developed to disseminate best practice and gather feedback among stakeholder groups and engage the community in project development, skills development and promotion

Area Steering Groups

Existing green infrastructure networks in Thames Gateway- the Greengrids - have evolved various models of governance based on capacity and need and Haven Gateway may like to consider something similar. The **Thames Gateway East London Greengrid** has six Area Steering Groups chaired by one of the partner members and with the support of a design champion funded by the Regional Development Agency, which champions delivery on an area basis. These groups develop and deliver the Greengrid vision, objectives and projects in their local areas, through developing Local Area Frameworks to a more detailed level based on the strategic objectives and principles for the overall plan.

This format could be used to develop and expand upon the concept planning and strategic opportunities work of the Haven Gateway Green Infrastructure Strategy, in particular to:

- coordinate stakeholders and their approaches, consolidate resources, coordinate efforts and facilitate cross partners working
- extend and refine the baseline resource analysis in the Haven Gateway Green Infrastructure Strategy to ensure it is comprehensive and current for local plan and project need
- identify project clusters and strategic transformational projects amongst the local projects, and appraise these against the principles
- form bidding strategies to deliver the key project clusters and strategic projects
- ensure synergy with the Local Development Frameworks and open space strategies

More information can be found at www.london.gov.uk/mayor/auu/green-grid.jsp .

In Haven Gateway the same structure could be applied, for instance, through three area delivery groups, covering Ipswich, Felixstowe/Harwich and Colchester with Clacton reporting back to an overall Project Board or Steering Group.

Dedicated staffing

A key role for the existing Steering Group, is to seek funding for one or more dedicated staff members to oversee delivery of the Haven Gateway Green Infrastructure Strategy. In addition, both Colchester and Ipswich, as the key growth nodes, would benefit from more detailed local green infrastructure strategies and delivery programmes, spearheaded by dedicated project officers. The work of these green infrastructure staff would need to give added value to the emerging Planning Policy Guidance 17 strategy work at a borough or district level.



Orwell Creek, Shotley, Suffolk County Council



Shingle Street



Poppies, Natural England, Chris Gibson



Sunset at Mistley Walls, RSPB, Rick Vonk

5.3 Funding

Funding for the creation and maintenance of greenspace remains a big issue. Appendix 7 lists some existing sources of funding that can be accessed to help create new greenspace and also identifies guidance that suggests alternative models and mechanisms that can support ongoing greenspace management.

5.4 Project delivery

The strategy sets the framework for delivery to 2021 but needs to be monitored and reviewed on an ongoing basis, including against the development of the Local Development Frameworks.

In addition, the Schedule of Opportunities (**figure 23**) should be incorporated into a more detailed phased action plan, to be updated every two years, that incorporates a strategy for governance, funding, promotion and further community and stakeholder engagement.

Project clusters

Some of the vision projects are of a scale that makes them strategic or transformational projects in their own right. Notable amongst these would be the enhancement of existing regional-scale sites with the greatest potential to accommodate large numbers of people such as the forest at Rendlesham and to secure new/extended sites close to Colchester and Ipswich, such as Abberton or Alton Reservoirs (Project 75). Others may best be able to contribute to strategic deficiencies through grouping as project clusters, based on themes such as **landscape character** (e.g. coastal, riverside, heath, woodland), **principle** (e.g. access, quality of life, community, greening development, biodiversity) or **location** (Colchester, Ipswich, Clacton/Walton and Harwich/Felixstowe). Such 'clusters' or 'project programmes' may be able to lever in significant external funding, e.g. from the Department for Community and Local Government or European funding, in a way more modest individual projects cannot hope to do.

Monitoring and evaluation

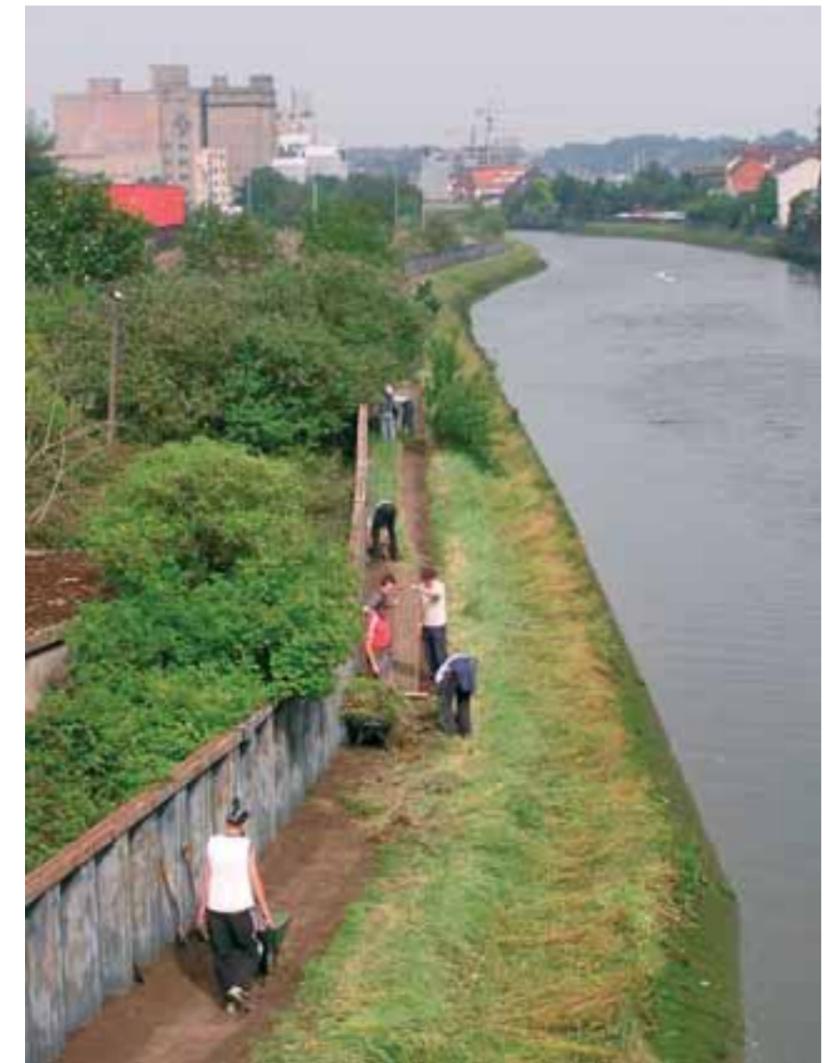
Establish a clear monitoring framework for projects against an agreed set of criteria to compare them against external benchmark and their stated targets. Indicators should be measurable, relevant to both the Haven Gateway Green Infrastructure Strategy principles and the particular project and local context, e.g. relate to Local Area Agreement targets and Community Strategies. Annual Monitoring Reports – which are used by all Local Authorities in the Haven Gateway as part of the monitoring of their Local Development Framework's – could be used to embed green infrastructure provision into the planning process.

Delivery through the planning system

The development of the Haven Gateway Green Infrastructure Strategy sets the framework for delivery of greenspace across the Haven Gateway sub-region. This is just a starting point for delivery, however, and the task now is to get the vision and principles to be adopted into local policy within the emerging local development frameworks and more detailed local green infrastructure framework plans adopted as supplementary planning documents. The aim should be to:

- incorporate Haven Gateway Green Infrastructure Strategy principles into Local Development Framework policy, including development control policies, site allocations, open space strategies, area action plans and site master plans
- produce green infrastructure guidance for Haven Gateway
- investigate the value of a template for creation of guidance at a local level that can be adopted as a supplementary planning document
- ensure local Planning Policy Guidance 17 studies complement and support the Haven Gateway Green Infrastructure Strategy

It is important that the potential to enhance existing ANG and create new green spaces and links is carefully considered within each local development framework in relation to the siting of new housing developments. It is recognised that it is very difficult and costly to assemble and acquire land for open space. There are likely to be many competing calls on Section 106 or roof tariff funds but ANG at 500ha, 60ha and 20ha is much needed within the Haven Gateway Growth Point. It should be part of the sustainability appraisal to determine whether potential new developments will safeguard and enhance existing green infrastructure or, conversely, have a negative impact. It is to be hoped that such appraisals would ensure that new development is able to create further opportunities thereby fulfilling the principles and vision set out at the beginning of this report.



Gipping river, Essex Wildlife Trust



Avocets, Essex Wildlife Trust

5.5 Other tools for delivery

Developer checklists

Detailed guidance could be provided under each of the key principles, stating which party is responsible, which stage of the planning process is relevant and a list of actions to take to follow the principle. Essex Biodiversity Partnership has developed a checklist tool as part of their guidelines for planners and developers; 'Integrating biodiversity into development' which shows how this methodology could be applied. View at www.essexbiodiversity.org.uk.

Concept statements

A 'concept statement' is a simple, clear expression of the kind of place that new development should create. It is a brief explanation of how development on that site should contribute to the local authority's vision. Concept statements explain how the policies and objectives – including greenspace - of the local plan or local development document should apply to each specific site, in order to deliver the best possible economic, social and environmental benefits. Concept statements can be used on greenfield and brownfield sites and in town centre, suburban and rural locations, to identify green infrastructure elements, access routes and wildlife links both within and between key sites. Concept statements are promoted by Natural England. View at www.naturalengland.org.uk.

Design and access statements

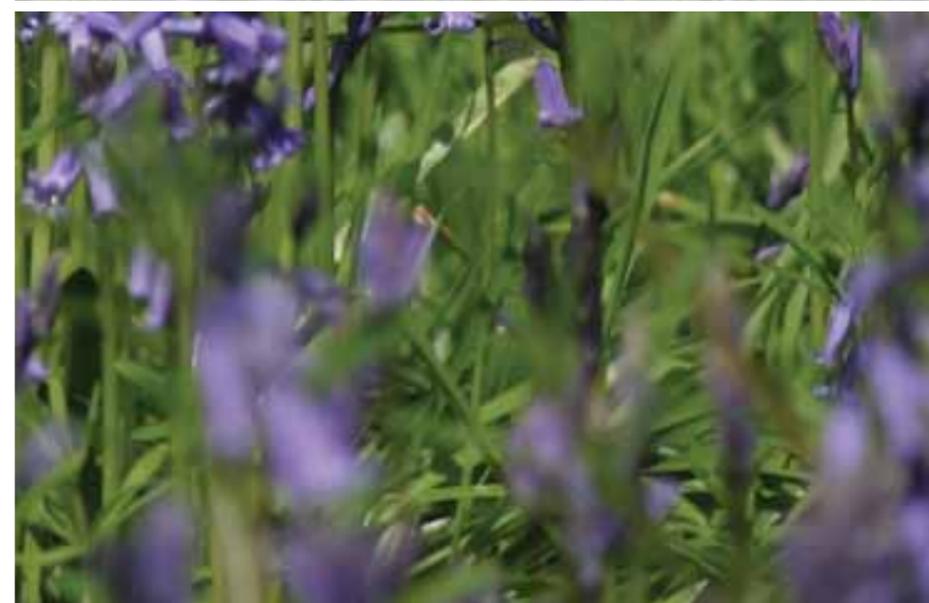
Design and access statements are a recent (mandatory) addition to the planning process and aim to allow the applicant to demonstrate that proposals are based on a thorough design process and a sustainable approach to access. A key part of the statement is an explanation of how local context, including landscape character, biodiversity and heritage, has influenced the final design. The purpose of design and access statements is to verify that applicants have considered the surrounding area and how the proposed development has been sensitively informed by what already exists. These statements provide an opportunity for local authority planners to ensure key green infrastructure assets, on and adjoining a site, are protected and enhanced through the development control process.

Village and town design statements

Village and town design statements set out clear and simple guidance for the design of development, based on the character of the locality, including landscape settings, greenspace, heritage and biodiversity. The documents are produced by the local community and can encourage community support for proposals. Design statements seek to influence the operation of the planning system, so that there is a better chance that new development is in harmony with its setting and makes a positive contribution to the immediate environment, including relevant green infrastructure assets such as woodland, hedgerows grasslands or wetland habitats. View www.naturalengland.org.uk

Cultural assets: conservation management plans

It is recommended that conservation management plans be prepared for developments with an impact on cultural assets. English Heritage considers that conservation management plans should pull together research on what assets exist to develop an understanding of what is important and how features should be preserved and enhanced, including their settings where relevant. Plans can then be prepared for maintenance and/or restoration and proposals for change can be formulated. View www.english-heritage.org.uk.



Bluebells, Natural England, Chris Gibson

5.6 Engagement

Further stakeholder engagement

The process of developing the Haven Gateway Green Infrastructure Strategy has built a consensus for action among green space professionals. This consensus now needs to be promoted among a broader stakeholder group that includes forward planners, development control teams, transport and housing professionals, culture and arts sectors, health professionals, business and investors and developers. Links need to be developed with the Local Strategic Partnerships, appropriate indicators embedded in the Local Area Agreements as well as other local government strategies. Existing local government networks can be used for this purpose or those built up through the Haven Gateway Partnership. The following need to engage further in this way:

- Government, government agencies, the regional development agency and regional assembly, local authorities, Primary Care Trust, developers, house builders, landowners and land managers, utility companies, ports authorities
- voluntary sector: wildlife trusts, Royal Society for the Protection of Birds, Groundwork, British Trust for Conservation Volunteers

Community engagement

Along with an effective promotional programme, a key step in delivery is building community support for green infrastructure through available networks. This can include presentations to local government citizen's panels, parish or town councils, community forums or residents' associations, school councils, or youth panels and forums. In addition promotional displays can be organised for library or supermarket foyers, green fairs or existing greenspace events and public interest and feedback gained through games, competitions or targeted questionnaires.

Green infrastructure champion

The success of the Haven Gateway Green Infrastructure Strategy delivery over time will in part depend upon support at the highest level. Support could best be focussed through engagement of a green infrastructure 'champion' that crosses over communities of interest. A likely figure could come from the Haven Gateway Board or be a local 'celebrity' if appropriate. The 'Green Corridor' partnership programme in west London for example has the support of Chris Packham, conservationist and media personality, to champion their cause.



Cattawade Marsh, Stort Valley, Claire Studren



Cattawade barrage, RSPB, Rick Vonk

5.7 Promotion

A key part of the success of the Green Infrastructure Strategy will be in promoting the concept and principles to a wide audience to build support for the vision, develop community capacity and generate project and funding partnerships across a broad community of interest and place. Key partners in delivery need to be engaged early on in order to ensure buy-in from communities, commerce and Government. This includes not only partners of influence, such as the Department for Communities and Local Government and the East of England Development Agency, who can provide potential funding and champion the programme politically, but delivery partners such as developers, key environmental organisations and community groups.

Branding

The Thames Gateway South Essex Greengrid Partnership recruited a brand consultant in 2004 to develop an identity for the South Essex Greengrid as the strategy for the area was being developed. The brand was developed with all the key stakeholders and was based on the key values and strengths identified around the Greengrid programme. The output was a distinctive logo that could be used to identify partners, projects and promotional activity under the Greengrid umbrella, an evaluation of the programme name and a distinctive strapline that summed up the role of the programme, 'Connecting Green Spaces South Essex'. The brand was designed to have currency both with key stakeholders and the community and to work with the Thames Gateway South Essex Partnership's own brand. The commission cost c. £15,000.

The brand can be viewed at www.greengrid.co.uk.

Web pages

Both the Thames Gateway South Essex Greengrid and the Peterborough Greengrid have used their branding to develop distinctive web sites that are accessible to both stakeholders and community alike. The South Essex Greengrid web site hosts an interactive map of the sub-region that identifies key natural environments, history and archaeology and days out, as well as detailing current projects, latest news and ways for the community, business and developers to get involved. View at www.greengrid.co.uk. The Peterborough Green Grid, Natural Networks, is developing its web site at the moment. It too details latest news and competitions and provides a link to the strategy. View at www.naturalnet.org.uk.

The option exists to host distinct web pages on a key partner's website. Thus the Haven Gateway Partnership could opt to be the host for their green infrastructure pages. Currently, Thurrock Council, for example, is doing this for its own local Greengrid programme, which links to the South Essex Greengrid. View at www.thurrock.gov.uk/countryside/greengrid.

Events

In order to build support for the green infrastructure programme with the community and local businesses, that could help provide sponsorship for the programme, as well as promoting the emerging network to visitors, participatory events such as walks, talks, fun-days and greenspace management days should be encouraged by the key stakeholder partners. The events programmes can be managed locally by partners but brought together under the Haven Gateway Green Infrastructure Strategy brand and promoted through joint web pages, newsletters etc. This approach has worked successfully in the Community Forest programme such as at Marston Vale Community Forest which lists key events at their own and partners' sites on their website www.marstonvale.org/events/.

Newsletters

Both printed and increasingly electronic magazines are good ways of engaging support and disseminating information. Again these are used successfully by the Community Forests in the UK where multiple partners are working together to enhance greenspace and access routes. View at www.marstonvale.org/commentree.

Best practice examples

Extensive 'best practice' on green space and green infrastructure creation is developing nationally. The Steering Group can draw on this existing expertise to promote 'best practice' across the sub-region and develop, in time, its own library of sub-regional examples. Some existing 'best practice' examples can be found at www.cabe.org.uk/casestudies.aspx which details good quality urban open space in particular or at www.landrestorationtrust.org.uk/



Tree Dressing, Dedham Vale, Stort Valley



Flatford, Claire Studren

