Isle of Wight **Green Infrastructure Mapping Study**

ISLE of WIGHT COUNCIL

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Executive Summary

This Green Infrastructure Mapping Study was commissioned as a 3 part process towards developing a Green Infrastructure Strategy for the Isle of Wight.

The first stage was a PPG17 compliant Open Space, Sport and Recreation Study which assessed the quality, value, quantity and accessibility of all publicly accessible open space and determined what local needs were in relation to open space provision on the Island. This report is summarised within this study.

The second stage was a mapping study of all Green Infrastructure assets for the Island, from a strategic level to a local level. The Island is well endowed with a wide range of Green Infrastructure assets, from international designations, to a large AONB, which covers most of the Island, to its wealth of parks, gardens, play areas and green spaces at local level. This study examines all assets across the whole Island to assess what exists, its location, the level of designation, as well as quality of provision. It also seeks to establish any deficiencies and potential opportunities that may exist.

This report covers the following:

Introduction – Section 1

Defining the importance of Green Infrastructure in our daily lives and the challenges that we face within urban and rural environments. Developing GI, a process which involves planning, design, implementation and management, presents an opportunity to achieve many social, environmental and economic objectives. These range from climate change mitigation to the importance of place making in sustainable communities.

Green Infrastructure Terminology – Section 2

A summary of terms related to Green Infrastructure such as assets, connectivity and multi-functionality. It also defines what we could be included in the GI network at the local, district and regional scales.

Why Green Infrastructure? – Section 3

A brief summary as to why we should be adopting a Green Infrastructure approach to planning, design and management of landscapes. It summarises Natural England's stance on Green Infrastructure as well as the South East Green Infrastructure Framework's view on why it is important. These are detailed further in Section 5.

Definition of Green Infrastructure – Section 4

Summarising a number of definitions but also what is included within the scope of Green Infrastructure. These include definitions from Natural England, The Landscape Institute, and the South East Green Infrastructure Framework. It summarises the range of typologies and the stance adopted as part of the recent PPG17 Open Space, Sport and Recreation Study as well as the difference between PPG17 and Green Infrastructure.

Green Infrastructure Policy Review – Section 5

A summary of National, Regional and Local policies and strategies supporting and advocating a Green Infrastructure approach. A wealth of information is now available on developing Green Infrastructure and new policy guidance and strategic advice emerges on a regular basis. Many existing National, Regional and Local policies also cross reference and impact either directly or indirectly on GI. It is important to be aware of these and support cross cutting initiatives that benefit GI as much as possible. The development of a Green Infrastructure Strategy that achieves and benefits as large a range of mutually beneficial initiatives and ultimately sees improvements and enhancements to the GI network is a major priority.

Following this process of a policy review means that green infrastructure is embedded from the outset through study and understanding of place and character and is secured, protected, enhanced and managed through appropriate policies. A Green Infrastructure Strategy will have the potential to engage and concentrate a range of partners in a common focus.

Strategies are based upon an analysis of existing provision, deficiency and need. This policy review and analysis guides the strategy's priorities as well as highlighting opportunities for green infrastructure creation, enhancement and investment. Strategies are generally produced at sub-regional and local scales, and address the mechanisms needed for delivery at these scales.

Isle of Wight Green Infrastructure Data Collection and Evidence Gathering – Section 6

This section covers the mapping of all the Green Infrastructure assets for the Isle of Wight, from strategic designations to local green spaces. With this in mind, and the Isle of Wight's intention to produce a Green Infrastructure Strategy with the many partners involved, we have carried out comprehensive data collection and evidence gathering. Consideration of green infrastructure at the evidence gathering stage helps to meet the requirements of the 'test of soundness' for development plans, provides a firm foundation for later planning decisions and supports future funding bids.

This section is comprehensive and covers all aspects of Green Infrastructure that we have been able to collate and map into a GIS format and includes the following datasets:

- Data set ONE – International, National and Regional GI Regional GI
- Data set TWO - District & Island GI
- Data set THREE – Local GI
- Data set FOUR – Coastal and River Biodiversity
- Data set FIVE – SINC's
- Data set SIX – Water Framework directive Data/Goundwater Source Protection Zone (Source Environment Agency)
- Data set SEVEN - Local Biodiversity Opportunities
- Data set EIGHT – Recreation and Community Services
- Data set NINE – Institutions
- Data set TEN – Landscape – Rights of Way
- Data set ELEVEN – Agriculture Land Classification – Best & Most Versatile Land Assessment (BMV)
- Data set TWELVE – Minerals and Extraction Sites
- Data set THIRTEEN – Regional Development – Key Regeneration Areas & Settlements
- Data set FOURTEEN – Archaeology, Conservation and Landscape
- Data set FIFTEEN – Landscape Character Areas (Source Isle of Wight AONB)
- Data set SIXTEEN – Green Corridors
- Data set SEVENTEEN – PPG17 Quality & Value Assessments (see Section 8)
- Data set EIGHTEEN – SINC Sensitivity Map (see Section 8)
- Data set NINETEEN – SSSI Quality Map (see Section 8)
- Data set TWENTY – Accessibility (see Section 8)

Isle of Wight Green Infrastructure Analysis - Local Context – Section 7

Where is it that we want to be, looking at context, quality and interaction. This section uses a simple matrix to assess where the Isle of Wight needs to be and what the desired state of the GI network should be. It suggests there are two points at which planners should focus on Island-wide GI issues:

1. In considering how to enhance quality of environment, quality of life and quality of place through a focus on green spaces, links and networks of green spaces; and

2. In considering how to manage development pressures and the implications of development scenarios on existing green spaces, access to green spaces and wider green infrastructure.

Deficiencies and Opportunities – Section 8

This builds on the work from the PPG17 study as well as the Mapping Study, with an analysis of any deficiencies, particularly in quality, connectivity and accessibility and possible opportunities that are available.

As part of the PPG17 study, a range of standards were applied in relation to quality, quantity and accessibility. It summarised that overall quality of the open space network across the island was generally high and that provision of open space across most typologies was also excellent, with the exception of allotments. When accessibility and distance thresholds were applied, most local communities had good access to a range of open space typologies, although there were a number of small deficiencies, particularly in Ryde.

The GI study has analysed further a range of qualitative and accessibility, particularly with regards to landscape character, quality of SSSI based on Natural England assessments as well as local Conservation Officer assessments of quality of natural green space. We have also assessed accessibility based on the latest ANGSt (Accessible Natural Green Space Standards) guidance from Natural England. These have been mapped in Section 8. The GI Study has looked at the impact of the revised Habitat Regulations and as a consequence this study has looked at issues affecting some of the most sensitive habitats on the Island. These have been locally assessed based on an agreed methodology from low, medium and high sensitivity. These include SAC, SPA, and SSSI. Many of these sites display high levels of sensitivity and as a result, opportunities have been suggested that mitigate some of the pressures currently experienced by these areas. Accessibility overall has been deemed generally good and when applying ANGSt, overall provision is still very good. However, we applied the PPG17 accessibility standards to the key regeneration areas to assess any local deficiencies and noted a number of natural green space deficiencies particularly in Cowes and East Cowes. Overall though, accessibility standards were very good.

This section also mapped the overall GI assets in a series of maps for the key regeneration areas and the Island as a whole, highlighting all the Environmental Characteristics for each area and the Island, to allow an assessment of the full GI assets available. As a consequence, we have then suggested what needs protecting, what can be changed and enhanced and where there are gaps, what is tradable and what needs linking. It overlays much of the information with available health data previously mapped for the Island and allows a number of opportunities to be proposed and developed in Section 9.

Strategic and Local Green Infrastructure Network Opportunities – Section 9

This section looks at issues, needs and opportunities for the 3 key regeneration areas and the Island as a whole. In particular it assesses the pressures on more sensitive habitats and green spaces and how the existing network can be improved and enhanced to alleviate some of these pressure points. It summarises:-

- Quantity of open space generally is excellent across the Island for most typologies
- Accessibility to most open spaces including Natural Green Space is very good with some local deficiencies in a small number of locations. There are local deficiencies within towns to natural green space typologies
- There are concerns in relation to health especially among children and young people with figures well above the national average
- The rights of way network is comprehensive and high quality across the Island but there are a number of gaps
- There are a considerable number of sites that are considered “sensitive” and are under pressure and need to be considered under the wider Habitat Regulations
- The PPG17 study recommends developing a Strategic and Local Network which should form the core of any future GI Strategy.

This section therefore assesses for each Key Regeneration Area and the Island, current issues, quantity, multifunctionality, specific sensitivities, needs and suggests a number of opportunities that could be developed. These are mapped as Green Infrastructure Concept Plans and should be the foundation for any future GI Strategy. In particular for the Island as a whole, it looks at the concept of “corridors, stepping stones and sites” and the issue of connectivity. The Island wide Green Infrastructure Conceptual Plan has therefore been proposed which takes into account:-

- The 3 key regeneration areas
- Corridors (physical and biodiversity)
- Areas of sensitivity
- Areas of opportunity.

The Next Step – Section 10

How does this translate into a deliverable Green Infrastructure Strategy?

This Mapping Study is comprehensive and covers a wide range of Green Infrastructure assets and makes a number of observations and recommendations. It provides, along with the PPG17 Open Space, Sport and Recreation Study, enough evidence and information for the development and delivery of the final stage – A Green Infrastructure Strategy for the Isle of Wight.

The development of a Green Infrastructure Strategy should set out how green infrastructure in the Isle of Wight can be made to function as effectively as possible to deliver a wide range of ecosystem services in the form of a carefully structured robust network of interconnected and multi functional green spaces. The Green Infrastructure Strategy for the Island should:

- Set up a framework for strategic initiatives in the Isle of Wight to provide a high quality of life for the people who live, work and visit the Isle of Wight
- Seek to maximise multifunctional use of open space and natural green spaces for a range of benefits including biodiversity, climate change, economic investment and activity, health, landscape, recreation and well-being
- Aim to promote connectivity of all types of green space at local, district and Island-wide scales, particularly in relation to the key regeneration areas
- Provide a key mechanism of the Islands proposals for mitigation in relation to the Habitats Regulations

With this in mind, the Strategy should provide:

- The rationale for the Isle of Wight to continue to invest in green infrastructure planning and management, working with a range of partners and stakeholders across the Island
- A review of the evidence collected as part of this GI Study
- GI Themes and Objectives
- Projects to be delivered
- Implementation – governance and policy

1. Introduction

Our lives are surrounded and enriched by green assets. Some of these, like public parks, are planned and designed. Others, such as protected coastlines, may be more natural. Sometimes our green assets are unintended consequences of other kinds of planning – road verges and railway embankments provide a network of connected green spaces. Up until recently, these assets have generally been thought of in terms of single functions, for example parks were conceived of as areas for play and recreation, wildlife reserves were places dedicated to the preservation of particular species and canal towpaths or cycle routes were planned for leisure or transport use.

The networks of green spaces, rivers and lakes that intersperse and connect our villages and towns are at the heart of our green infrastructure (GI). These elements perform a vast range of functions and deliver many benefits. Developing GI, a process which involves planning, design, implementation and management, presents an opportunity to achieve many social, environmental and economic objectives. Its multifunctional nature, with benefits enhanced through connectivity, means that GI represents an approach to the use of our limited land resource which cannot now be ignored.

The value of natural elements in urban and rural environments, and the economic, social and environmental benefits they provide, is beginning to gain recognition. However, there is still a widespread lack of awareness of how important these assets are, demonstrated by the frequent failure to plan, design and manage them appropriately. Natural assets are often seen as separate entities – afterthoughts in the discipline of land use planning which gives priority to 'grey infrastructure' at the expense of the natural environment. This approach fails to recognise the symbiosis between the quality and connectivity of natural assets with local environmental and economic performance. The result can be a disconnected series of inadequately-managed natural elements which deliver far fewer public benefits than could be provided.

Overcoming this failure – of policy, investment and service delivery – relies on the recognition that the natural environment has a critical role to play in sustaining life, and the quality of that life, through the provision of a range of different functions. It relies on an understanding that these functions are multiplied and enhanced significantly when the natural environment is planned and managed as an integrated whole; a managed network of green spaces, habitats and places providing benefits which exceed the sum of the individual parts.

It is this concept of connectivity and multifunctionality which makes the GI approach such an important part of landscape planning and management.

The concern for the natural environment goes beyond environment for environment's sake. The advocacy of GI delivery in urban and rural environments is based on the fact that a wider range of challenges depend on both its quality and integrity, including:

- Climate change mitigation and adaptation
- Safeguarding and encouraging biodiversity
- Economic productivity
- Food and energy security
- Public health and wellbeing
- Social cohesion
- Reconnecting people with the natural environment
- Sustainable use of a finite land resource
- Water security with resource management and flood attenuation
- Timber and wood fuel
- The importance of place-making in sustainable communities

A number of barriers to GI delivery inhibit uptake of an approach which leads to the development of rich multifunctional places. With an improved understanding of the concept, greater policy support, increased investment and a more collaborative approach, GI should become more central to the way we think about and use our land.

2. Green Infrastructure Terminology

GI includes the network of green spaces and other natural elements such as rivers and lakes that are interspersed between and connect villages, towns and cities.

Individually these elements are GI assets and the roles that these assets play are GI functions. When appropriately planned, designed and managed, these assets and functions have the potential to deliver a wide range of social, environmental and economic benefits.

GI Assets include the natural elements which provide social, environmental or economic benefit. They can be specific sites or broader environmental features within and between rural and urban areas. The Landscape Institute suggests outlining the different types of GI asset by classifying them according to the spatial scale at which each would typically be found. See Table 2-1.

Connectivity between different GI assets will help maximise the benefits that they generate. This connectivity can be visual or notional; however generally physical connections do make the most impact although notional and conceptual connections do have a value in safeguarding strategic networks from development and identifying future enhancement opportunities.

This connectivity can enhance public engagement with the natural environment, improve opportunities for biodiversity migration and assist in encouraging sustainable forms of travel.

GI Functions are roles that assets can play if planned, designed and managed in a way that is sensitive to, and includes provision for, natural features and systems. Each asset can perform different functions, a concept known as multifunctionality.

Understanding **Multifunctionality** is central to the GI approach to land use planning. Where land performs a range of functions it affords a far greater range of social, environmental and economic benefits than might otherwise be delivered.

Ecosystem Services – underpinning the multiple functions that GI assets perform is the concept of ecosystem services.

Health and wellbeing depends on the range of services provided by ecosystems and their constituent parts: water, soils, nutrients and organisms. These services include:

- **Support:** necessary for all other ecosystem services, e.g. soil formation and photosynthesis
- **Provision:** food, fibre, fuel
- **Regulation:** air quality, climate control, erosion control
- **Culture:** non-material benefits for people, including aesthetic qualities and recreational experiences

GI Approach - GI approaches to land-use planning promote the widest range of functions which can be performed by the same asset, unlocking the greatest number of benefits. Such an approach enables us to demand more from the land in a sustainable way; by helping to identify when it can provide multiple benefits and to manage the many, often conflicting, pressures for housing, industry, transport, energy, agriculture, nature conservation, recreation and aesthetics. It also highlights where it is important to retain single or limited land use functions

Local, neighbourhood and village scale Town, city and district scale City-region, regional and national scale	Town, city and district scale	City-region, regional and national scale
Street trees, verges and hedges	Business settings	Regional parks
Green roofs and walls	City/district parks	Rivers and floodplains
Pocket parks	Urban canals	Shoreline
Private gardens	Urban commons	Strategic and long distance trails
Urban plazas	Forest parks	Forests, woodlands & community forests
Town & village greens & commons	Country parks	Reservoirs
Local rights of way	Continuous waterfront	Road and railway networks
Pedestrian & cycle routes	Municipal plazas	Designated green belt and Strategic Gaps
Cemeteries, burial grounds & churchyards	Lakes	Agricultural land
Institutional open spaces	Major recreational spaces	National Parks
Ponds and streams	Rivers and floodplains	National, regional or local landscape designations(AONB's, NSAs and AGLVs), Canals
Small woodlands	Brownfield land	Common lands
Play areas	Community woodlands	Open countryside
Local nature reserves	(Former) mineral extraction sites	
School grounds	Agricultural land	
Sports pitches	Landfill	
Swales and ditches		
Allotments		
Vacant and derelict ground		

Table 2-1: Typical GI Assets and their Associated Scales.

3. Why Green Infrastructure?

There has been a plethora of information on why we should be adopting a GI approach into the planning, design and management of landscapes. The multifunctional nature of GI assets, underpinned by ecosystem services, means that they can deliver a diverse range of benefits which are mutually reinforcing and can be enhanced by the connectivity of these assets. It is important to fully appreciate the many benefits that GI can generate. The Landscape Institute include the following in their Position Statement on GI *'Green Infrastructure: connected and multifunctional landscapes April 2009'*:

- Climate change adaptation
- Climate change mitigation
- Water management
- Dealing with waste
- Food production
- Biodiversity enhancement, corridors and linkages
- Recreation and health
- Economic values
- Local distinctiveness
- Education
- Stronger communities

Natural England's *'Green Infrastructure Guidance 2009'* **highlights the following:**

- Access, recreation, movement and leisure
- Habitat provision and access to nature
- Landscape setting and context for development
- Energy production and conservation
- Food production and productive landscapes
- Flood attenuation and water resource management
- Cooling effect

The *'South East Green Infrastructure Framework – From Policy into Practice* **(***June 2009)'* **key message is** *"Green Infrastructure performs a wide range of functions. These deliver benefits that meet the South East's sustainable development policy objectives".*

It highlights a number of key functions, as below:

- Conservation and enhancement of biodiversity, including the need to mitigate the potential impacts of new development
- Creating a sense of place and opportunities for greater appreciation of valuable landscapes and cultural heritage
- Increasing recreational opportunities, including access to and enjoyment of the countryside and supporting healthy living
- Improved water resource and flood management and sustainable design
- Making a positive contribution to combating climate change through adaptation and mitigation of impacts
- Sustainable transport, education and crime reduction
- Production of food, fibre and fuel

What this guidance is perfectly clear about is that when planning green infrastructure in the region, practitioners should determine the social, economic and environmental baseline at the local scale. This should inform an analysis of local needs, potential benefits and opportunities in respect of the key green infrastructure functions and allow their relative priorities to be determined according to local circumstances and regional policy priorities.

This Green Infrastructure Study therefore follows the following structure:

- **Definition of Green Infrastructure**
- **Green Infrastructure Policy Review – National, Regional and Local**
- **Isle of Wight Green Infrastructure Data Collection and Evidence Gathering**
- **Isle of Wight Green Infrastructure Analysis – The Local Context**
- **Deficiencies and Opportunities**
- **Strategic and Local Green Infrastructure Network - Opportunities**
- **The Next Step**

4. Definition of Green Infrastructure

There have been a number of definitions of Green Infrastructure from a number of sources and most of them are very similar and have a common pattern to their definitions, in relation to multi functionality and networks. For the purpose of this study, the Steering Group adopted the definition proposed by *'South East Green Infrastructure Framework – From Policy into Practice 2009'* as the key stakeholders felt this represented most groups views on what GI meant to their organisations.

For the purposes of spatial planning, the term green infrastructure (GI) relates to the active planning and management of sub-regional networks of multi-functional open space. These networks should be managed and designed to support biodiversity and wider quality of life, particularly in areas undergoing large scale change.

The following areas can form part of networks of green infrastructure:

- **Parks and Gardens** - including urban parks, country parks and formal gardens
- **Natural and Semi-natural Urban Greenspaces** - including woodlands, urban forestry, scrub, grasslands (e.g. downlands, commons and meadows), wetlands, open and running water, wastelands and derelict open land and rock areas (e.g. cliffs, quarries and pits)
- **Green Corridors** - including river and canal banks, cycleways, and rights of way
- **Outdoor Sports Facilities** (with natural or artificial surfaces, either publicly or privately owned) - including tennis courts, bowling greens, sports pitches, golf courses, athletics tracks, school and other institutional playing fields, and other outdoor sports areas
- **Amenity Greenspace** (most commonly, but not exclusively, in housing areas) – including informal recreation spaces, greenspaces in and around housing, domestic gardens and village greens
- **Provision for Children and Teenagers** - including play areas, skateboard parks, outdoor basketball hoops, and other more informal areas (e.g. 'hanging out' areas, teenage shelters)
- **Allotments, Community Gardens, and City (Urban) Farms**
- **Cemeteries and Churchyards**
- **Accessible Countryside in Urban Fringe Areas**
- **River and Canal Corridors**
- **Green Roofs and Walls**

For the purpose of this study, a detailed analysis was carried of GI assets for the Isle of Wight and was based on the following:

- Natural England Guidance
- South East Green Infrastructure Framework
- Best Practice
- The recently completed PPG17 study for the Isle of Wight
- Availability of data sets and information

National Planning Policy Guidance 17 (PPG17) requires local authorities to undertake robust assessments of existing and future needs for open space, sports and recreational facilities. The definition of green infrastructure in the South East Plan is broadly consistent with the typology in PPG17.

Assessments under this Guidance will therefore provide a valuable information source for planning green infrastructure. A robust assessment has recently been carried out for the Isle of Wight completed in April 2010 based on an audit of open spaces in September 2009.

The audit encompassed the following typologies:

- **Parks and Gardens**
- **Natural Green Space**
- **Outdoor Sports Facilities**
- **Allotments and Community Gardens**
- **Children and Young Peoples Facilities**
- **Local Amenity Green Spaces**
- **Churchyards and Cemeteries**
- **Education**
- **Green Corridors**

The distinction between planning for open space (Open Space or Green Space Strategies, based on Planning Policy Guidance 17 or PPG17 type audits) and planning for green infrastructure.

Sometimes the distinctions can appear subtle, as all green spaces can form part of green infrastructure networks, although the scope of open space strategies and green infrastructure strategies are quite different. Green Space strategies work within the typology of recreational, amenity and public open spaces identified by PPG17: Planning for Open Space, Sport and Recreation (2002).

They evaluate publicly accessible open space provision within these typologies at the local authority scale, noting issues in relation to condition, quality and access, often to inform a strategy and action plan that sets out future management and regeneration policies. They form a complementary strategy to Local Rights of Way Improvement Plans.

This guidance draws a distinction between planning for green infrastructure and open/green space strategies in the following terms:

- Green infrastructure goes beyond the site specific, considering also the 'big picture' – landscape context, hinterland and setting, as well as strategic links of sub regional scale and beyond
- Green infrastructure considers private as well as public assets
- Green infrastructure provides a multifunctional, connected network where benefits are derived from ecosystem services
- Whilst PPG17 compliant studies consider typologies beyond sports and amenity greenspace, spaces are considered primarily from access, quality and management perspectives, rather than consideration of wider environmental benefits and services. These green spaces are, however, important constituents of a green infrastructure network

5. Green Infrastructure Policy Review – National, Regional and Local

Planning policy supports implementation of green infrastructure into local policies, reflecting the wide range of benefits it can bring to communities and the environment. This section focuses on the national context as well as where it is covered in relation to local policies.

The Regional Policy context has now been revoked, nevertheless, it was developed taking into account the national context, Natural England's guidance and recognised best practice. On this basis references to the Regional Policy context serves as a useful indication on how to draw these sources together and apply it to the local context.

This section briefly sets out the results of the document review we have conducted for the Green Infrastructure Study for the Isle of Wight Council and summarises a number of existing strategy or other documents which are relevant to the assessment, starting with national, working down to regional and then Authority-wide strategies and plans. Green Infrastructure is a relatively new concept and this is very much reflected within the guidance documents reviewed below where there is a degree of repetition.

National

PPS1 Delivering sustainable development (2005)

PPS1 recognises the condition of our surroundings has a direct impact on the quality of life and the conservation and improvement of the natural and built environment brings social and economic benefit for local communities.

Accordingly planning should seek to maintain and improve the local environment and help to mitigate the effects of declining environmental quality through positive policies on issues such as design, conservation and the provision of public space. In addition PPS1 requires development to include an appropriate mix of uses, including the incorporation of green space.

The Planning and Climate Change Supplement to PPS1 (2007)

This Supplement suggests spatial strategies and development should help to deliver green infrastructure and biodiversity, amongst other things, as part of a strategy to address climate change and mitigation. The supplement recognises that open spaces and green infrastructure can contribute to 'urban cooling, sustainable drainage systems and conserving and enhancing biodiversity'.

PPS9 Biodiversity and Geological Conservation (2005)

The PPS suggests local authorities should aim to maintain natural habitat networks by avoiding or repairing the fragmentation and isolation of natural habitats through policies in plans. Such networks should be protected from development, and, where possible, strengthened by or integrated within it.

PPS12 Local Spatial Planning (2008)

PPS12 defines green infrastructure as:

"A network of multi functional green space, both new and established green spaces, both rural and urban, which supports the natural and ecological processes and is integral to the health and quality of life of sustainable communities".

The PPS requires local planning authorities to identify within their Core Strategies the amount of green infrastructure to be provided , who will provide it and when.

PPG17 Planning for Open Space Sport, and Recreation (2002)

PPG17 requires local authorities to produce co-ordinated open space strategies which encourage the full range of green infrastructure functions and benefits to be realised.

PPS25 Development and Flood Risk (2006)

This PPS recognises the significant role of green infrastructure in reducing flood risk through for example sustainable drainage and surface water management.

The Climate Change Act (2008)

The Act requires the Government to report on climate change adaption at minimum 5 yearly intervals, noting the risks brought by climate change and mitigation measures to put in place to address them. The Act also confers the requirement on public bodies and statutory undertakers to undertake climate change risk assessments and to plan to address those risks.

Accessible Natural Greenspace Standards – Promoting the Natural Green structure of Towns and Cities: English Nature

Since updated in 2010 in *'Nature Nearby Accessible Natural Greenspace Guidance'*, Natural England's Accessible Natural Greenspace Standard (ANGSt) provided a set of benchmarks for ensuring access to places near to where people live.

These standards recommended that people living in towns and cities should have:

- An accessible natural greenspace of at least 2 hectares in size, no more than 300 meters (5 minutes walk) from home
- At least one accessible 20 hectare site within two kilometres of home
- One accessible 100 hectare site within five kilometres of home
- One accessible 500 hectare site within ten kilometres of home
- One hectare of statutory Local Nature Reserves per thousand population

The purpose of this model is to guide local authorities in identifying the current level of provision of accessible natural greenspace and to assist with the production of local standards and targets.

While it is expected that local authorities should aspire to meet the provisions of the standard, it is recognised that this will be more difficult in some urban contexts than in others. Local authorities are therefore encouraged to determine for themselves the most appropriate policy response in the light of a sound understanding of the standard, the needs of the local community and the value of accessible natural greenspace to it, the existing greenspace resource and funding constraints.

The model should be viewed as a point of reference against which to assess the natural greenspace resource and from which local targets for continual improvement can be developed, as yardsticks for progress towards an aspiration to meet its requirements as fully as possible. Implementing the model is the starting point for a creative process of greenspace planning and management, and not an end in itself.

This guide is intended to outline a general approach to the use of the model and to present options as to how this might be tailored to suit available resources and the local context. In some areas, this will be hard to achieve in the short term, but it should be a long-term aim for all local authorities, within their Greenspace Strategies.

The essential role of green infrastructure: eco-towns green infrastructure worksheet (2008) TCPA, CLG and Natural England

The worksheet is designed to provide guidance on how to design, incorporate and operate green infrastructure (GI) that is fully "fit for purpose". The main parts of the worksheet primarily considered the practical aspects of green infrastructure provision and standards to be achieved. The Annexes provide greater detail on the individual components of green infrastructure and on the potential for green infrastructure to significantly underpin the sustainability of eco-towns.

The key recommendations of the worksheet of relevance to this study suggest green infrastructure should:

- Be provided as a varied, widely distributed, strategically planned and interconnecting network
- Be factored into land values and decisions on housing densities and urban structure
- Be accessible to local people and provide alternative means of transport
- Be designed to reflect and enhance an area's locally distinctive character, including local landscapes and habitats
- Be supported by a green infrastructure strategy
- Be multi-functional, seeking the integration and interaction of different functions on the same site and across a green infrastructure network as a whole
- Be implemented through co-ordinated planning, delivery and management that cuts across local authority departments and boundaries and across different sectors
- Be able to achieve physical and functional connectivity between sites at all levels and right across town
- Be implemented primarily through focused green infrastructure strategies and the spatial planning system and formally adopted within the development plan
- Be established permanently with financial support for continued maintenance and adaption

Natural England Policy Position Statement: Housing Growth and Green Infrastructure (June 2008)

Natural England believe the provision of multi-functional green infrastructure should be an integral part of all new development as it can considerably enhance the quality of the development and deliver a wide range of benefits for people and the natural environment.

Accordingly they suggest that the provision of green infrastructure should be an integral part of the creation of sustainable communities throughout England. To achieve this English Nature call for networks of multi-functional green infrastructure providing a wide range of environmental and quality of life benefits to be identified in regional and local plans and designed into all major development and regeneration schemes from the outset. In addition they suggest substantial funding could be provided for the creation and long term maintenance of extensive green infrastructure through the Community Infrastructure Levy.

This is seen as a viable funding option. Other funding sources are expanded on in NE176 Natural England's GI Guidance, as well as other documents such as the regional framework document.

Funding options may also include business opportunities relevant to the GI network, such as through increased recreational access (increasing use of visitor accommodation/farm shops), as well as opportunities through implementation of wider land use plans (forestry, water, transport or shoreline management plans).

Natural England Strategic Direction 2008-2013

Natural England's Strategic Direction document describes the outcomes they want to achieve for the natural environment over the five years between 2008 and 2013. Under outcome 3 "*Sustainable use of the natural environment*" sub section 3.1 *"Land is used for social and economic development in a way that recognises, protects and enhances the value of the natural environment"*, they seek to ensure: *"that there is provision for high quality green infrastructure in all new urban development and seek opportunities to expand and improve green infrastructure in existing urban area, particularly through regeneration projects"* which appears to be Natural England's consistent message on green infrastructure.

Natural England Green Infrastructure Guidance (March 2009)

This guidance provides a comprehensive overview of the concept of GI and signposts to other information such as Natural England's definition of GI, its policy statement and track record in driving delivery. It also maps out wider policy priorities and drivers for GI.

Natural England anticipates the use of the guidance will help to facilitate a co-ordinated and consistent approach to green infrastructure strategies and promote the contribution of green infrastructure to 'place-making' as well as demonstrating that it adds to the value of plans and projects through the delivery of multiple benefits which the more traditional grey infrastructure solutions may not be able to offer.

The Guidance is divided into three sections which address:

- The definition of green infrastructure and Natural England's role. It also clarifies the distinction between planning for open space and green infrastructure, which is useful for this study. That is that:
  - "*Green infrastructure goes beyond the site specific, considering also the 'big picture' – landscape context, hinterland and setting, as well as strategic links to the sub regional scale and beyond*
  - *GI considers private as well as public assets*
  - *It provides a multifunctional, connected network, delivering ecosystem services*
  - *Whilst PPG17 compliant studies consider typologies beyond sport and amenity greenspaces, spaces are considered primarily from the access, quality and management perspectives, rather than consideration of the wider environmental benefits and services. These green spaces are, however, important constituents of a green infrastructure network"*
- It considers the function and benefits of GI and the links to related concepts such as place making. 'Place making' means recognising the character and distinctiveness of different places and that the quality and management or area, including street and parks are directly related to civic pride, community and identity. Green Infrastructure can play a key role in this process as a holistic understanding of the landscape and environmental settings and sensitivities as they relate to GI is critical to the understanding of character and place. Accordingly GI plans and policies are essential to sustainable planning policies
- It addresses the role of GI strategies and how to embed them in plan making and the development management process. The document notes that many opportunities to deliver GI will not lie with the local planning authority but with other partners or sections within the Council. It is therefore essential that GI is incorporated within a range of documents including the Sustainable Community Strategies, Local Transport Plans and Local Area Agreements to name a few. In respect of Local Development Frameworks the Guidance recommends planning for GI should occur at the evidence gathering stage to ensure GI is properly planned in advance of development or delivered alongside so it can be planned as an integral part of the community

Very helpfully the Guidance outlines a model process for integrating GI in plan making which identifies what actions are required the various stages of the Development Plan process, together with the key outputs from each stage.

Natural England's 'No Charge? Valuing the Natural Environment' (2009)

This Natural England report sets out the contribution that nature makes to our economy (such as clean water, carbon storage) to ensure that its value is recognised.

It summarises that a healthy natural environment is indispensable to current and future economic prosperity stating that conserving the natural environment is the most efficient and effective way to deliver a huge range of benefits to society.

The evidence is overwhelming. A healthy natural environment provides cost-effective solutions to many of the challenges we face; from flooding and coastal defence through to delivering fresh water and adapting to climate change. The economic evidence suggests that the benefits of ecological solutions outweigh the cost, many times over in some cases.

It especially highlights the following:

- People who live within 500m of accessible green space are 24 per cent more likely to meet recommended levels of physical activity. Reducing the sedentary population by just 1 per cent would reduce morbidity and mortality rates valued at £1.44 billion for the UK

Investing in a healthy natural environment is essential to deliver the many benefits highlighted in the report.

Investing in a healthy natural environment is critical if we are to deliver these benefits on a scale that makes a significant contribution to future prosperity. The challenges of climate change and food, water and energy security cannot be overcome with technology alone. New ecological solutions are required to deliver multiple services and benefits cost-effectively.

To realise these ambitions and continue to enhance our prosperity, we need unparalleled innovation and a new integrated approach to delivery – an ecosystems approach. This will require:

- A deeper understanding of the economic value of nature and natural capital and the use of an ecosystem services approach to better inform decision-making processes
- Enhanced public investments in the natural environment to deliver greater efficiency and improved outcomes
- New mechanisms and institutions that enable more ecosystem services to become part of the formal economy, thereby stimulating innovation, enterprise and investment in their provision

Natural England's 'Nature Nearby Accessible Natural Greenspace Guidance' (March 2010)

This new guidance is a key tool for those working on the planning and management of parks and green spaces and their 'natural' development. It sets out the standards they are promoting to provide high quality accessible natural greenspace:

- **Quantity and Accessibility** – the Access to Natural Greenspace Standards (ANGSt)
- **Visitor Service Standards** –for the most visited NNRs and for Country Parks and Local Nature Reserves
- **Quality** – the Green Flag Award

They emphasise they would like to see these being adopted in both open space and green infrastructure strategies to ensure that everyone can benefit from regular contact and experiences of the natural environment close to where they live.

Habitat Regulations (1995)

Within Europe natural habitats are continuing to deteriorate and an increasing number of wild species are seriously threatened. Much of this is as a result of development and agricultural intensification.

The main aim of the EC Habitats Directive is to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore natural habitats and wild species at a favourable conservation status, introducing robust protection for those habitats and species of European importance. In applying these measures Member States are required to take account of economic, social and cultural requirements and regional and local characteristics.

In 1992 the European Community adopted Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (EC Habitats Directive). This is the means by which the Community meets its obligations as a signatory of the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention).

The Habitats Directive introduced for the first time for protected areas, the precautionary principle; that is that projects can only be permitted having ascertained no adverse effect on the integrity of the site.

Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest. In such cases compensation measures will be necessary to ensure the overall integrity of network of sites.

In the UK the Directive has been transposed into national laws by means of the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended).These are known as 'the Habitats Regulations'.

Most SACs on land or freshwater areas are underpinned by notification as Sites of Special Scientific Interest (SSSIs). In the case of SACs that are not notified as SSSI, positive management is promoted by wider countryside measures, while protection relies on the provisions of the Habitats Regulations.

The Conservation of Habitats and Species Regulations 2010 has since consolidated all the various amendments made to the 1994 Regulations in respect of England and Wales. The Regulations now require competent authorities to consider or review planning permission, applied for or granted, affecting a European site, and, subject to certain exceptions, restrict or revoke permission where the integrity of the site would be adversely affected. Equivalent consideration and review provisions are made with respects to highways and roads, electricity, pipe-lines, transport and works, and environmental controls (including discharge consents under water pollution legislation). Special provisions are also made as respects general development orders, special development orders, simplified planning zones and enterprise zones.

Competent authorities must also undertake screening to establish whether there is likely to be a significant effect on the European site, alone or in combination with other plans or projects. If so, the authority must make an appropriate assessment of the implications of the site in view of the site's conservation objectives and shall give effect to the land use plan only after having ascertained that it will not adversely affect the integrity of the European site, unless there are no alternative solutions and imperative reasons of overriding public interest apply, which is rarely the case.

The key issues in relation to Green Infrastructure are how some of these sites can be integrated into the GI network as they are all classed as GI assets. It is essential to note and consider the sensitivities of their features of interest and to reflect these in any GI Strategy. There are however, opportunities where some sites can be enhanced by relieving the current pressure on such sites by creating opportunities elsewhere. This could involve the creation of new sites; enhancement of existing sites e.g. Country Parks or retro fitting of existing typologies e.g. amenity green spaces enhanced to incorporate natural green space. Existing sensitive sites and habitats also offer opportunities for buffering and expansion, to protect and enhance their features and this should also be a key aim of the GI Strategy.

Consultation paper on a new Planning Policy Statement: Planning for a Natural and Healthy Environment

In May 2007 the Government published its white paper 'Planning for a Sustainable Future'. Amongst the white paper's proposals was a commitment to produce a more strategic and clearly focused national policy framework, with Planning Policy Statement 1: Delivering Sustainable Development (PPS1) at its heart. A key first step is a comprehensive review of current planning policy statements and guidance and other relevant policy material.

The aim is to achieve a significant streamlining of the existing suite of documents by separating out policy from guidance.

A key objective of this single new PPS is therefore to bring together related policies on the natural environment and on open and green spaces in rural and urban areas to ensure that the planning system delivers healthy sustainable communities which adapt to and are resilient to climate change and gives the appropriate level of protection to the natural environment.

Another objective for the streamlining and consolidation of policy in this area is to deliver, for the first time, planning policy on green infrastructure.

Key considerations for green infrastructure are the functions or ecosystem services it provides.

It should therefore be considered at a broader scale than is necessarily the case for individual areas of open space. Natural England, for example, suggests that it should consider the "landscape context, hinterland and setting, as well as strategic links of sub-regional scale and beyond". It should also take into account the contribution that private assets (e.g. back gardens) as well as public assets (e.g. parks) make to green infrastructure.

Therefore, while the existing planning policies and approach on the different components of the natural environment and on open and green spaces remain valid, and taken together go a long way to delivering many of the components of green infrastructure, the new policy recognises that there are subtle differences between planning for open space and planning for green infrastructure.

Policy NE2.1 in the draft PPS therefore requires the relevant regional authority to address regional, sub-regional and cross-boundary issues in relation to biodiversity, geodiversity, landscape protection and green infrastructure in its regional strategy.

Policy NE4.1 requires local planning authorities to build on the work undertaken at the regional level, and to set out in their local development framework a strategic approach for the creation, protection and management of networks of green infrastructure.

The new policy does not require local planning authorities to produce and publish green infrastructure 'strategies', and the expectation is that much of the information already collected for the PPG17 open space strategies can be used at regional, sub-regional and local level to develop the evidence base for green infrastructure delivery.

Encouraging local planning authorities to take a more strategic and 'big picture' approach to green infrastructure should give them a better understanding of their existing green infrastructure network and its functions. This in turn should contribute to better decisions being made about its protection and management and, where a need is identified, the allocation in plans of additional land which could contribute to the network.

Regional

The South East Plan – The Regional Spatial Strategy for the South East of England (Government Office for the South East May 2009) *(Now revoked)*

The Regional Spatial Strategy (RSS) for the South East of England (known as the South East Plan) was intended to set out the long term spatial planning framework for the region over the years 2006-2026. The Plan was to be a key tool to help achieve more sustainable development, protect the environment and combat climate change. It provided a spatial context within which Local Development Frameworks and Local Transport Plans need to be prepared, as well as other regional and sub-regional strategies and programmes that have a bearing on land use activities.

These include the regional economic and housing strategies as well as strategies and programmes that address air quality, biodiversity, climate change, education, energy, community safety, environment, health and sustainable development. In addition, policies in this Plan carry weight in decisions made on planning applications and appeals for development.

Many of the Plan's policies had links to Green Infrastructure provision, for example CC6 Sustainable communities and the character of the environment, CC2 Climate change and C5 Managing the urban rural fringe.

However, the most relevant policy for this study was Policy CC8: Green Infrastructure. This policy required local authorities and others to work together to plan, provide and manage connected and substantial networks of existing and new accessible multi-functional green space. To deliver the widest range of linked environmental and social benefits including conserving and enhancing biodiversity as well as landscape, recreation, water management, social and cultural benefits to underpin individual and community health and 'well being'.

Policy CC8 was included in the Plan to ensure that connected networks of green spaces around new built environment were treated as integral to a planning and design process which is conscious of its place within wider GI networks. GI should not just be considered as an adjunct to new development, and policies and strategies relating to GI assets in Local Development Frameworks should have a spatial expression and not just be restricted to its definition.

The Plan identified the following areas as forming part of the Green Infrastructure Network:

- **Parks and Gardens** - including urban parks, country parks and formal gardens
- **Natural and Semi-natural Urban Greenspaces** - including woodlands, urban forestry, scrub
- **Grasslands** (e.g. downlands, commons and meadows) wetlands, open and running water
- **Wastelands and Derelict Open Land and Rock Areas** (e.g. cliffs, quarries and pits)
- **Green Corridors** - including river and canal banks, cycleways, and rights of way
- **Outdoor Sports Facilities** (with natural or artificial surfaces, either publicly or privately owned) - including tennis courts, bowling greens, sports pitches, golf courses, athletics tracks
- School and other institutional playing fields, and other outdoor sports areas
- **Amenity Greenspace** (most commonly, but not exclusively, in housing areas) – including informal recreation spaces, greenspaces in and around housing, domestic gardens and village greens
- **Provision for Children and Teenagers** - including play areas, skateboard parks, outdoor basketball hoops, and other more informal areas (e.g. 'hanging out' areas, teenage shelters)
- **Allotments, Community Gardens, and City (urban) Farms**
- **Cemeteries and Churchyards**
- **Accessible Countryside in Urban Fringe Areas**
- **River and Canal Corridors**
- **Green Roofs and Walls**

South East Green Infrastructure Framework – from Policy into Practice Land Use Consultants on behalf of a partnership of regional organisations June 2009

This framework was been produced by a Partnership of key governmental and non-governmental bodies in the South East to help implement the South East Plan's green infrastructure policy. It sought firstly to engender a common understanding of the role and importance of green infrastructure throughout the South East and its urban and rural areas. Secondly and most importantly, it encouraged local authorities to embed green infrastructure in any local plans and processes from the earliest stages, delivering through partnership working.

The document recognised that green infrastructure should provide a range of functions, including landscaping, flood control, recreation, cool spots in a warming climate, food production, safer routes and of course biodiversity. Together they form a 'life support system' and give rise to a wide range of environmental and quality of life benefits, including improved public health, opportunities for sustainable transport, and provision of attractive and distinctive places to live work and play. The document:

- Provided a definition of Green Infrastructure in the South East
- Explained the concepts of multifunctionality and place-shaping and describes the physical functions that green infrastructure can have and the regional policy objectives that these functions can help to meet
- Described the key principles which are a pre-requisite for effective delivery of green infrastructure through the local spatial planning system and the green infrastructure considerations at each stage of the plan-making process

The framework suggests the South East needed to build excellent multifunctional greenspace not only in new developments but into its existing spaces and communities as well as connecting the urban area to its wider rural hinterland. Accordingly Green infrastructure (GI) needed to be identified in regional and local plans and designed into all major new development and regeneration schemes from the outset.

It recognises Planning Policy Guidance 17 (PPG17) requires local authorities to undertake robust assessments of existing and future needs for open space, sports and recreational facilities and that the definition of green infrastructure in the South East Plan was broadly consistent with the typology in PPG17.

The Framework is still a very useful practical guide as it addresses both the concept and deliverability of green infrastructure in much more detail than similar publications. Within the appendices it provided a methodology for mapping infrastructure data to inform green infrastructure planning, a variety of national standards used to inform a deficiency and needs analysis, and possible funding streams for the provision and management of green infrastructure.

South East Biodiversity Strategy 2009

The South East Biodiversity Strategy (SEBS) provides a coherent vision and framework for action. It seeks to both inspire those individuals, groups and bodies with the power and resources to make a difference to our biodiversity assets, and to provide guidance on where the best opportunities exist for action that will make a significant difference. It aims to:

- Be a clear, coherent and inspiring vision for the South East
- Provide a framework for the delivery of biodiversity targets that guide and support all those who have an impact on biodiversity in the region
- Embed a landscape scale approach to restoring whole ecosystems in the working practices and policies of all partners
- Create the space needed for wildlife to respond to climate change
- Enable all organisations in the South East to support and improve biodiversity across the region
- Be a core element within the strategies and delivery plans of organisations across the South East region

The Regional Biodiversity Opportunity Areas Map identifies the areas which are priorities for the restoration and creation of Biodiversity Action Plan (BAP) habitats in the South East of England. These Biodiversity Opportunity Areas are to complement the work of regional and local organisations working to restore and create areas rich in biodiversity. Delivering Biodiversity Action Plan targets and actions through this agreed area based approach will result in a landscape scale approach to conservation, making wildlife more robust to changing climate and socio economic pressures.

The Biodiversity Opportunity Areas each cover a variety of habitats allowing for an ecosystem approach to conservation to be embedded across the region. By working with larger, more dynamic ecosystems, it is intended to create a wider range of habitat niches, which will in turn increase the ability of the landscape to support species. In a nutshell, using GI to increase biodiversity!

Local

Isle of Wight Unitary Development Plan 1996–2011 Isle of Wight Council (May 2001)

The saved policies of the UDP remain the extant development plan for the Island until the adoption of the LDF.

Theses policies recognise that the Island has a unique character in terms of its built environment, countryside and landscape. They do not address the issue of Green Infrastructure at a holistic and possibly more strategic level as would be expected today. Instead there are policies to protect the landscape character and local distinctiveness of areas (policy C1 refers). In addition they require the landscape to be considered as an integral part of any development scheme. It notes that the Island is well catered for in terms of informal open space, coast and countryside but increased participation in sports that use these areas can threaten the environmentally most sensitive areas of the Island. In response to these pressures the policies seek to provide a comprehensive range of facilities appropriate to the Island's needs, to take account of the natural recreational assets of the Island while recognising the importance of nature conservation and promoting recreational activities to all.

In addition the policies seek to protect existing open spaces (including school playing fields), village greens and allotments which are identified in the UDP.

Isle of Wight Council Corporate Plan 2009-2013 Isle of Wight Council (2009)

Isle of Wight Council's Corporate Plan, is its main strategic planning document which sets out the local authority's focus for the next four years.

The Isle of Wight Council has identified seven key priorities as its focus which is based on the political priorities outlined in the June 2009 elections. These are often described as major projects, as they all involve significant transformational change:

- School reorganisation
- Roads PFI scheme
- Transforming social care
- Regeneration and the economy
- Fire service modernisation
- Local housing
- Delivering better services

These build on previous priorities and set the direction of the strategic programme. None of them explicitly relate to Green Infrastructure.

2020 Vision the Island's Community Strategy - EcoIsland Island Strategic Partnership

The Community Strategy is the overarching plan for the Island. It draws on and influences plans from all key local organisations. The Strategy recognises that the environment is a crucial but fragile asset to the Island with70% of the landmass covered by European or UK environmental designations. It views protecting the environment as essential to maintaining the tourist economy and as one of the most valued aspects of Island life for residents. The rural character of the Island is a key element in this and it suggests finding the best way to maintain this, while at the same time providing improved access to services and jobs, which is a clear challenge.

Isle of Wight Cultural Strategy 2004-2008 Adding the Sparkle Isle of Wight Council

The strategy provides a strategic framework to help to sustain and develop the Island's cultural assets and values for the benefit of both residents and visitors.

It embraces the following activities:

- The performing and visual arts, crafts, media and film
- Museums, artefacts, record office and design
- Libraries, literature, writing and publishing
- The built heritage, architecture and archaeology
- Sports events, facilities and development
- Parks, open spaces, landscape, the coast, wildlife habitats, water environment and countryside recreation
- Children's play, playgrounds and play activities
- Tourism, festivals and attractions
- Informal leisure pursuits

It suggests the richness of the Isle of Wight's cultural diversity is reflected in the provision of an estimated 380 leisure and visitor centres and attractions on the Island by public, private, not-for-profit and voluntary organisations. Of relevance for this study are:

- Both English Heritage and The National Trust are active on the Island, with Osborne House and The Needles Old Battery respectively notable interests
- The Island has a rich mix of both indoor and outdoor sports and leisure facilities. All of these facilities are easily accessible to Island residents, visitors, schools, businesses, clubs and groups
- There are more than 250 parks, gardens and open spaces on the Island, together with 35 playgrounds and 1100 public seats. 64 miles of coastline are managed, and there are 11 miles of award winning beaches
- Ventnor Botanic Garden consists of 22 acres of maintained garden containing 8000 plant species, plus a plant production facility and visitor centre. Residents, visitors, researchers, schools and businesses all use the Garden

Research undertaken as background to the strategy revealed:

- 93% of residents visit beaches and esplanades at least once a week
- 92% visit the countryside, over half of these at least once a week. There is high public satisfaction with these opportunities and parks & gardens, and access to them

The strategy concluded that it was important to recognise the significance of the environmental assets bestowed upon the Island and to conserve and sustain these assets for the benefit of current and future generations. In addition it suggested the Council should give greater importance and publicity to the natural beauty of the Island, and the many and varied interests which flow from it, in order to enhance local cultural life and the tourist economy.

Cowes Waterfront - A Vision for the Medina Valley Supplementary Planning Guidance Isle of Wight Council (July 2003)

The vision for the Medina Valley has been developed building upon the area's existing strengths and aiming to diversify the Valley's economy, in order to maximize new opportunities and enhance sustainability It divides the area into 5 Zones of most significance for this study is Zone 4 which follows the length of the Medina between Cowes/East Cowes and Newport.

The area is principally rural in character and includes many of the most environmentally sensitive locations in the Medina Valley. The predominant concern within this zone will be the preservation and enhancement of the substantial environmental assets of the area. In the future, it is hoped that this environmental 'corridor' can also enhance north/south linkages along the Medina Valley.

West Wight Landscape Character Assessment prepared on behalf of The West Wight Partnership by Land Use Consultants (September 2005)

The study found that the countryside in the west of the Island is a cherished asset for residents and visitors alike. The area is well used for informal recreational purposes such as rambling, horse riding and mountain biking.

However there is growing concern over the impact of these uses on the natural environment in the area and the increasing numbers of visitors to the locality. The study concluded that the use of the areas for recreational purposes needed to be carefully managed to avoid any adverse impact upon the locality.

Open Space Provision in Residential Developments - Supplementary Planning Guidance Isle of Wight Council (August 2004)

The purpose of this Supplementary Planning Guidance is to set out and explain the Council's requirement for public outdoor playing space in new residential development as detailed in Policy L10 of the Unitary Development Plan. It gives detailed advice on the type and level of outdoor playing space required, its design and location, as well as how the outdoor playing space provision and maintenance will be financed. The SPG distinguishes between public open space for outdoor play and landscaped amenity areas. Policy L10 of the UDP deals only with public outdoor playing space in residential development. The guidance draws heavily on the advice contained within the NPFA's Six Acres Standard and successor documentation. Although developers will be expected to provide open space at a level above this standard.

Isle of Wight Biodiversity Action Plan 2000-2005

The Isle of Wight Biodiversity Action Plan is made up of a series of documents produced from 2000 to 2005. A series of Habitat Action Plans have been produced to provide a framework for action to conserve and enhance the Island's biodiversity. These plans link with national Habitat Action Plans.

Each Habitat Action Plan follows the format:

- Introduction
- Current status
- Current factors affecting the habitat
- Current actions
- Objectives and targets
- Proposed action

The objectives are based on the following principles:

- Ensure no further loss or degradation of the habitat
- Increase the extent of the habitat
- Improve the quality of the habitat
- Ensure the needs of the species associated with the habitat are met
- Improve the knowledge of the habitat, and its associated species by survey, research and monitoring
- Raising awareness

The actions are grouped under the headings:

- Habitat protection
- Habitat management, incentive schemes and other resources
- Species action
- Survey, research and monitoring of the habitat and its associated species
- Communication, publicity and awareness across all sectors of society

The progress of each plan is monitored annually and reported to the Steering Group. Each plan will be reviewed and revised as appropriate at five-yearly intervals. These include the following:

- Maritime cliffs and slopes
- Calcareous grassland
- Heathland and acidic grassland
- Lowland meadows
- Wetlands
- Woodland
- Farmland
- Solent coastal
- Community biodiversity

The Isle of Wight Estuaries Project

The Medina Estuary Management Plan was written in 1997 and revised in 2000. It sets out key issues, policies and actions that contribute to the integrated management of the area and highlight the need for the sustainable use of the estuary's resources.

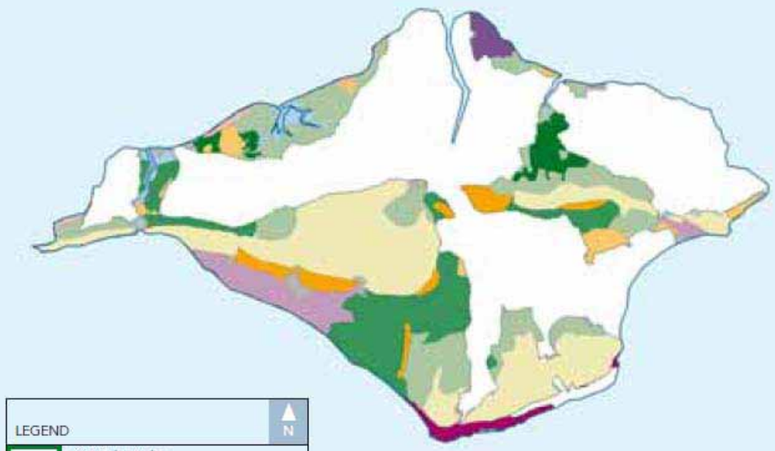
The Western Yar Estuary Management Plan was written in 1998 and revised in 2004. It sets out key issues, policies and actions that aim to manage the Western Yar's sensitive environment through partnership. The Plan has been revised and updated through consultation with local people, organisations and authorities that sit on the Western Yar Estuary Management Committee.

The Isle of Wight Local Transport Plan 3 (LTP3) – 2010

LTP3 is currently being developed and an SEA has been produced by UE Associates and Alliance Planning.

It identifies a number of issues in relation to Landscape:

- Potential effects on the integrity of areas with landscapes designated as part of the Isle of Wight AONB
- Effects on landscape and townscape quality from new transport infrastructure and increasing traffic flows and congestion. This has for example affected Newport, the centre of the Island's road network
- Further loss of tranquillity from increasing traffic flows and new transport infrastructure
- Effects on landscape quality from poor design of transport infrastructure, including insensitively designed layouts, inappropriate signage or excessive clutter
- Pressures on non-designated sites and landscapes: These sites and areas play an important role in the cultural identity of the Island and enable a wider understanding of the area's historic development
- Loss of key landscape features such as woodland or hedgerows
- Noise and light pollution issues from increases in traffic flows
- Green Infrastructure: There are significant opportunities to improve linkages between areas of open space, parks and the open countryside



EXTENT OF EACH LANDSCAPE CHARACTER TYPE

LANDSCAPE CHARACTER TYPE	Percentage of AONB area	Hectares
Chalk Downs	34	6446
Traditional Enclosed Pasture	22.7	4305
Intensive Agricultural Land	16.3	3092
Southern Coastal Farmland	5.9	1134
Sandstone Hills & Gravel Ridges	4.5	849
Northern Woodland	3.7	700
Landscape Improvement Zone	3.3	620
Harbours & Creeks	2.8	538
The Undercliff	1.9	354
Osborne Coast	1.6	309
Northern Coastal Cliffs	1	161

AONB Management Plan

The Isle of Wight has a high quality and varied landscape. Reflecting this, a significant area of the Island has been designated as an Area of Outstanding Natural Beauty (AONB), the Isle of Wight AONB.

AONBs were designated under the provisions of the National Parks and Access to the Countryside Act 1949 to protect high quality landscapes and to secure their permanent protection against development that would damage their special qualities. AONBs are designated solely for their landscape qualities, for the purpose of conserving and enhancing their natural beauty (which includes landform and geology, plants and animals, landscape features and the rich history of human settlement over the centuries).

The Countryside and Rights of Way Act 2000 (CRoW Act) strengthened the profile and protection of AONBs. In particular, the Act:

- Placed a duty on all public bodies and statutory undertakers to 'have regard' to the purposes of AONBs
- Established a process for creating AONB conservation boards, where this is supported locally
- Created a statutory responsibility for local authorities and conservation boards to produce and regularly review AONB Management Plans

The Isle of Wight AONB was designated in 1963, the 14th AONB to be confirmed in England and Wales, to reflect the Island's complex, diverse and high quality landscapes. The total area of the AONB is 191 square kilometres, which is approximately half the land area of the Island.

The AONB is not continuous and is made up of five distinct land parcels across the Island.

In 1994 a landscape character assessment was carried out for the AONB by the Countryside Commission, which identified eleven character types across the AONB which contribute to its overall character. This was further augmented by the Island-wide Historic Landscape Characterisation project, which was completed in 2006.

The 1994 character types, and the parts of the AONB they cover, are presented below. Appendix C of the Isle of Wight AONB Management Plan 2009-14 includes detailed descriptions of each of these landscape character areas.

Landscape Character Types in the Isle of Wight AONB (Source: Isle of Wight AONB Management Plan 2009-2014)

A wide variety of statutory and non-statutory plans, designations, strategies and policies all have an impact on the AONB. They all inform the AONB Management Plan. In turn the AONB Management Plan should provide guidance on producing plans, designations, strategies and policies that impact on the AONB up to regional level. The Management Plan provides a strategic overview of the whole of the AONB and links to other plans and as such will need to link to the development of a Green Infrastructure Strategy for the Island.

Heritage Coasts

The Heritage Coast classification scheme was initiated in 1972 to protect coastline of special scenic and environmental value from inappropriate development. Heritage Coasts represent stretches of England and Wales' most scenic coastline, which are managed to conserve their natural beauty and, where appropriate, to improve accessibility for visitors.

The Isle of Wight includes two of the South East's four Heritage Coasts. Hamstead Heritage Coast runs for 11km, from Bouldnor through to Thorness Bay, and surrounds the drowned Estuary of the Newtown River.

The Tennyson Heritage Coast runs for 34km, from Steephill Cove in Ventnor to Widdick Chine at Totland and includes the famous chalk stacks of The Needles, high chalk cliffs, deep wooded chines and landslip areas cut in the clay and sand beds below the chalk. Both coasts cover parts of the AONB. Although sharing many of the aims of AONB designation, Heritage Coasts are also defined for public enjoyment and appreciation, 'improving and extending appropriate recreational, educational, tourism and sporting opportunities where they do not conflict with the conservation of the resource', with an additional aim to, 'maintain and improve the environmental health of the inshore waters and beaches'.

Isle of Wight PPG17 Open Space, Sport and Recreation Study (April 2010)

This is an important piece of work that will clearly affect the development of the Green Infrastructure network and implementation of a subsequent GI Strategy. This element of the process is very much a precursor to this GI Mapping study and is summarised below.

An Open Space, Sport and Recreation Study is designed to set local standards based on assessments of local needs, demographics and audits of existing open spaces.

It is the basis for addressing quantitative and qualitative deficiencies through the planning process and recommends policies and actions for inclusion with future leisure and planning documents.

The main aim of the Isle of Wight PPG17 Open Space, Sport and Recreation Study is to:

"Provide a clear picture of the Island's existing and future needs for open space and its current ability to meet those needs in terms of its function, quality, quantity and accessibility in accordance with the requirements of the latest Planning Policy Guidance Note 17 (Planning for Open Space Sport and Recreation, July 2002) and its Companion Guide (September 2002)".

The study was developed to provide an overall framework that will guide the Isle of Wight Council's Planning and Leisure Divisions over the next five years in the future management and designation of open spaces. It will enable Isle of Wight Council to ensure the most effective and efficient use of open spaces within the Island and plan and respond appropriately to any pressures of immediate and future developments.

This local assessment of open space and the development of this study are intended to enable the Council to:

- Plan positively, creatively and effectively in identifying priority areas for improvement and to target appropriate types of open space required
- Ensure an adequate provision of high quality, accessible open space to meet needs of community
- Ensure any accessible funding is invested in the right places where there is the most need

The study included all open space types identified within the latest Planning Policy Guidance Note 17 (Planning for Open Space Sport and Recreation, July 2002) and its Companion Guide (September 2002).

These included parks and gardens, natural and semi-natural areas, green corridors, amenity green space, provision for children and young people, outdoor sports facilities, allotments, cemeteries and churchyards and civic spaces.

Prior to developing the study there was a general viewpoint that there was an adequate provision of open space within the urban areas but there were increasing pressures on these spaces for housing developments. The detailed and comprehensive audit and analysis undertaken in developing this study reaffirms this viewpoint.

When applying the new provision standards the following key points were extracted:

Parks & Gardens: both the urban and some rural areas are well endowed with parks and gardens across the Island with some excellent provision in some of the towns in particular.

Natural and Semi-natural: there are no deficiencies across the Island in relation to natural green space, except the Bay Growth Area. There are large quantities of open available areas especially in relation to coastal areas, country walks, woodlands and country parks.

Amenity Greenspace: there are very few deficiencies across the Island in relation to amenity green space, with most of the towns only having localised smaller deficiencies.

Provision for Children and Young People: there are considerable deficiencies in accessibility but in relation to quantity, there are no deficiencies between urban and rural, although accessibility to play facilities is far more important than overall quantity of provision.

Green Corridors: there is a large amount of provision of green corridors across both the urban and rural areas linking settlements, including cycleways, bridleways and the coastal footpath.

Outdoor Sports Facilities: there is a surplus of outdoor sports facilities within the urban areas but a deficiency in some of the rural areas but this does not necessarily mean a surplus of playing pitches.

Allotments: there is an overall deficiency of allotments within the urban area and rural areas. There are no allotment sites in West Wight.

Cemeteries and Churchyards: the provision of cemeteries and churchyards appears to meet existing demands.

The report highlights that there are many high quality open spaces provided on the Island with the majority of sites rated as well above average and more sites than any other rated as 'good'. This was the case for both the urban and rural area.

The Island has many areas designated as Site of Special Scientific Interest (SSSI's) or Sites of Importance for Nature Conservation (SINC's). This inherent quality is very positive but does have implications upon management and maintenance.

Most open spaces within the Island are deemed accessible to the public. Within the rural area most sites are rated as 'very good' and in the urban area most sites are rated as 'good'.

This demonstrates the high standards of provision that currently exist within the Island.

It is clear that the Island has predominantly high quality open spaces that have a high level of accessibility.

However there are some slight deficiencies in both the urban and rural areas and very few areas with a surplus of provision particularly when undertaking a local area needs analysis not taking into account the larger Islandwide provision.

The PPG17 Study also suggests a Vision for open spaces on the Island:

"The Isle of Wight will provide a network of accessible, high quality, highly valued green spaces which its local communities are proud of, and which promotes sustainability, supports biodiversity and extensively contributes to the economic, social and environmental aspirations of the Island".

It suggests a number of objectives which should provide the key assessment targets to achieving this vision. These should act as the 'drivers for change' with regards to open space provision in the Island:

- To aspire to high standards of quality and care in relation to open space provision across the Island
- To ensure all residents and visitors to the Island have appropriate access to open spaces offering the widest possible range of facilities to meet varied recreational needs
- To increasingly consider biodiversity and ecological value of existing and new open space sites enhancing habitats, wildlife corridors, and providing greater biodiversity within the area
- To address areas of deficiency, or, where this is not possible, to improve accessibility and utilisation of existing provision
- To protect existing open spaces of high value, or those with potential high value (i.e. high quality and/or high usage)
- Seek to enhance open space provision and management through community involvement working in partnership with appropriate groups and organisations
- To increase awareness and usage of open spaces within the Island through effective marketing and promotion

It states any future strategy should include a detailed Action Plan which should form the tactical element where by key issues identified within the Audit should be addressed and the objectives of the strategy to be achieved. It should include a number of actions and targets which can be achieved in order to fulfil the needs and demands for open space both within the urban and rural area of the Island.

The action plan should include the following key actions:

- Maintain the standards of high quality that have been set within existing open spaces
- The recognition of the importance of biodiversity and action plan targets in all strategies and policies, including any development plans
- A further specific study is undertaken on supply and demand for playing pitches
- Any forthcoming Best Value or Comprehensive Performance Assessment linked with the provision of open space is utilised as an opportunity to enhance standards of open spaces within the Island in terms of provision, quality and accessibility
- A review of Core Strategy policies in terms of addressing the key issues raised within the open space analysis and assessment
- Continue to identify and attempt to access sources of funding to improve and enhance existing open space and provide new open space in areas of need
- Develop best practice on the management, design, planning and maintenance of open spaces
- Develop educational awareness in raising the importance of caring for open spaces both within urban and rural areas and identifying opportunities for involving the local community within this process
- Address the areas of quantity, quality and accessibility deficiency identified within the audit achieving an improved distribution of open space types across the urban and rural areas
- Entering and obtaining a Green Flag Award for different open space types within the Island that can then be seen as realistic visions for other open spaces of similar types
- Investigate the use of, and access too, school sports facilities in areas of deficiency through the School's Reorganisation Programme
- That the provision of teenage facilities is targeted to encourage teenagers to use park areas helping to bring youths together in one place and therefore making it more manageable avoiding problematic issues within close residential areas

Proposed Policies

A number of policies are proposed to be developed as part of a strategy and it is proposed that these policies should be adopted where appropriate. A summary of these policies is provided:

New Open Space Provision

- Ensure that open space needs and demands are a key consideration in any urban regeneration or renewal investment programmes
- Any new open space sites should be targeted at areas of deficiency identified within this strategy
- Support the conversion of disused railway lines to footpaths and cycleways, linking various types of open space, subject to satisfactory arrangements for maintenance and car parking
- When dealing with developers contributions and new provision of open space the council should ensure that the area of land is large enough on one site to provide significant recreational value as well as aesthetic value within the new development

Protection

- Ensure all sites of high usage and high quality are afforded maximum protection and are seen as best practice examples
- In accordance with PPG17 any proposal to dispose of open space land needs to be assessed in context within an overall analysis of all open space types within the Island particularly with identified deficiencies in specific areas
- For any future developments to modify any areas of open space, it is recommended that an ecological survey is undertaken at an early stage to determine the presence of legally protected or notable species and conservation value of the site
- Support the protection of playing fields through consultation with Sport England and the identification and protection of playing fields and surrounding grounds that either currently or potentially could provide opportunities for enhancing and promoting biodiversity

Management

- No additional open spaces to be provided without realistic plans for implementing and resourcing maintenance agreements to provide the required quality
- Involve and support communities in open space planning, management and delivery

The development of the GI Strategy therefore needs to consider these recommendations carefully.

Isle of Wight Food Sector Survey 2009

Carried out in 2009, the objectives of the survey were to:

- Build a better understanding of the Island's food sector
- Assist decisions about future support and strategic planning
- Seek producer feedback on the merits of establishing a food group on the Island

Summary of Survey Findings

- An improved understanding of the food products available on the Island has been established although it is important that this continues to be developed
- Key supply chains and linkages exist along the food chain although they appear to be somewhat limited
- 43% of farmers/growers indicated plans for expansion. All the main agricultural sectors were represented although the highest level of confidence and plans for expansion came from the livestock sectors. The development of direct supply was a feature of the expansion plans
- 80% of processors have plans for expansion, stimulated by the increased demand for local produce
- For those businesses considering scaling down operations, pressure on returns was stated as a key factor
- 70% of farmers/growers and 80% of processors supported the creation of a food group
- Respondents considered that the Isle of Wight Food Sector needed an Island Food Group to give the sector a clear identity and would like the group to focus on:
  - o Specialist advice
  - o Networking
  - o Marketing support and
  - o Collaboration opportunities
- There was a call for greater facilitation and co-ordination of local and regional food events
- Producers who had moved along the food chain in the main supported Farmers Markets and/or their own farm shop. Over 40% of the respondents used one of the Farmers Markets as an outlet for their produce
- There was only minimal evidence of businesses selling direct to non farming outlets such as restaurants and pubs
- Some evidence of linkages exist between tourism accommodation and attractions and Island food, although this appears greatly under developed
- Wholesale outlets were dominated by off-island businesses especially in the livestock sectors, reflecting the absence of an Island abattoir

It has been suggested that elements of the agricultural sector should be mapped as part of the GI study, in particular spaces influenced by livestock farming and forestry sectors. This level of detail is difficult to assess but we have mapped the Agriculture Land Classification: Best and Most Versatile Land Assessment (BMV) which is indicative of land quality for agricultural purposes as we as areas of forestry.

Local Authorities have to bear the costs of maintaining much of the urban and suburban GI, but this is not the case for the vast majority of the Island's GI assets, which will depend to a large extent upon a viable and thriving rural economy, in particular extensive livestock enterprises.

Livestock farming is primarily about food and fibre, but an important by-product is maintenance of the landscape and grazing livestock are an essential tool for the conservation of many important wildlife habitats. Public involvement with farming is also important for a number of other reasons. Local food produced from low input farming also has a number of wider environmental, economic and social benefits.

Maintenance of a viable pastoral economy is essential for the maintenance of GI, and some levels of development within rural settlements for economic and social benefits are essential to support environmentally friendly farming. But in the current economic climate there is increasingly a drive to diversify the rural land based sector, undermining the economic viability of the low input pastoral system of farming.

Careful consideration should be given to integrating livestock grazing with development in order to sustain the long term viability of livestock farming on the Island. It is manageable by positively supporting the system and enterprises that deliver the livestock.

Whilst this is only partially within the regulatory remit of the Local Planning Authority, agriculture, farming and food production should be addressed in the GI Strategy.

A Renewable Energy Strategy for the Isle of Wight to 2010

The Isle of Wight, through this study, carried out in 2002, and also earlier work from the Island Agenda 21 strategy and Ecological Footprint Study, has been working to promote sustainable development on the Island. In particular, the Council has been exploring and maximising the opportunities that making use of the Island's renewable energy resources can have for the Island Community. This is not just in terms of reducing environmental impact, and the Island's Ecological Footprint but also for economic development and regeneration, diversification of rural incomes, and promoting the idea of the Island as a centre for 'Green Tourism'.

The development of the Renewable Energy Strategy was key to the implementation of the Island Agenda 21 Strategy. This important strategy identifies sustainable resource management as a key priority. It specifically states that the Island should be *"efficient in the use of our energy and where possible use our renewable resources to generate electricity"*. The associated Action Plan required "*research of the optimal use of the Island's natural and waste resources in the local generation of electricity and identify specific initiatives which will develop the use of this generating capacity"*.

The Agenda 21 Strategy was identified within the Council's Corporate Plan as a key component of the Council's strategic priorities, with a specific commitment made to 'promote alternative and renewable energy initiatives, improve waste management recycling and energy management.

Based on the analysis, a number of exemplar, or 'flagship' projects are identified, which could be submitted for grant funding, and would act as important pilot and demonstration projects for renewable energy on the Island.

Those identified were:

- A community wind project
- A biomass CHP or heat-only scheme, providing energy for a large end-user
- Zero energy housing development, incorporating a combination of different RES and energy efficiency measures.
- Farm based anaerobic digestion
- A biodiesel production plant
- Demonstration marine current turbine

There are a range of issues in relation to RES that can impact on the Island in several ways and considerations that are a concern. These were included and had been discussed in a series of workshops (following):

Community Wind - There was acknowledgement of the fact that wind power had scored highly on a Cost Benefit Analysis and that it was the only currently viable source/technology that was not self-limiting. There was strong feeling that any wind development should be community owned and that planning guidance should be developed as an immediate priority in consultation with local communities and drawing upon the best of practice world-wide. A suggestion was made that the Island should only be countenancing 600 KW turbines but possibly trialling a 1.5MW machine to assess reaction and to attract tourists.

An offshore wind farm was thought to be a possible option but there were serious concerns about the impact on shipping, fishing, sailing and the marine environment. Also it was difficult to see any possibility of community ownership.

Marine Current Turbines - Interest remained high in locating a Marine Current Turbine as a demonstration project providing that the marine environment and local fishing and sailing were not jeopardised in any way.

Biomass/CHP - The use of Biomass is a very practical option for the Island as borne out by the Cost Benefit Analysis. There was keen interest in the development of a Biomass fired CHP/heat only system at Sunnycrest Nurseries. It was particularly felt that this could be used as a demonstration project to build confidence in the system and to encourage diversification by identifying and developing markets for energy crops.

Biodiesel - The Biodiesel project was agreed to be a must for the Island as not only would it reduce the overall fossil fuel energy demand but also it would significantly contribute to waste reduction.

Zero Fossil Energy Build – Identified as an urgent need to not only to ensure the maximum energy efficiency and sustainability of all new build on the Island but also to address issues of energy conservation within the current housing stock

There are real issues in relation to the development of GI assets and networks particularly in relation to impact of potential RES on existing GI assets (marine environments as an example) but also the potential for enhancing or creating new GI assets in relation to Biomass using forestry residues, other waste woods or energy crops.

Isle of Wight Shoreline Management Plan (currently being reviewed and updated)

The Isle of Wight's Shoreline Management Plan (SMP) is a large-scale assessment of the risks associated with coastal processes which seeks to reduce these risks to people and the developed, historic and natural environments. The SMP will determine the natural forces which are shaping the shoreline to assess how it is likely to change over the next 100 years, taking account of the condition of existing defences. The SMP will develop policies outlining how the shoreline should be managed in the future, balancing the scale of the risks with the social, environmental and financial costs involved, and avoiding adverse impacts on adjacent coastal areas. Due to the current legislative and funding arrangements, climate change and environmental considerations, it may not be possible to protect, or continue to defend, some land and property from flooding or erosion.

The revised *Isle of Wight Shoreline Management Plan* (SMP) will cover the entire 110km coastline of the Isle of Wight. The neighbouring coast of Hampshire and West Sussex (between Hurst Spit and Selsey Bill) is covered by the *North Solent Shoreline Management Plan* www.northsolentsmp.co.uk.

The Isle of Wight coastline has been shaped by major sea level fluctuations which have occurred in response to periods of glaciation. During the last cold period of the Ice Age sea levels fell by up to 140m. At this time, the Island's chalk spine would have extended to the Isle of Purbeck in Dorset. As the ice sheets melted and sea levels rose over the period 15,000 to 5,000 years Before Present (BP), the chalk ridge was eroded and the valley behind flooded, forming the Solent and separating the Isle of Wight from the mainland.

Within its relatively small area, the Island's coast is extremely varied and dynamic. Marine erosion has continued around most of the Island to produce a near-continuous cliffline that varies greatly in terms of morphology and rates and styles of weathering and landslide activity. The south coast in particular is vulnerable to large storm events crossing the Atlantic and rates of erosion are particularly rapid along the south-west coast of the Island.

There are five estuaries located on the north and north-eastern coasts of the Island: the Western Yar; Newtown Estuary; Medina Estuary; Wootton Creek; and Eastern Yar. The Island's estuaries have been internationally recognised as important for nature conservation and are included in the Solent European Marine Site.

There are distinct differences between the exposed southerly and westerly facing coasts (potentially rapid marine erosion) and the relatively sheltered north coast (modest toe erosion). Cliff erosion materials deposited on the foreshore are valuable inputs to the immediate littoral system and also contribute to beaches further downdrift.

Cliff sediments provide more permanent protection of the cliff toe if they are sufficiently durable to remain on the local beach and are not removed by littoral drift. In spite of continued cliff erosion sediment inputs, local beaches are not large, suggesting that most materials continue to be removed and that the Island's beaches are open systems dependent upon continued inputs for their stability and even survival.

An update on the development of the new SMP: Recent work on the SMP has outlined the natural processes and coastal defence structures that are affecting the changing shoreline and has identified the flood and erosion risks that the Isle of Wight will face in the future if the defences fail. This has included describing what is at risk over the next 100 years, including residential and commercial areas, infrastructure, sites of natural or historic importance and features, such as beaches, which might be important for the local tourism economy.

This information has been used to draft objectives which state the important issues that the SMP intends to support and preserve.

Policies will be developed as part of the Draft SMP and published in summer 2010 for a 3-month period of public consultation (from July to September). The results of the public consultation will then be used to set the final policies and the Final SMP will be completed and adopted in December 2010.

Eastern Yar Flood and Erosion Risk Management Strategy

The Environment Agency and the Isle of Wight Council have worked in partnership to produce the '*Eastern Yar draft flood and erosion management strategy'*. The strategy sets out how they will manage flooding and erosion in the Eastern Yar catchment. The catchment of the Eastern Yar River and Bembridge Harbour is at risk of flooding from both the sea and the river. Flooding and erosion are real risks facing people and their property in this area. With climate changing, rising sea levels and more frequent and intense storms, existing defences are under increasing threat from the elements.

If the existing defences were not maintained, more than 480 properties in low-lying areas could flood or be lost to erosion from a 1 in 200 year chance event.

With rising sea levels this number could increase to over 730 in the next 100 years. Subject to funding being available, the strategy recommendations will help to manage the risk of flooding and erosion to communities throughout this period. Early conclusions and recommendations have been made and are currently being investigated further however, the potential habitat compensation needs under the EU Habitats Regulations is likely to remain within the scope of this Strategy in conjunction with the South Coast Regional Habitat Creation Programme.

The Appropriate Assessment will be a key document in support of the Strategy and the options appraisal will be tailored to fully incorporate the legislative and economic implications of working within the Regulations.

Isle of Wight Strategic Flood Risk Assessment 2007 and 2010

The Isle of Wight Council commissioned Entec in 2007 to conduct a Strategic Flood Risk Assessment for the whole of the Isle of Wight which totals an area of 380km². The SFRA is required to be produced by the Council to support the Council's Core Strategy. Information was presented at one of the following scales; Island wide; Key Development Area or; Site specific.

This enables the Council to easily access the relevant level of detail when processing an allocation.

The major tasks undertaken in the SFRA are listed below:

At the Island wide scale

- Assessment of flood risks from all sources
- Definition of PPS25 flood Zones
- Assessment of the suitability of Infiltration SuDS
- Assessment of potential surface runoff
- Assessment of the sensitivity of the fluvial floodplains to the possible impacts of climate change
- Description of possible mitigation and management options
- At the Key Development Area scale
- Impact of climate change on coastal flood zones
- Detailed synopsis of all the flood risk issues, including; Flood Zones; Climate change; Historic flood events; surface water drainage and; Information to inform future FRAs

At the potential development site level

- Every piece of data supplied for use in the SFRA that could be qualified or quantified has been included as an attribute for each of the potential development sites (Table 5.1 for full list of attributes)
- Site specific flood risk definition to inform the allocation of appropriate land uses

Implications were summarised as follows:

Flood Risk

The Level 2 flood risk assessment identified that only 9% (138 out of 1469) of all the potential development sites assessed are impacted by the extent of Flood Zones 2 or 3. This means that 91% of the potential development sites are in Zone 1 making them suitable for all development types. Site Specific flood risk assessments are therefore only required for all those identified as being in Flood Zones 2 and 3 and sites over 1ha of which there are 198.

A numerical assessment of flood risk implies that the allocation of development land should not be overly restricted by flood risk issues. This however belies the fact that flood risk is not evenly distributed across the Island. Key Development areas like St Helens, Ventnor and Wootton have very few potential sites within Flood Zones 2 and 3.

On the other hand, Cowes and East Cowes, Newport, Freshwater and Ryde are presented with significant flood risks.

Climate Change

The Island's fluvial floodplains were assessed for their sensitivity to climate change. The approach has resulted in 24 of the potential development sites being identified as being in areas where the extents of the fluvial Flood Zones may increase significantly as a result of climate change. The differing degrees of impact that climate change is predicted to have in different parts of the Island are due to variations in the topography of the coastline. Climate change results in more potential development sites being affected by the Flood Zones in the future.

Therefore in the interest of sustainability, it advises that impacts of climate change be assessed in detail for any of the sites the SFRA has highlighted as being at risk.

The works undertaken with the data available have been sufficient to allow for a detailed assessment of flood risk to be carried out and enabled a series of strong datasets to be produced to help the Council in the allocation of development land.

Water for Life and Livelihoods – River Basin Management Plan South East River Basin District – Environment Agency and Defra 2009

This plan is about the pressures facing the water environment in the South East River Basin District, and the actions that will address them. It has been prepared under the Water Framework Directive in the first of a series of six-year planning cycles.

By 2015, 18 per cent of surface waters (rivers, lakes, estuaries and coastal waters) are going to improve for at least one biological, chemical or physical element, measured as part of an assessment of good status according to the Water Framework Directive. This includes an improvement of 710 kilometres of the river network in the river basin district, in relation to fish, phosphate, specific pollutants and other elements.

23 per cent of surface waters will be at good or better ecological status/potential and 33 per cent of groundwater bodies will be at good status by 2015. In combination 23 per cent of all water bodies will be at good status by 2015. The Environment Agency wants to go further and achieve an additional two per cent improvement to surface waters across England and Wales by 2015.

The biological parts of how the water environment is assessed – the plant and animal communities – are key indicators.

At least 47 per cent of assessed surface waters will be at good or better biological status by 2015.

There has been considerable progress in protecting the natural assets of the South East River Basin District and cleaning up many of the problems for the water environment. The North and South Downs, the White Cliffs, the Solent and the New Forest are well-known landscapes. Their wildlife is supported by water, which is vital for the livelihoods of those who live and work here.

However, a range of challenges remain, which will need to be addressed to secure the predicted improvements. They include:

- Point source pollution from sewage treatment works
- The physical modification of water bodies
- Diffuse pollution from agricultural activities
- Diffuse pollution from urban sources
- Water abstraction

At present, because of these pressures and the higher environmental standards required by the Water Framework Directive, only 19 per cent of surface waters are currently classified as good or better ecological status/potential. 40 per cent of assessed surface water bodies are at good or better biological status now, although we expect this to change to 35 per cent when we have assessed all surface water bodies.

In order to meet these targets, it is important for everyone to play their part now and in the future. River basin management is an opportunity for this generation – for people and organisations to work together to improve the quality of every aspect of the water environment – to create an environment we are all proud of and can enjoy.

This plan has been prepared under the Water Framework Directive, which requires all countries throughout the European Union to manage the water environment to consistent standards. Each country has to:

- Prevent deterioration in the status of aquatic ecosystems, protect them and improve the ecological condition of waters
- Aim to achieve at least good status for all water bodies by 2015. Where this is not possible and subject to the criteria set out in the Directive, aim to achieve good status by 2021 or 2027
- Meet the requirements of Water Framework Directive protected areas
- Promote sustainable use of water as a natural resource
- Conserve habitats and species that depend directly on water
- Progressively reduce or phase out the release of individual pollutants or groups of pollutants that present a significant threat to the aquatic environment
- Progressively reduce the pollution of groundwater and prevent or limit the entry of pollutants
- Contribute to mitigating the effects of floods and droughts

The Plan highlights the following in relation to the Isle of Wight:

The Isle of Wight's landscapes and coast help draw one million people on holiday each year. About half of the catchment is designated as an Area of Outstanding Natural Beauty and Heritage Coast and there is considerable intensive horticulture which is important for the economy. A range of coastal wetlands are designated as Special Protection Areas or Special Areas of Conservation.

However, there are issues that are preventing more of the island's waters from achieving good status now. Most streams and rivers have been dredged and straightened for flood protection and urbanisation, and suffer from sedimentation and diffuse pollution. The lack of mains drainage for many small communities is a concern, as septic tanks can discharge sewage effluent which can find its way into streams and groundwater. This has increased the levels of nutrients in many waters, limiting the ecological quality of the water environment.

The catchment covers five groundwater bodies. Three major units (Central Chalk, Southern Downs Chalk and the Lower Greensand) supply water for agriculture and industry and are heavily abstracted for public water supply. Although all homes have been metered since the 1980s, water is transferred from the mainland to supplement the Isle of Wight's supplies. For the island to become more self-sufficient in water resources, it is critical to improve water efficiency and protect the groundwater from pollution.

There are 35 river water bodies in the catchment and no lakes. 24 waters are heavily modified. A range of actions will target the key pressures on the Isle of Wight, and investigate water bodies where there is uncertainty about what pressures are present, or their effect.

Three water bodies, including the Palmers Brook, will improve in status by 2015). In considering future action, those waters in the worst state will be prioritised.

11 per cent of rivers (20 kilometres or 14 per cent of river length) currently achieve good or better ecological status/potential. 27 per cent of rivers assessed for biology are at good biological status now. These waters include the Brightstone Streams and the Eastern Yar.

Some Key Actions for this Catchment

- The Environment Agency will modify abstraction licences and discharge consents to ensure no adverse impact on internationally important wildlife sites
- The Environment Agency and Southern Water will improve six sewage works including Newtown and Chillerton, to reduce inputs of nutrients and organic pollutants and benefit shellfish waters
- The Landcare Project and Strategic Partnership for the England Catchment Sensitive Farming Delivery Initiative will tackle diffuse pollution across the whole island. This will help address rising trends in pesticide and nitrate in groundwater at Niton
- The Environment Agency will work with others to improve habitats and ecology particularly in rivers, chines and estuaries. We seek to improve habitat and fish passes on the Medina and Bembridge Sluice, as well as remove invasive non-native fish such as pumpkinseed
- The Environment Agency will lead a range of initiatives to improve river flow for example by reducing abstraction, particularly in the summer months
- The Footprint Trust will raise awareness of water saving, seeking to assist households, businesses and schools in reducing per capita water use to a sustainable level
- The Environment Agency will put a Water Level Management Plan in place for Brading Marshes. This will improve the condition of this important wildlife site, aid fish passage and provide an improved wetland habitat for birds without increasing flood risk
- The Environment Agency and local authority will quantify and reduce the impact of private sewage discharges from septic tanks and cess pits

Local Geodiversity Action Plan (LGAP) and Regionally Important Geological Sites (RIG's)

The primary function of the Isle of Wight Local Geodiversity Action Plan is to formulate a strategy to promote the Isle of Wight through the conservation and sustainable development of its Earth Heritage. The plan sets objectives, targets and determines indicators that will focus resources to conserve and enhance the heritage. The secondary function is to produce, for the first time an electronic database audit of the Island's geodiversity.

The LGAP is intended to link into other existing initiatives such as the Isle of Wight AONB, Local Biodiversity Action Plan, Historic Environment Action Plan, Historic Landscape Assessments and the Isle of Wight Council's corporate objective of "Protecting the Island's Physical Environment".

The objectives of the LGAP are:

- To audit the existing Earth Heritage resource of the Isle of Wight.
- To audit existing Earth Heritage interpretation on the Isle of Wight.
- To form an action plan to help conserve the Island's Earth Heritage resource.
- To form an action plan to develop in a sustainable way the Island's Earth Heritage Resource to the benefit of the Island community and visitor.

It is not unreasonable to state that site-based geoconservation on the Isle of Wight lags behind other parts of England in some respects; having said this, significant steps are being made. As stated above there is a good network of SSSI's which embrace most of the Island's geodiversity. More recently the publication of the Isle of Wight AONB Management Plan 2009-2014 highlights the importance of Earth Heritage and recognises the threats and challenges to Earth Heritage within the AONB. Three policies are proposed to tackle the threats, based on raising awareness, recording and monitoring and conserving and enhancing.

During the 1970s the former Museum of Isle of Wight Geology (now replaced by Dinosaur Isle Museum) became a Record Centre as part of the National Scheme for Geological Site Documentation. Later, during the 1990's a small number of important local geological sites were identified by the former Museum as Regionally Important Geological/Geomorphological Sites (RIGS).

RIGS statements were produced for these sites because they fell outside of the protection offered by the identification of many classic geological and palaeontological areas on the Island otherwise listed as Sites of Special Scientific Interest (SSSI).

Delivering Green Infrastructure Effectively

Green infrastructure evidence gathering and analysis must inform the strategic vision within the Island's Sustainable Community Strategy and related Local Area Agreement targets.

In order to deliver green infrastructure effectively and meet Local Area Agreement targets, it is essential that green infrastructure is fully integrated into the plan-making process, that consideration of green infrastructure begins at the earliest stages of that process and that green infrastructure provision is considered in relation to the particular functions most relevant in each area.

The Isle of Wight Council should take the lead in forming partnerships which utilise partners' expertise, financial resources and land-ownership to contribute to the planning, provision and maintenance of local green infrastructure, whilst addressing the diverse objectives of the constituent organisations.

Sustainable Community Strategies

The Sustainable Community Strategy (SCS), prepared by the Local Strategic Partnership (LSP) for a local authority area, in the case of the Isle of Wight – 2020 Vision The Islands Community Strategy – EcoIsland, and should establish the overall strategic direction and long-term vision for the economic, social, and environmental well-being of the area, and should include two key elements:

- The long-term vision based firmly on local needs
- Key priorities for the local area, which may be realistically achieved in the medium term

Green infrastructure clearly provides a means of dealing, in an integrated way, with the need for natural green space throughout existing and new communities to help to address local community, economic and environmental issues, and to deliver a range of benefits and services to local people and wildlife in a sustainable manner.

It is therefore imperative that green infrastructure be incorporated in the SCS and the *evidence gathering stage* of the process must therefore take place early enough to inform development of the SCS. Unprompted community consultation may not identify green infrastructure as a priority.

Lead officers within the local authority and other local green infrastructure stakeholders should therefore actively engage with the LSP to ensure that the importance of green infrastructure is understood, as well as championing the benefits of green infrastructure within the local authority itself. It is also important that the SCS considers cross-boundary green infrastructure issues and the LSP should therefore include a political, community or other leadership figure able to champion green infrastructure at a sub-regional scale.

It should also be apparent that many different partners have an interest in securing new or improved green infrastructure. For example, providing cycle routes within green links could address objectives within a local transport plan for more sustainable travel and objectives within a local health strategy to increase exercise levels.

This once again highlights the importance of ensuring that green infrastructure objectives are embedded in the SCS as well as in the LDF, and that they are reflected in Local Area Agreement targets.

Green Infrastructure Strategies

Following this process means that green infrastructure is embedded from the outset through study and understanding of place and character and is secured, protected, enhanced and managed through appropriate policies. It is recognised, however, that it may be desirable to draw up a Green Infrastructure Strategy, as these have the potential to engage and concentrate a range of partners in a common focus.

Strategies are based upon an analysis of existing provision, deficiency and need. This analysis guides the strategy's priorities as well as highlighting opportunities for green infrastructure creation, enhancement and investment. Strategies are generally produced at sub-regional and local scales, and address the mechanisms needed for delivery at these scales.

Green infrastructure strategies are often developed in the context of high levels of planned growth (e.g. housing) so as to ensure green infrastructure provision is integrated into the development process from the very beginning, and to ensure that it complements and supports future developments. With this in mind, and the Isle of Wight's intention to produce a Green Infrastructure Strategy with the many partners involved, we have carried out comprehensive data collection and evidence gathering. Consideration of green infrastructure at the evidence gathering stage helps to meet the requirements of the 'test of soundness' for development plans, provides a firm foundation for later planning decisions and supports future funding bids.

6. Isle of Wight Green Infrastructure Data Collection and Evidence Gathering

The principal purpose of this section of the study relates to data collection, which will inform detailed analysis and any highlighting of GI opportunities.

A number of sources were highlighted in relation to GI collection and evidence gathering. Relevant mapped datasets were identified and have been compiled in a Geographic Information System (GIS). This has enabled a picture of the existing environmental assets and unique features of the Island to be built up and the existing green infrastructure to be identified.

The information was sourced from a number areas including the Isle of Wight Council, the recent PPG17 audit, Natural England, Forestry Commission as well as on line datasets, Magic and the Ordnance Survey.

We recommended that all the mapped data listed be gathered where available. Some gaps do exist and a decision was taken as to whether it was necessary and/or feasible to fill those data gaps.

We have produced the following datasets and these are available in GIS format but we have reproduced these below for ease of comprehending this Study:

- Data set ONE – International, National and Regional GI Regional GI
- Data set TWO - District & Island GI
- Data set THREE – Local GI
- Data set FOUR – Coastal and River Biodiversity
- Data set FIVE – SINC's
- Data set SIX – Water Framework directive Data/Goundwater Source Protection Zone (Source Environment Agency)
- Data set SEVEN - Local Biodiversity Opportunities
- Data set EIGHT – Recreation and Community Services
- Data set NINE – Institutions
- Data set TEN – Landscape – Rights of Way
- Data set ELEVEN – Agriculture Land Classification – Best & Most Versatile Land Assessment (BMV)
- Data set TWELVE – Minerals and Extraction Sites
- Data set THIRTEEN – Regional Development – Key Regeneration Areas & Settlements
- Data set FOURTEEN – Archaeology, Conservation and Landscape
- Data set FIFTEEN – Landscape Character Areas (Source Isle of Wight AONB)
- Data set SIXTEEN – Green Corridors
- Data set SEVENTEEN – PPG17 Quality & Value Assessments (see Section 8)
- Data set EIGHTEEN – SINC Sensitivity Map (see Section 8)
- Data set NINETEEN – SSSI Quality Map (see Section 8)
- Data set TWENTY – Accessibility (see Section 8)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PLEASE DO NOT PARK IN THIS ENTRANCE
ACCESS REQUIRED AT ALL TIMES

Data set ONE – International, National and Regional GI

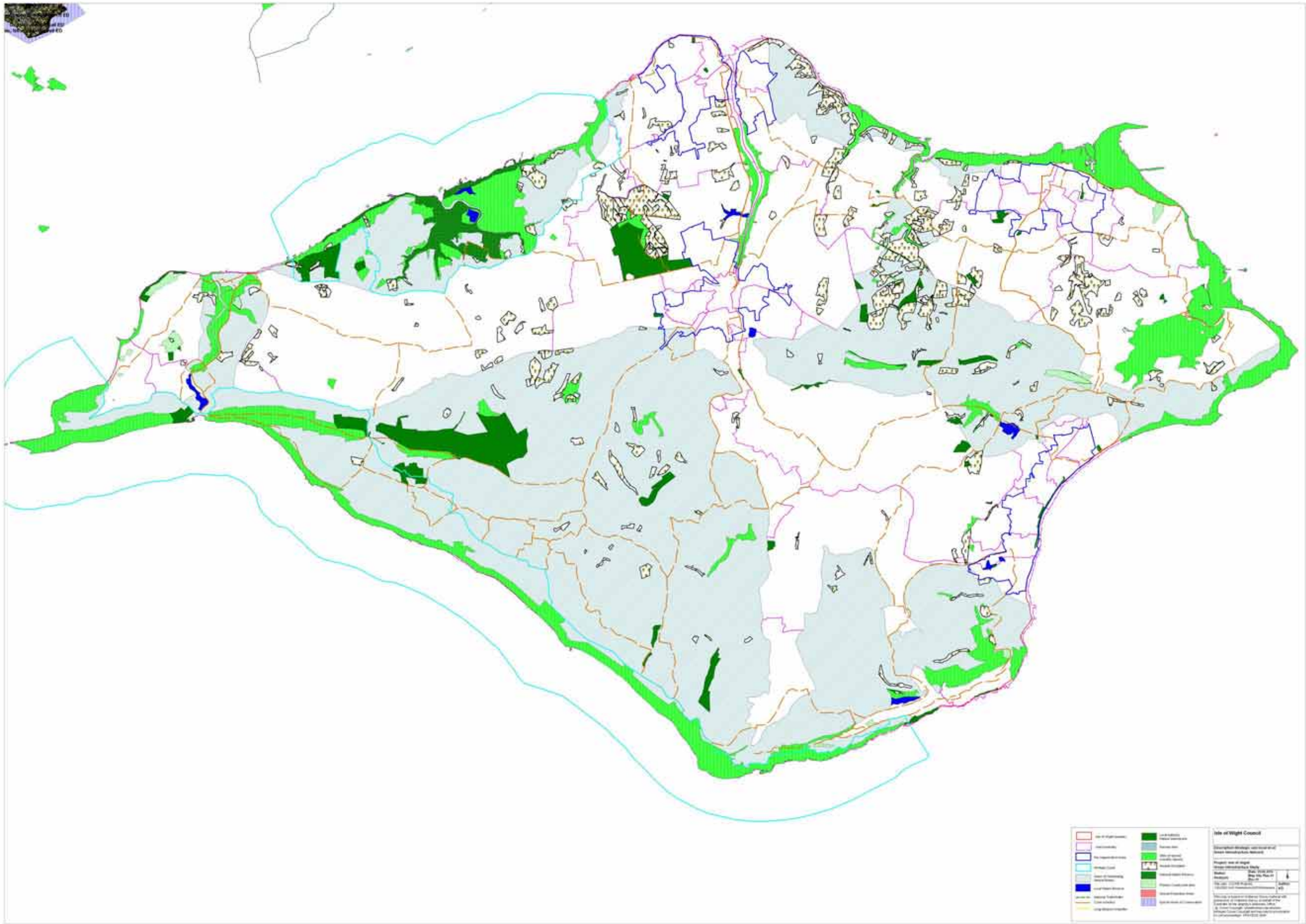
- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)
- Ramsar
- Isle of Wight AONB
- Sites of Special Scientific Interest (SSSI)
- National Nature Reserves (NNR)
- Heritage Coast
- National Trails/Walks

Description

Covering all conservation designations from International, National and Regional as well as the AONB, which is split into a number of areas.

Issues

There are a range of areas within the Isle of Wight and taking into account the number of international and national designations, these are significant for an Island the size of the Isle of Wight. Issues have been highlighted in relation to Habitat Regulations and pressures on Natura 2000 sites.



Data set TWO – District/Island GI

As above, but to include:

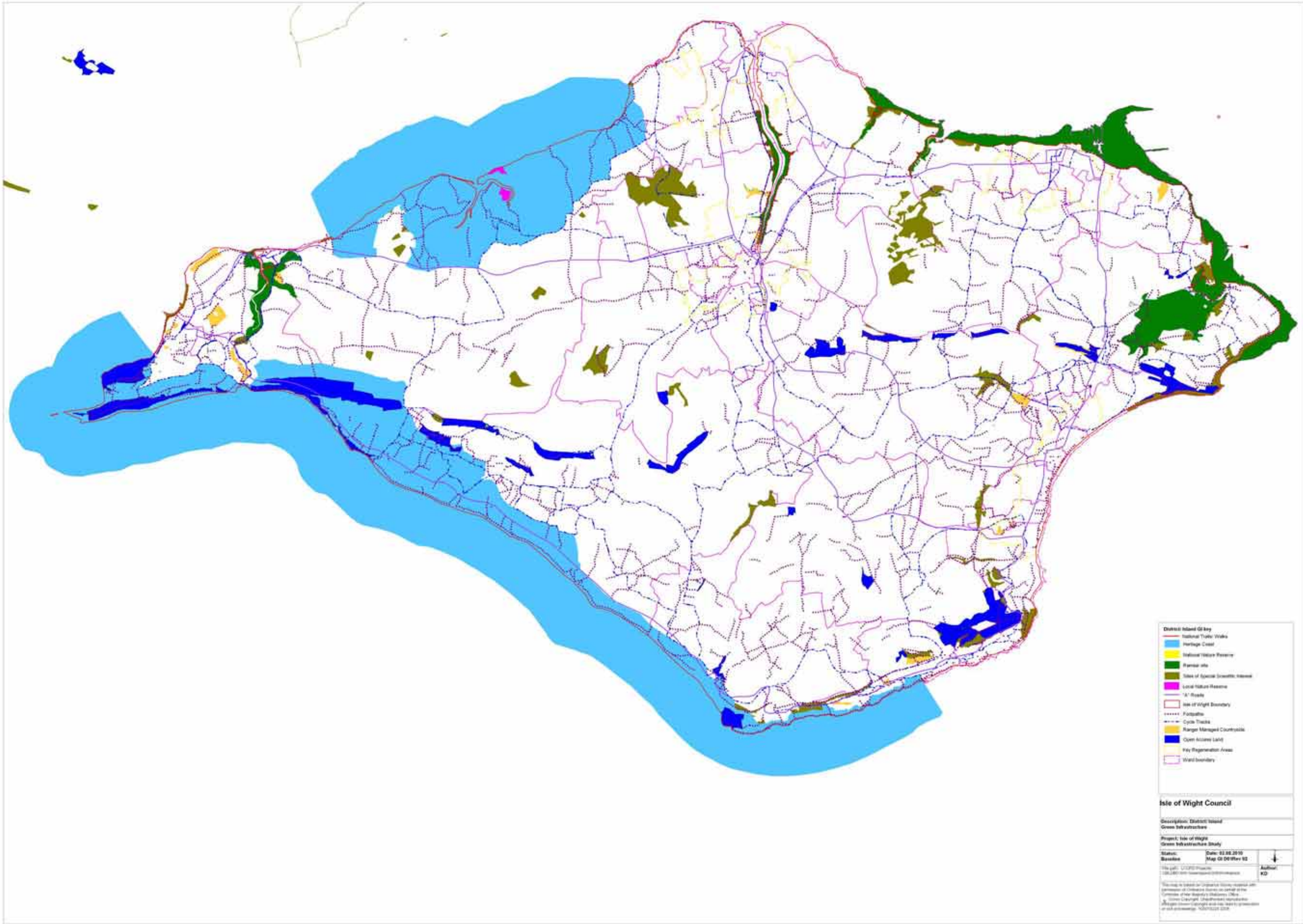
- Local nature reserves
- Cycle corridors
- Long distance footpaths
- Primary countryside sites/Ranger managed sites
- Open access land

Description

Covering the international, national, regional and local conservation designations indicating local spaces of conservation interest.

Issues

Many of the local designation such as Local Nature Reserves are small but important as they often relate to areas of settlements therefore giving good access to natural green space. Open Access Land and countryside sites are generally less 'sensitive' in relation to environmental designation and may well offer opportunities for mitigation in relation to other more 'sensitive' sites.


District Island GI key
National Trails/ Walks
Heritage Coast
National Nature Reserve
Ramsar site
Sites of Special Scientific Interest
Local Nature Reserve
'A' Roads
Isle of Wight Boundary
Footpaths
Cycle Tracks
Ranger Managed Countryside
Open Access Land
Key Regeneration Areas
Ward boundary
Isle of Wight Council
Description: District Island
Green Infrastructure
Project: Isle of Wight
Green Infrastructure Study
Status:
Baseline
Author:
KD

Data set THREE – Local GI

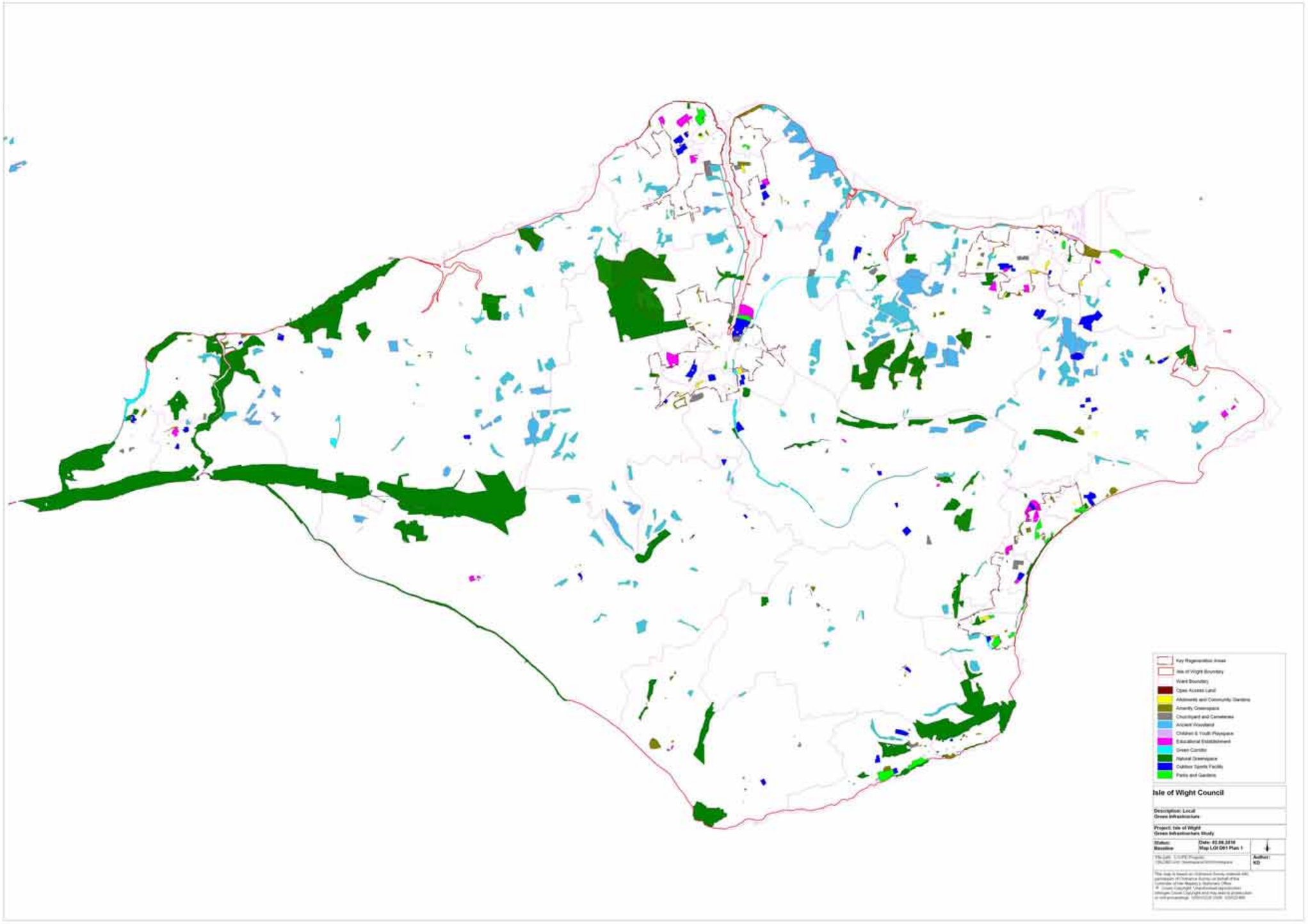
- Local authority green space (PPG17 audit)
- Ancient woodlands
- All sports sites

Description

Included are sites audited under the recent PPG17 Open Spaces, Sport and Recreation Audit. These sites are generally under Local Authority ownership or are accessible to the general public. Ancient woodlands are added in to this dataset to show areas of accessible/non-accessible woodland across the Island.

Issues

The PPG17 audit looked at a range of quality, value, quantity and accessibility issues which are summarised within. This was based on an agreed typology and new provision standards were derived from this work. There were a small number of accessibility issues (discussed within this report) which were mapped within the PPG17 study.


Key Regeneration Areas
Isle of Wight Boundary
Ward Boundary
Open Access Land
Allotments and Community Gardens
Amenity Greenspace
Churchyard and Cemeteries
Ancient Woodland
Children & Youth Playspace
Educational Establishment
Green Corridor
Natural Greenspace
Outdoor Sports Facility
Parks and Gardens
Isle of Wight Council
Description: Local Green Infrastructure
Project: Isle of Wight Green Infrastructure Study
Status: Baseline
Date: 02.06.2010
Map LGI 001 Plan 1
Author: KD

Data set FOUR – Coastal and River Biodiversity

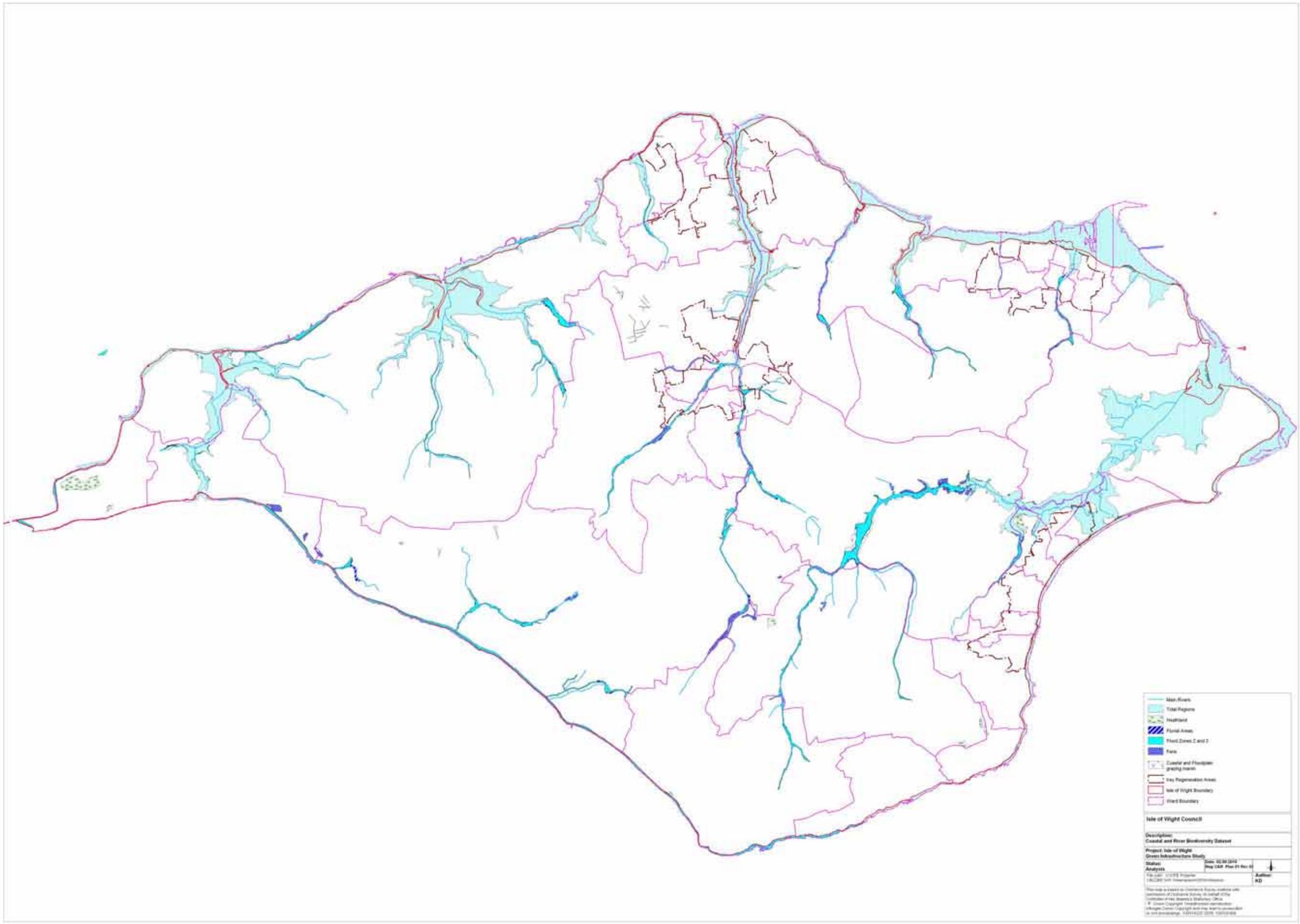
- Coastal and floodplain grazing marsh
- Fens
- Floodzone
- Fluvial areas potentially susceptible to climate change
- Main rivers
- Inter tidal zone
- Estuaries Bullets

Description

Important aspects of the Isle of Wight landscape with World Heritage Site Status being sought or GeoPark status. This includes areas that are highly sensitive and are included as international, national and regional conservation designations.

Issues

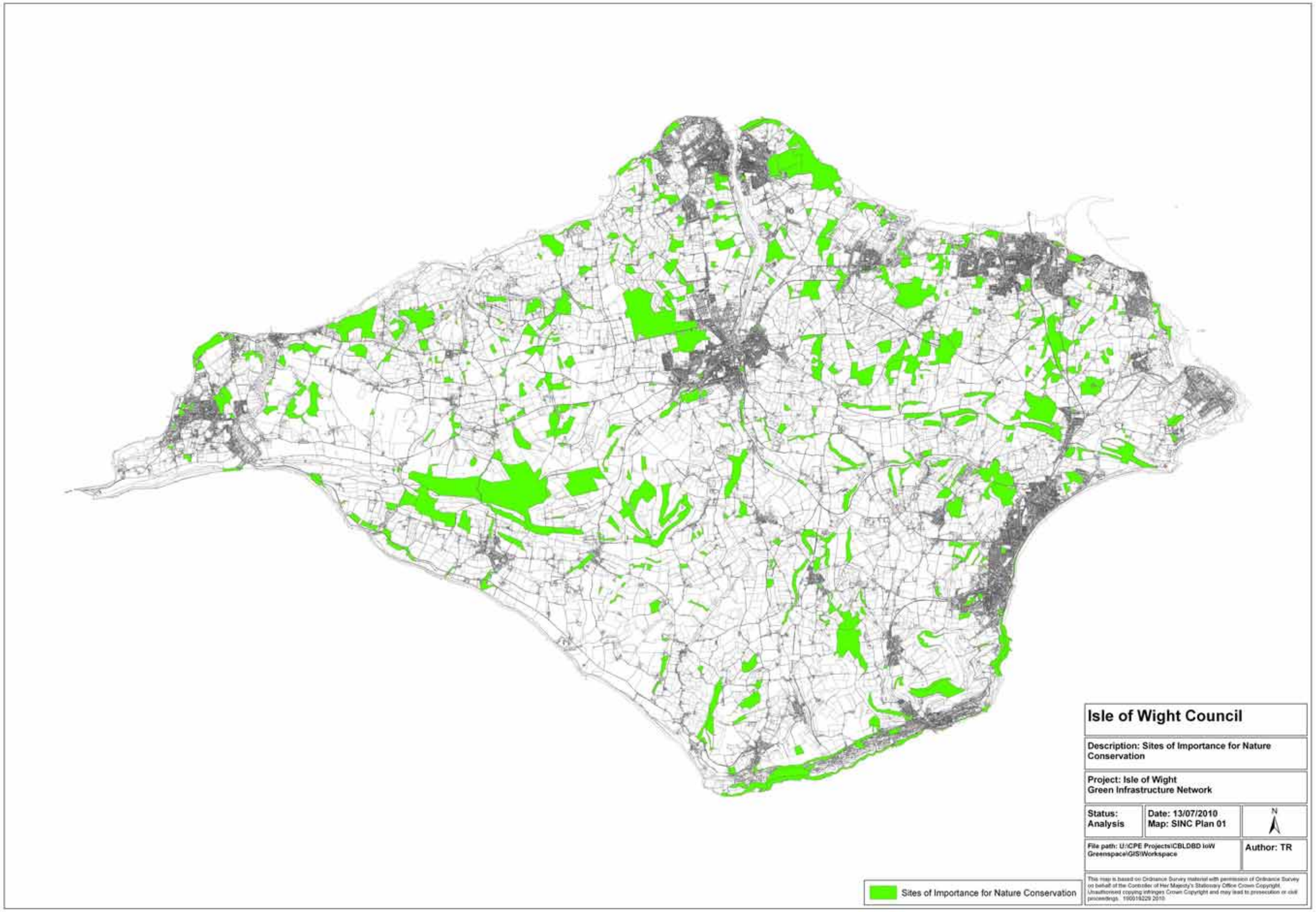
This includes areas of sensitivity which are under pressure from development, coastal erosion, and recreational activity.


Isle of Wight Council
Description:
Coastal and River Biodiversity Dataset
Project: Isle of Wight
Green Infrastructure Study
Status:
Analysis
Author:
KD

Data set FIVE – SINC's

Description

The Planning Authority for any given area may designate certain areas as being of local conservation interest. This is the lowest tier of conservation designation, and varies from area to area. They are given only a certain level of protection against developments of certain types. However, it provides no protection at all for species and habitats as such, nor does it have any effect upon management – or lack of it.


Isle of Wight Council
Description: Sites of Importance for Nature Conservation
Project: Isle of Wight
Green Infrastructure Network
Status:
Analysis
Date: 13/07/2010
Map: SINC Plan 01
N
File path: U:\CPE Projects\CBLDBD IoW Greenspace\GIS\Workspace
Author: TR
Sites of Importance for Nature Conservation

Data set SIX – Water Framework Directive Data/Groundwater Source Protection Zone (Source Environment Agency)

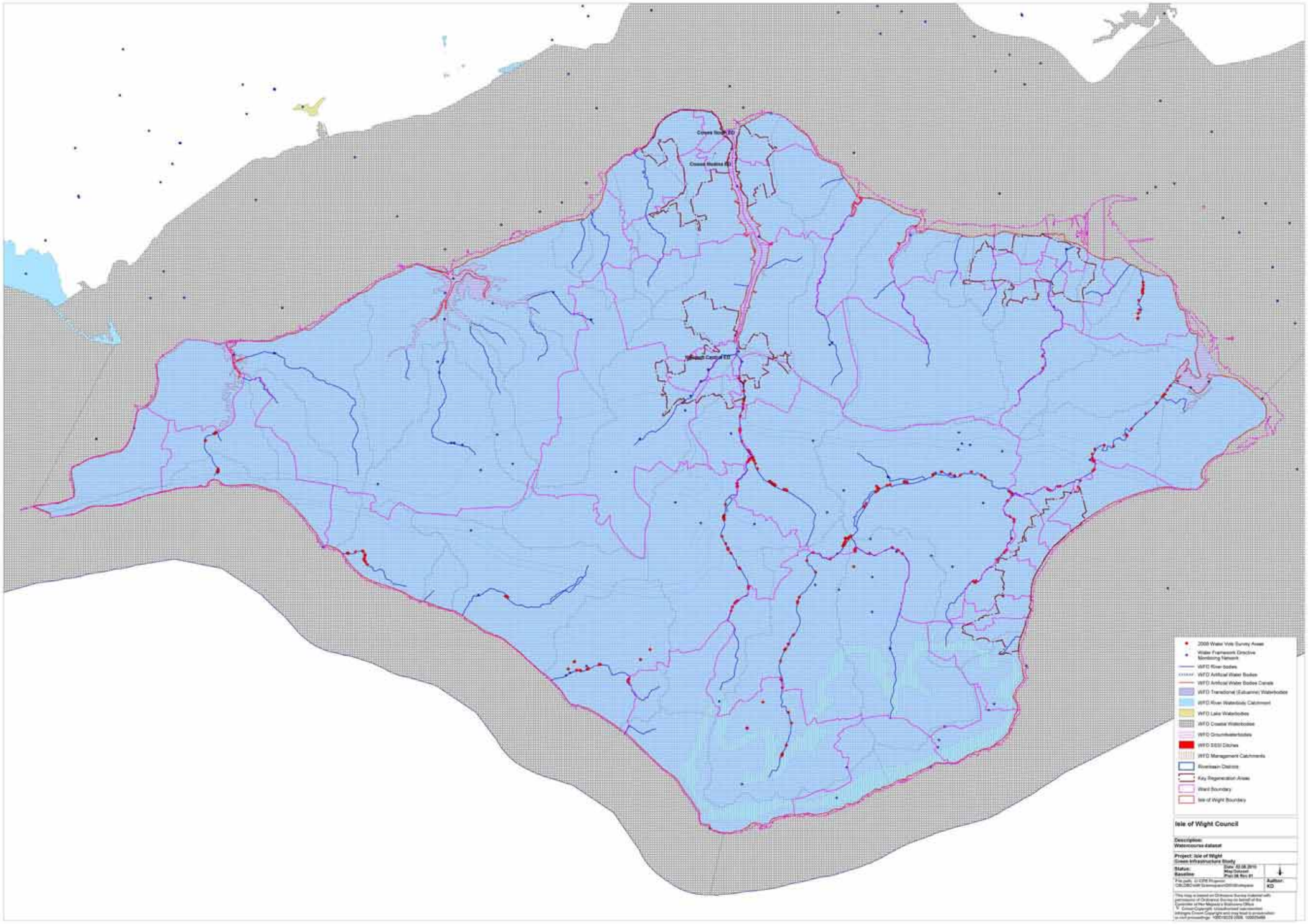
- WFD River Bodies
- WFD Artificial Water Bodies
- WFD Transitional Estuarine Bodies
- WFD River Waterbody Catchment
- WFD Lake Water Bodies
- WFD Coastal Water Bodies
- WFD Ground Water Bodies
- WFD SSSI Ditches
- WFD Management Catchments
- River Basin Districts

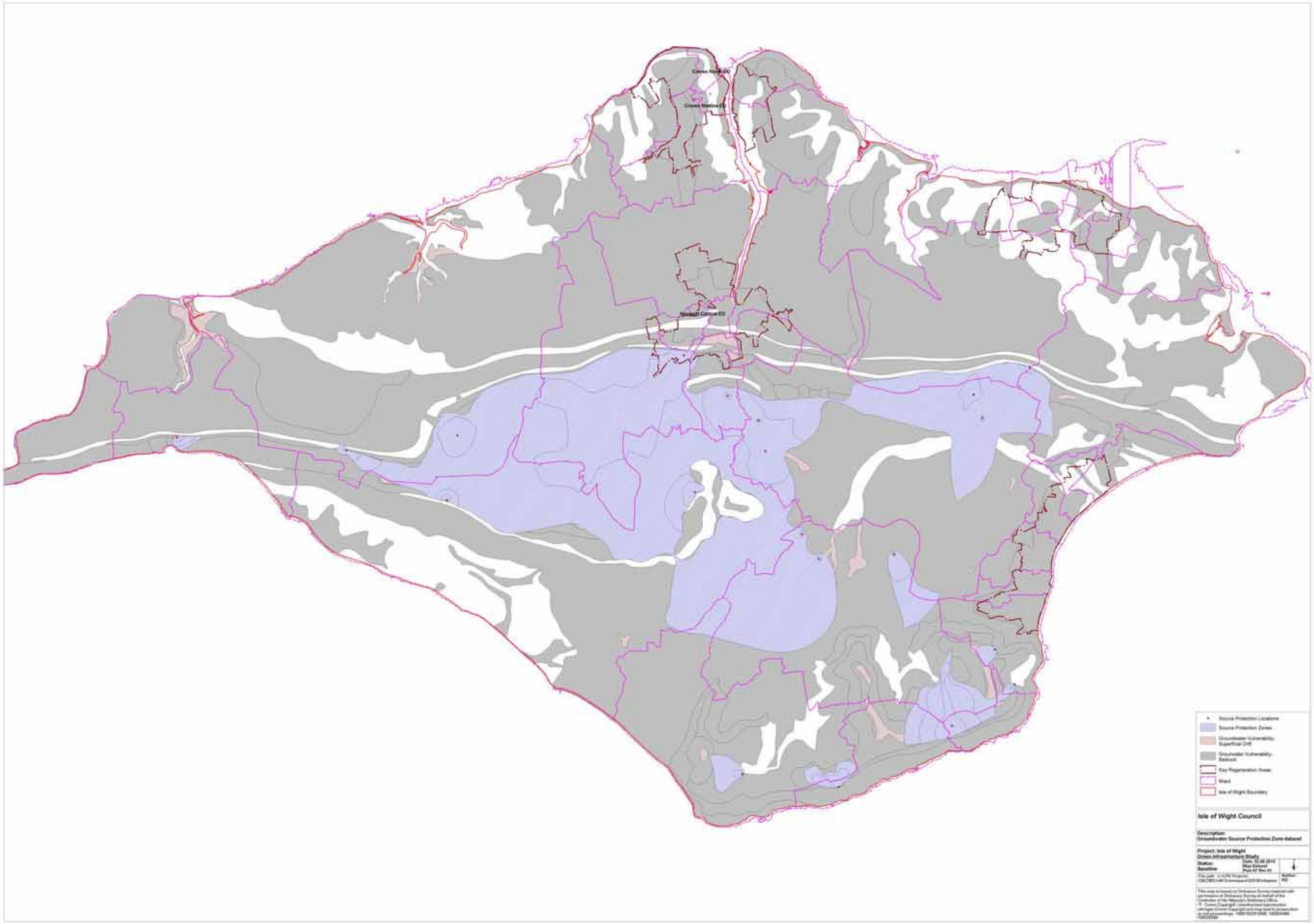
Description

The European Union (EU) has established a Community framework for water protection and management. The Framework Directive provides, among other things, for the identification and analysis of European waters, on the basis of individual river basin districts, and the adoption of management plans and programmes of measures appropriate for each body of water. The publication of the EC Water Framework Directive (WFD) has raised the profile of river basin planning and floodplain management issues. The Directive will influence flooding and land-use planning, as it aims to help stabilise the quantity of water contained within catchments which will, in turn, limit flood potential and protected habitats.

Issues

As discussed previously.


2009 Water Vole Survey Areas
Water Framework Directive Monitoring Network
WFD River bodies
WFD Artificial Water Bodies
WFD Artificial Water Bodies Canals
WFD Transitional (Estuarine) Waterbodies
WFD River Waterbody Catchment
WFD Lake Waterbodies
WFD Coastal Waterbodies
WFD Groundwaterbodies
WFD SSSI Ditches
WFD Management Catchments
Riverbasin Districts
Key Regeneration Areas
Ward Boundary
Isle of Wight Boundary
Isle of Wight Council
Description:
Watercourse dataset
Project: Isle of Wight
Green Infrastructure Study
Status:
Baseline
Date: 02.08.2010
Map Dataset
Proj: OS Nov 01
Author:
KD


Source Protection Locations
Source Protection Zones
Groundwater Vulnerability - Superficial Drift
Groundwater Vulnerability - Bedrock
Key Regeneration Areas
Ward
Isle of Wight Boundary
Isle of Wight Council
Description:
Groundwater Source Protection Zone dataset
Project: Isle of Wight Green Infrastructure Study
Status: Baseline

Data set SEVEN – Local Biodiversity Opportunity Areas

Description

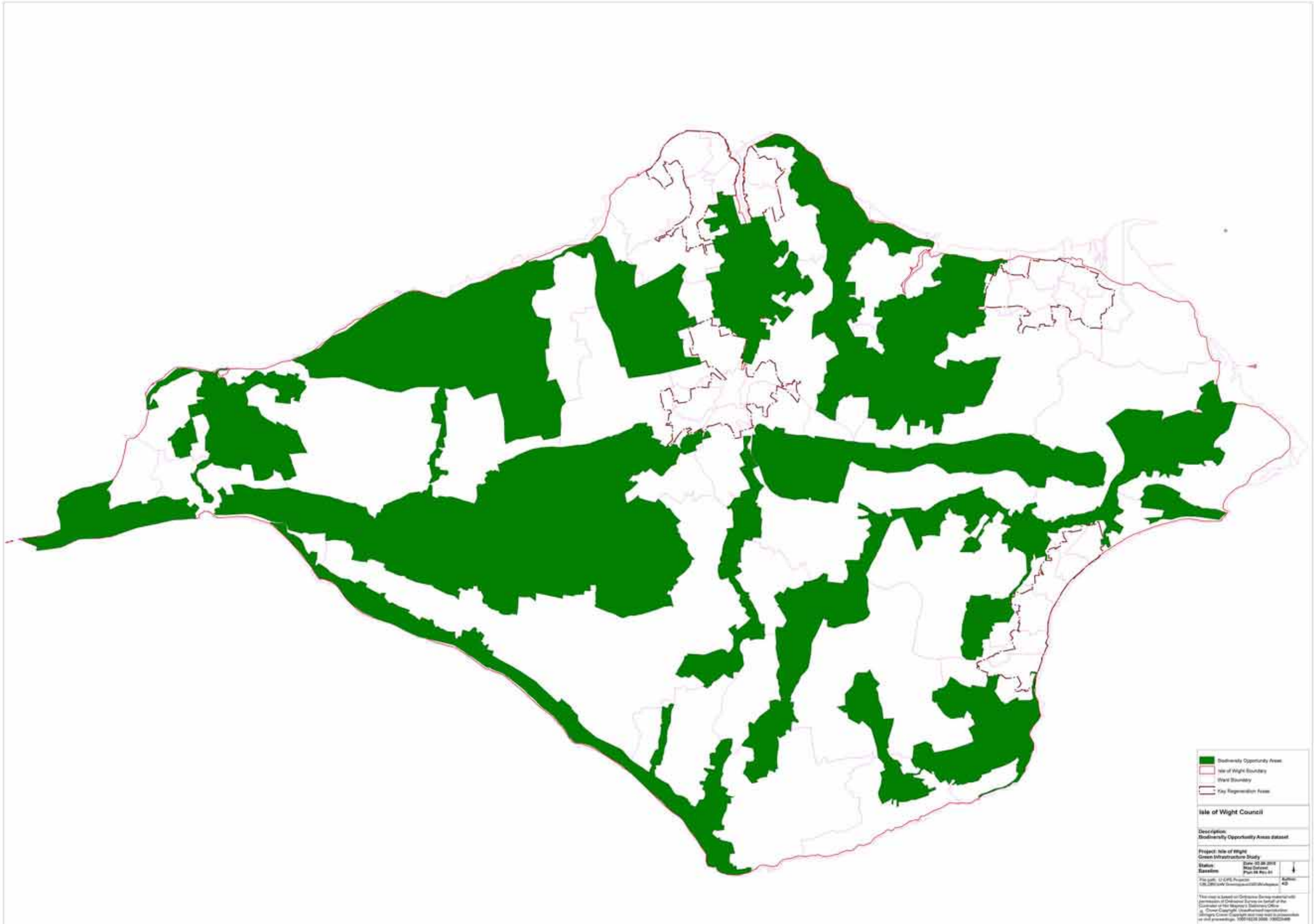
These Biodiversity Opportunity Areas complement the work of regional and local organisations on the Island working to restore and create areas rich in biodiversity. Delivering Biodiversity Action Plan targets and actions through this agreed area based approach should result in a landscape scale approach to conservation, making the Island's wildlife more robust to changing climate and socioeconomic pressures.

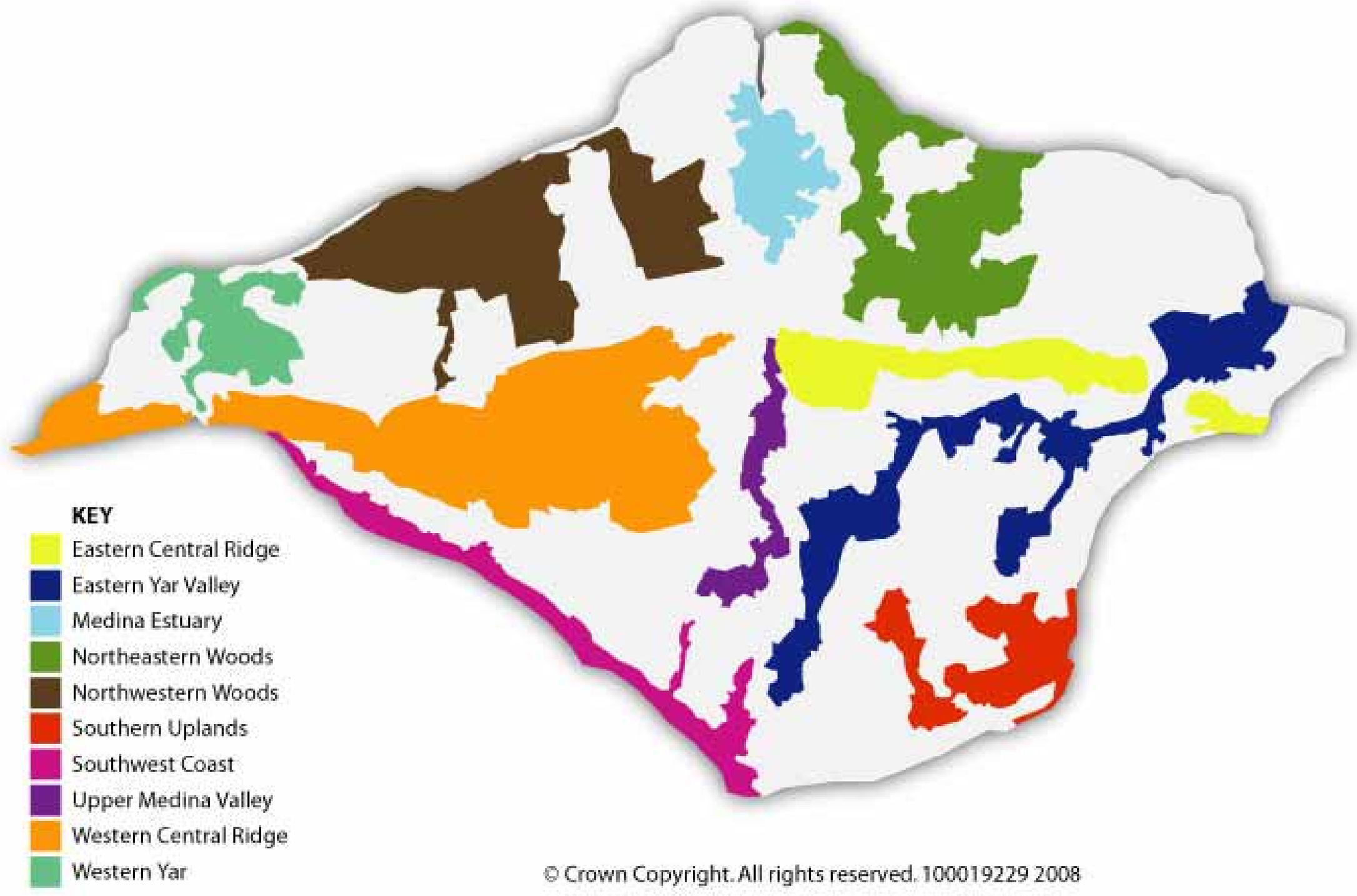
Issues

Covering 43% of the Island, the IW Biodiversity partnership has put forward ten new local Biodiversity Opportunity Areas (BOA's) to help deliver the IW Biodiversity Action Plan. Before now, they have been focusing work on individual sites usually designated as SSSIs (Sites of Special Scientific Interest) or SINCS (Sites of Important Nature Conservation). However, BOAs cover large areas and will enable partners to work on a more landscape-scale basis. Up until now nature conservation has concentrated on protecting important sites which are often fragmented and isolated however, the identification of BOAs will help expand sites, develop link habitats and buffer areas.

BOAs do not represent a statutory designation or a constraint upon activities. They indicate where there are substantial opportunities to make positive changes for biodiversity, and should be used to inform local strategies and planning.

This should involve work with farmers, landowners and communities in these areas and aim to show that in partnership what can be achieved through social and economic objectives alongside a flourishing natural environment with wildlife-rich landscapes.


Biodiversity Opportunity Areas
Isle of Wight Boundary
Ward Boundary
Key Regeneration Areas
Isle of Wight Council
Description:
Biodiversity Opportunity Areas dataset
Project: Isle of Wight
Green Infrastructure Study



Local Biodiversity Opportunity Areas (Source Wild on Wight

Data set EIGHT - Recreation and Community Services

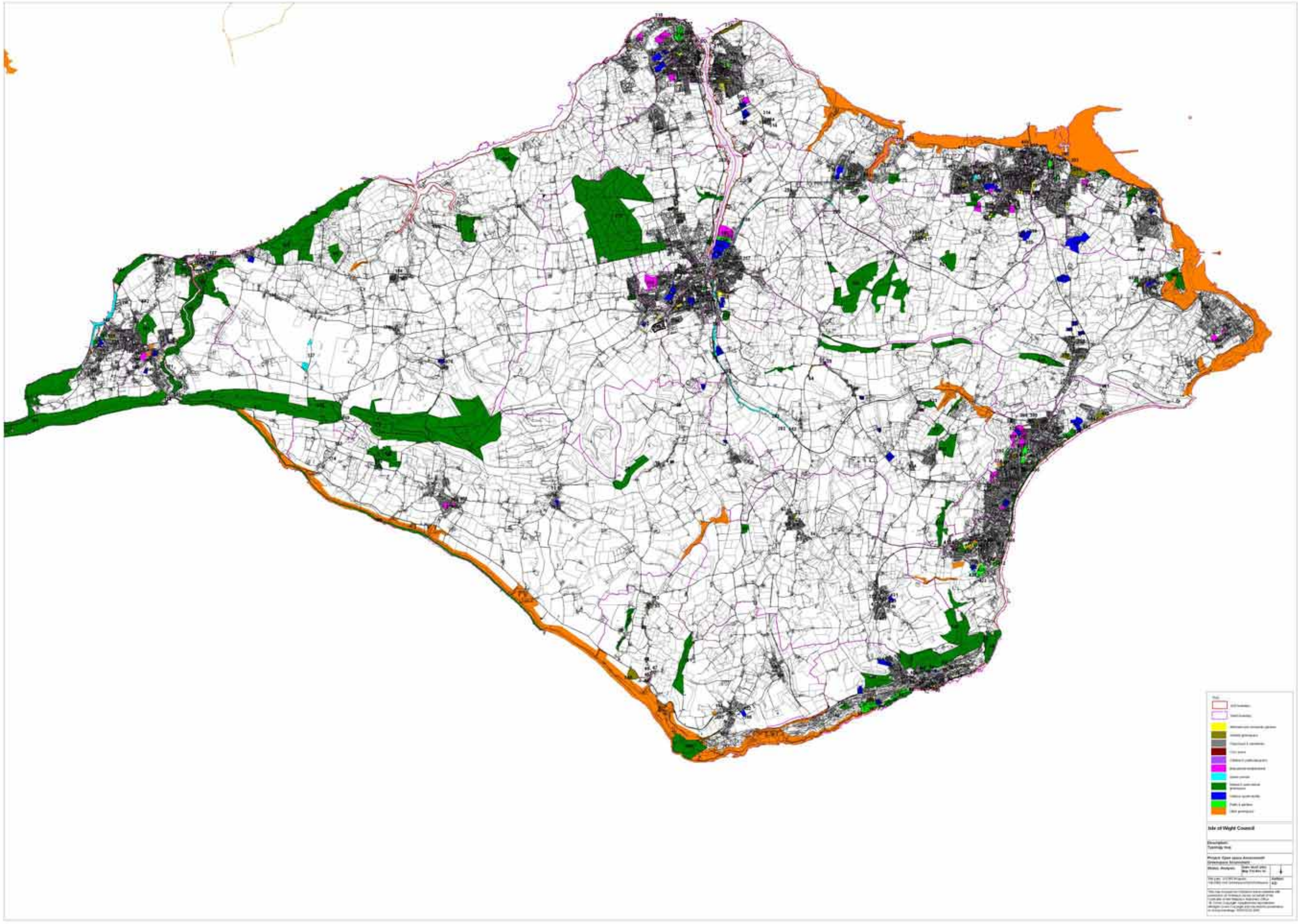
- Public Parks and Gardens
- Local Amenity Green space
- Allotments and Community Gardens
- Public Provision for Children and Young People (e.g. play areas)
- Outdoor Sports Facilities, Playing Fields
- Churchyards and Cemeteries
- Green Corridors

Description

Based on the PPG17 compliant audit carried in 2009 and cover most recreational facilities open and accessible to the public.

Issues

The PPG17 audit looked at a range of quality, value, quantity and accessibility issues which are summarised within. This was based on an agreed typology and new provision standards were derived from this work. There were a small number of accessibility issues (discussed within this report) which were mapped within the PPG17 study.



Data set NINE – Institutions

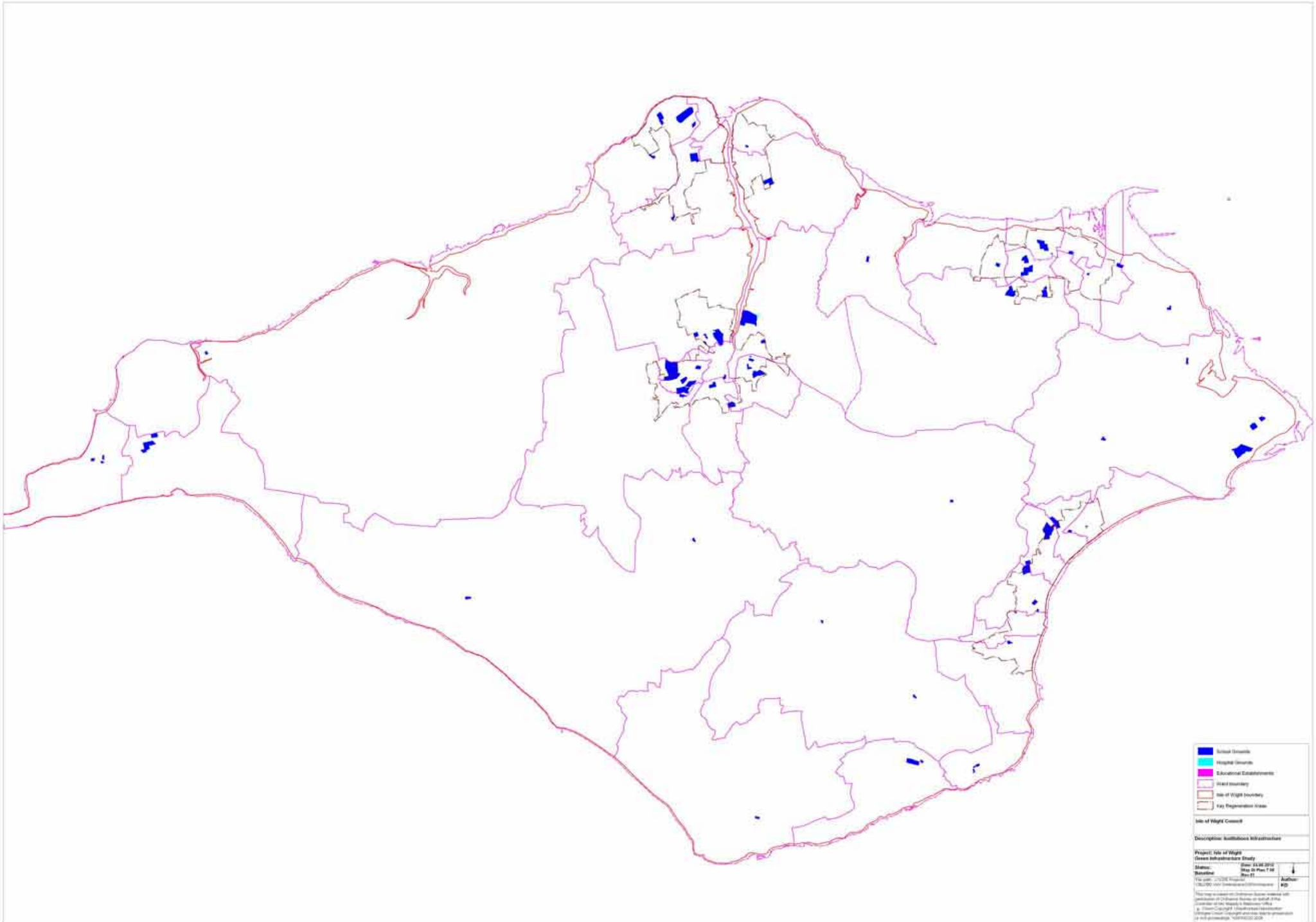
- Hospital Grounds
- School Grounds
- Educational Establishments

Description

Many of these have limited access but are important aspects of the Islands GI assets, particularly school playing fields, many which are accessible to local people as a dual use depending on facilities available and times of opening.

Issues

Accessibility, quality as well as location are all important. There is scope to increase accessibility to many of these sites as well as improve the multifunctionality of many of them which provide little in the way of biodiversity or recreational opportunities.



Data set TEN - Landscape

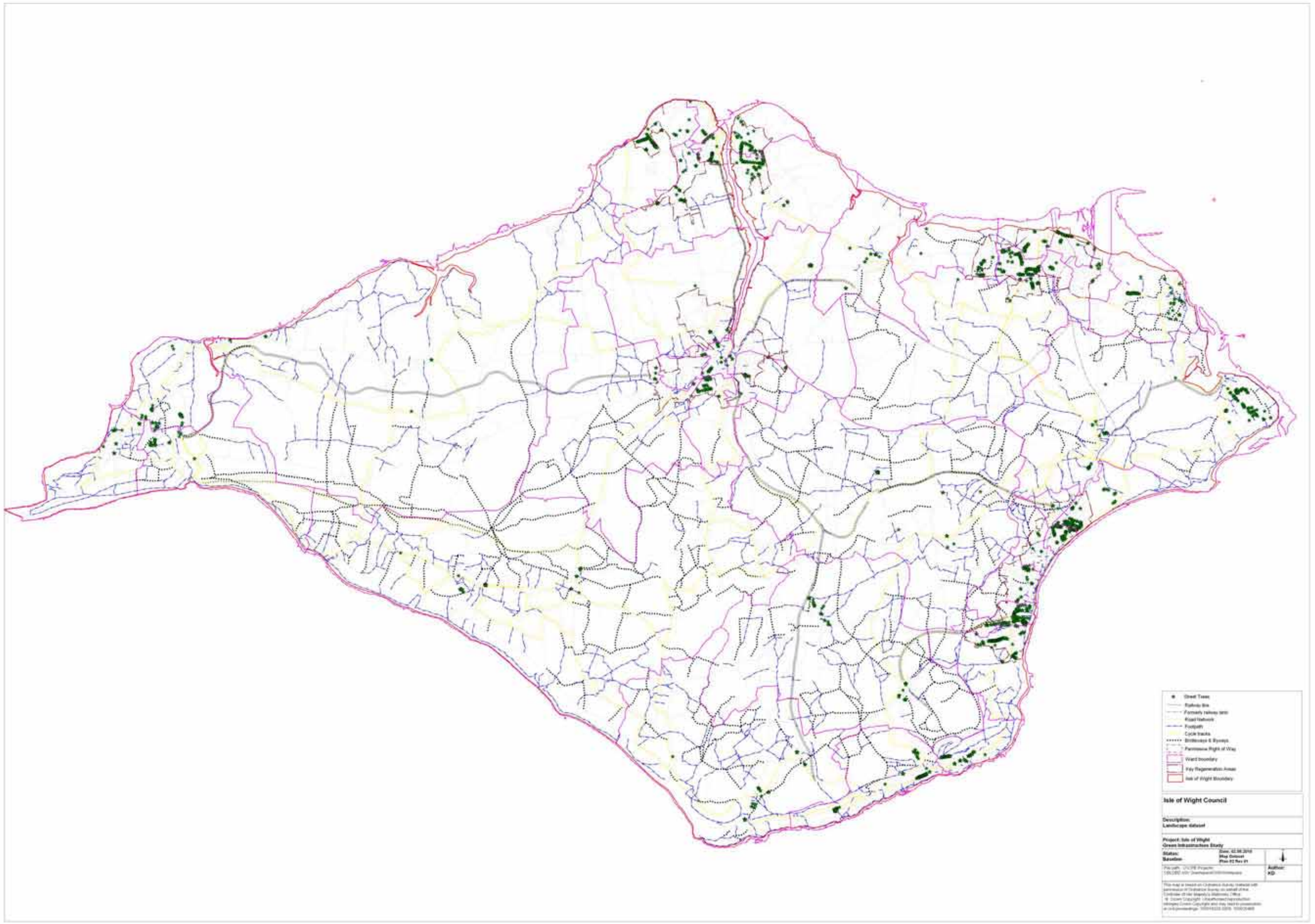
- Public Rights of Way (RoW)
- Permissive RoW
- Quiet Lanes (on-road)
- Defined Cycle Routes
- Street Trees
- Road network
- Railway Lines
- Former Railway Land

Description

The Rights of Way section of the Isle of Wight Council manages the most concentrated network of public rights of way in the UK. Within 38,000 hectares (147 square miles) there are 520 miles of rights of way which include 326 miles of footpath, 165 miles of bridleways, and 29 miles of byways. This equates to 3.5 miles of rights of way per square mile.

Issues

The Rights of Way Improvement Plan highlights a number of issues, ranging from the constantly improving quality of the network, from 2002, when 83% achieved the required standard, in 2003, 83%, 2004, 88% and improving further with minor problems cited such as path surface, signage and some areas overgrown. The Plan summarises that the Isle of Wight already has a good network of well-maintained paths. Even so, there have been requests and ideas for new links from the main user groups. While these new links and ideas will be addressed, it may benefit more users to concentrate on improving existing routes for all users, and potential upgrades or amendments to existing paths, to allow more access or safer use. The plan prioritises these schemes to benefit the most users. New routes and links are also potential schemes for encouraging external funding.


Isle of Wight Council

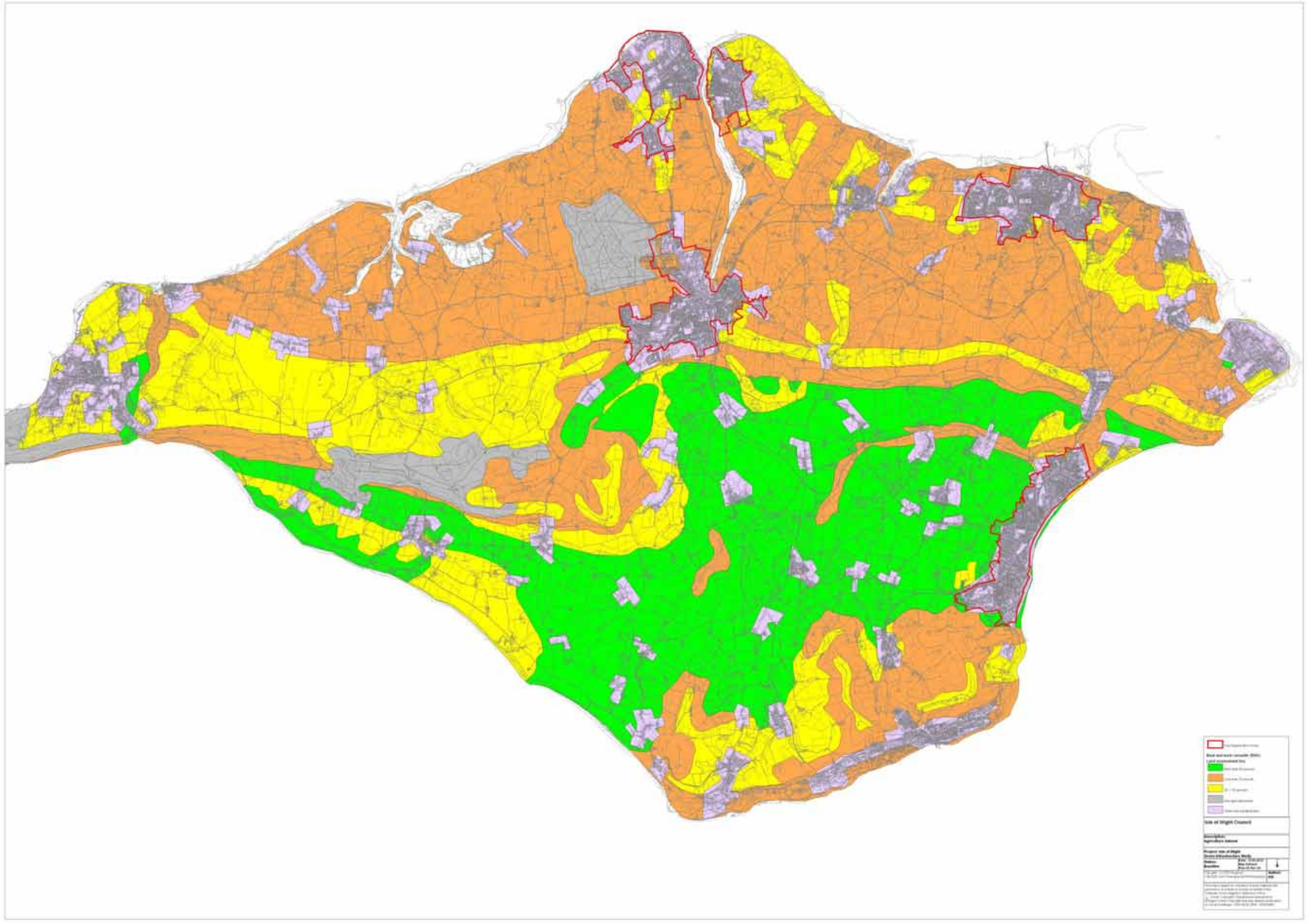
Data set ELEVEN - Agriculture Land Classification: Best and Most Versatile Land Assessment (BMV)

- More than 60%
- 20.1-60%
- Less than 20%
- Non Agricultural Land
- Urban and Industrial Land

Description and Issues

The presence of best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification), should be taken into account alongside other sustainability considerations (e.g. biodiversity; the quality and character of the landscape; its amenity value or heritage interest; accessibility to infrastructure, workforce and markets; maintaining viable communities; and the protection of natural resources, including soil quality) when determining planning applications. Where significant development of agricultural land is unavoidable, local planning authorities should seek to use areas of poorer quality land (grades 3b, 4 and 5) in preference to that of a higher quality, except where this would be inconsistent with other sustainability considerations. Little weight in agricultural terms should be given to the loss of agricultural land in grades 3b, 4 and 5, except in areas (such as uplands) where particular agricultural practices may themselves contribute in some special way to the quality and character of the environment or the local economy. If any undeveloped agricultural land needs to be developed, any adverse effects on the environment should be minimised.

Development plans should include policies that identify any major areas of agricultural land that are planned for development. But local planning authorities may also wish to include policies in their LDDs to protect specific areas of best and most versatile agricultural land from speculative development. It is for local planning authorities to decide whether best and most versatile agricultural land can be developed, having carefully weighed the options in the light of competent advice.

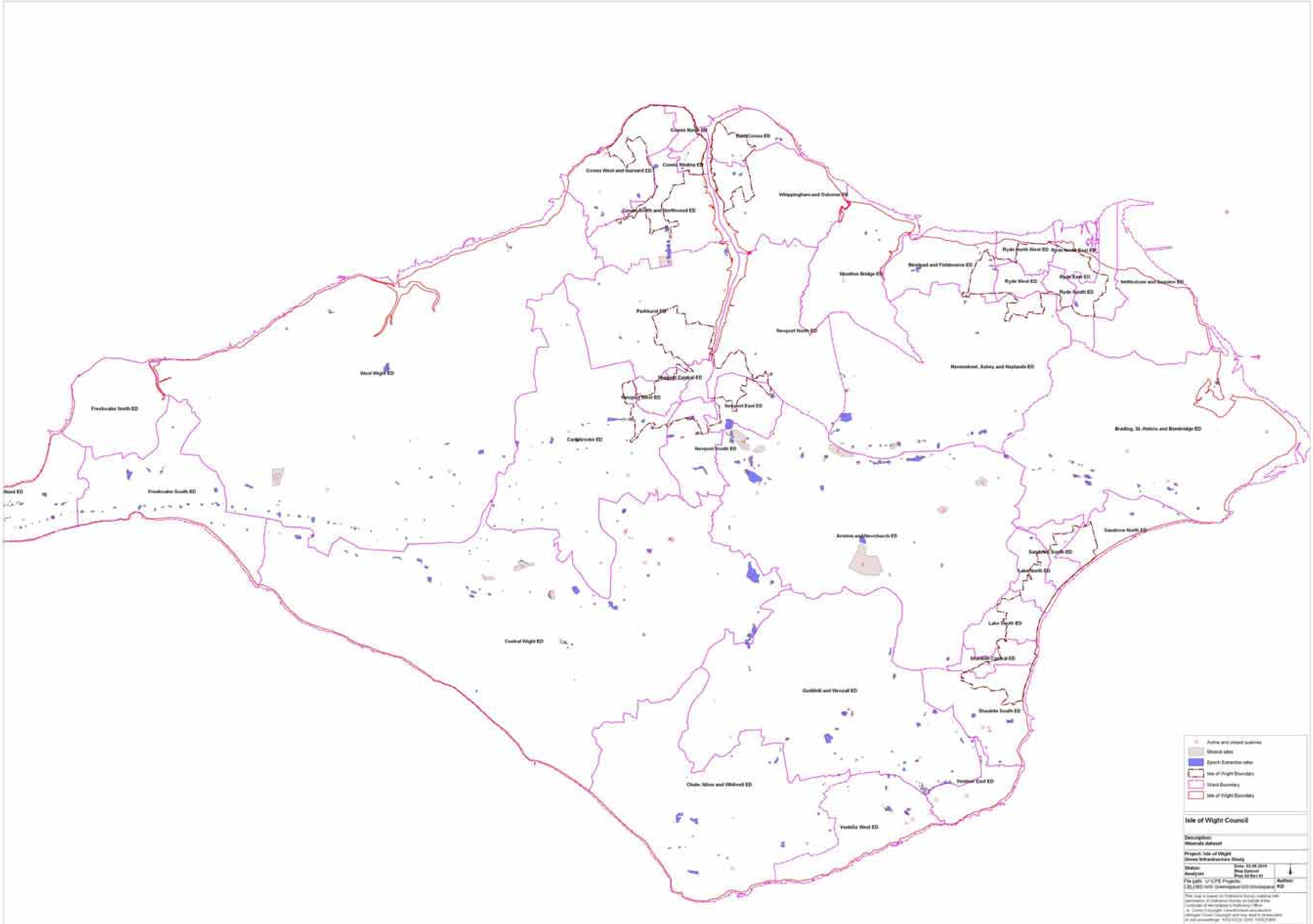


Data set TWELVE – Minerals and Extraction Sites

- Minerals Sites
- Active and closed quarries and mineral workings
- Epoch Extraction sites

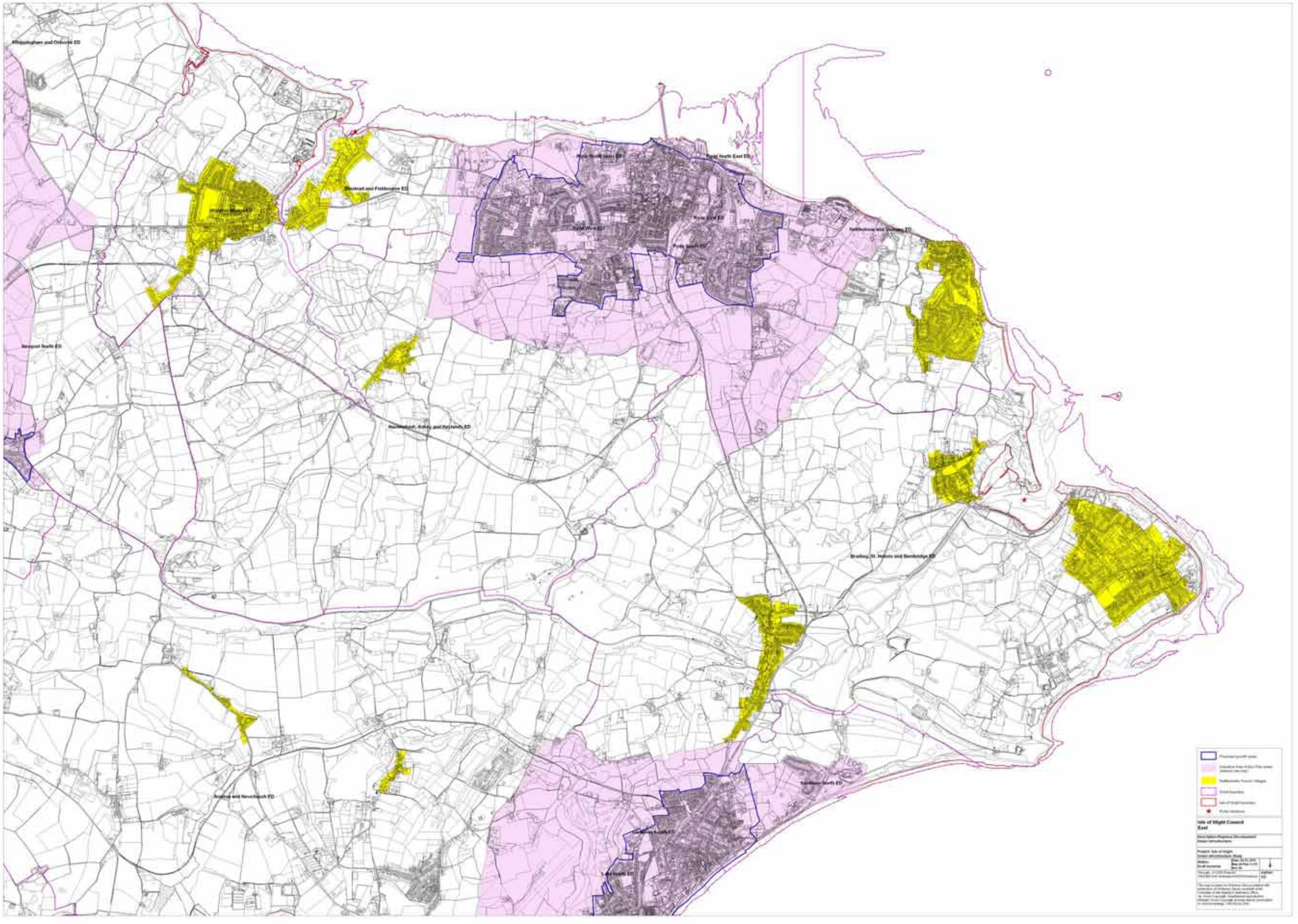
Description and Issues

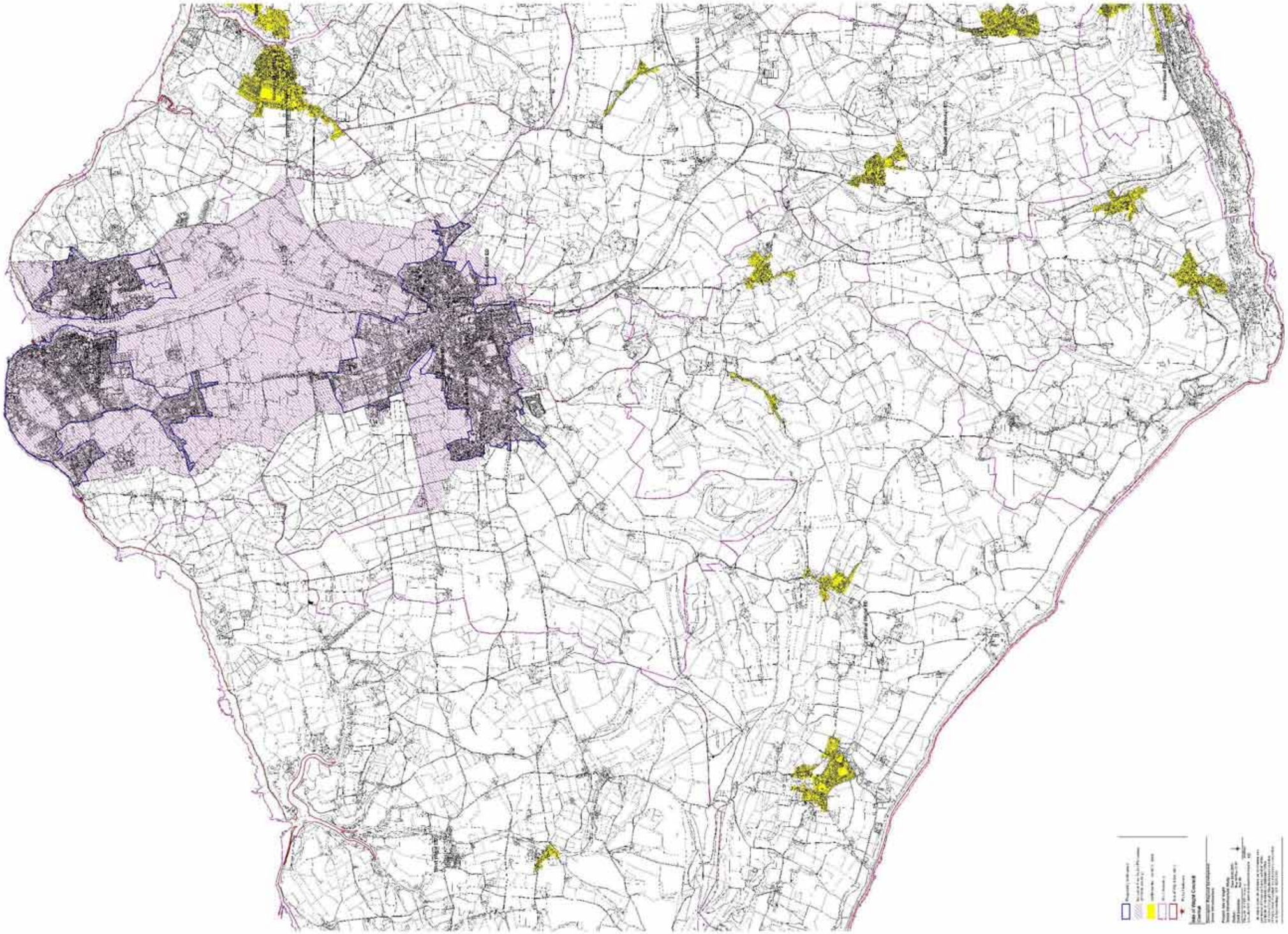
A number of mineral sites have biodiversity and leisure benefits and are Local Nature Reserves and accessible to the public. There may be opportunities for increasing access to other existing sites.

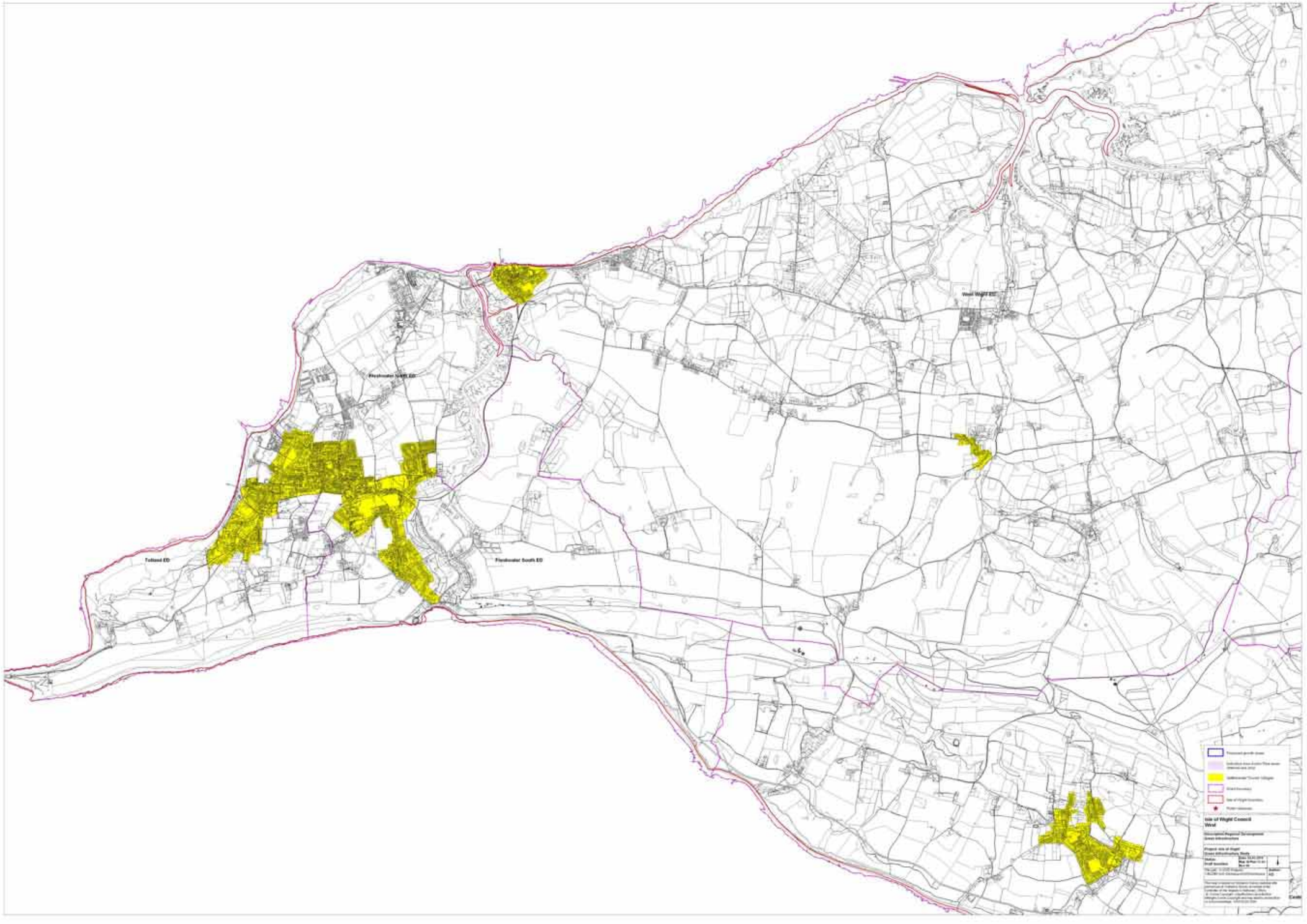

Active and closed quarries
Mineral sites
Epoch Extraction sites
Isle of Wight Boundary
Ward Boundary
Isle of Wight Boundary
Isle of Wight Council
Description:
Minerals dataset
Project: Isle of Wight
Green Infrastructure Study
Status:
Analysis
Author:
KD

Data Set THIRTEEN - Regional Development

- Key Regeneration Areas
- Settlements/Towns/Villages

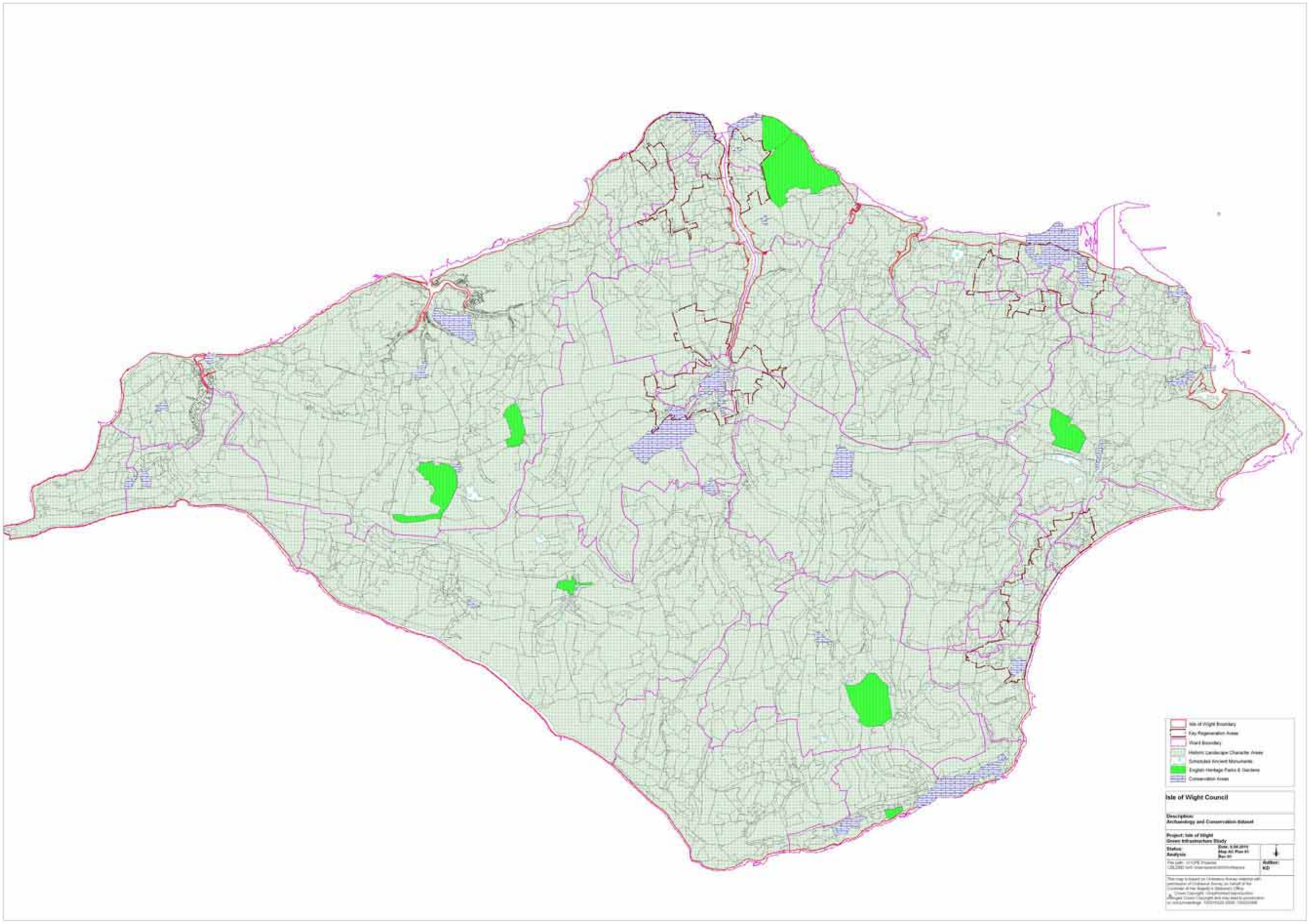

Whippingham and Osborne ED
Shalmsford and Fishbourne ED
Newport North ED
Hamstead, Ashey and Haylands ED
Bembridge, St. Helens and Bembridge ED
Arreton and Newchurch ED
Isle of Wight Council
East




Tolland ED
Freshwater South ED
Freshwater North ED
West Wight ED
Isle of Wight Council
West

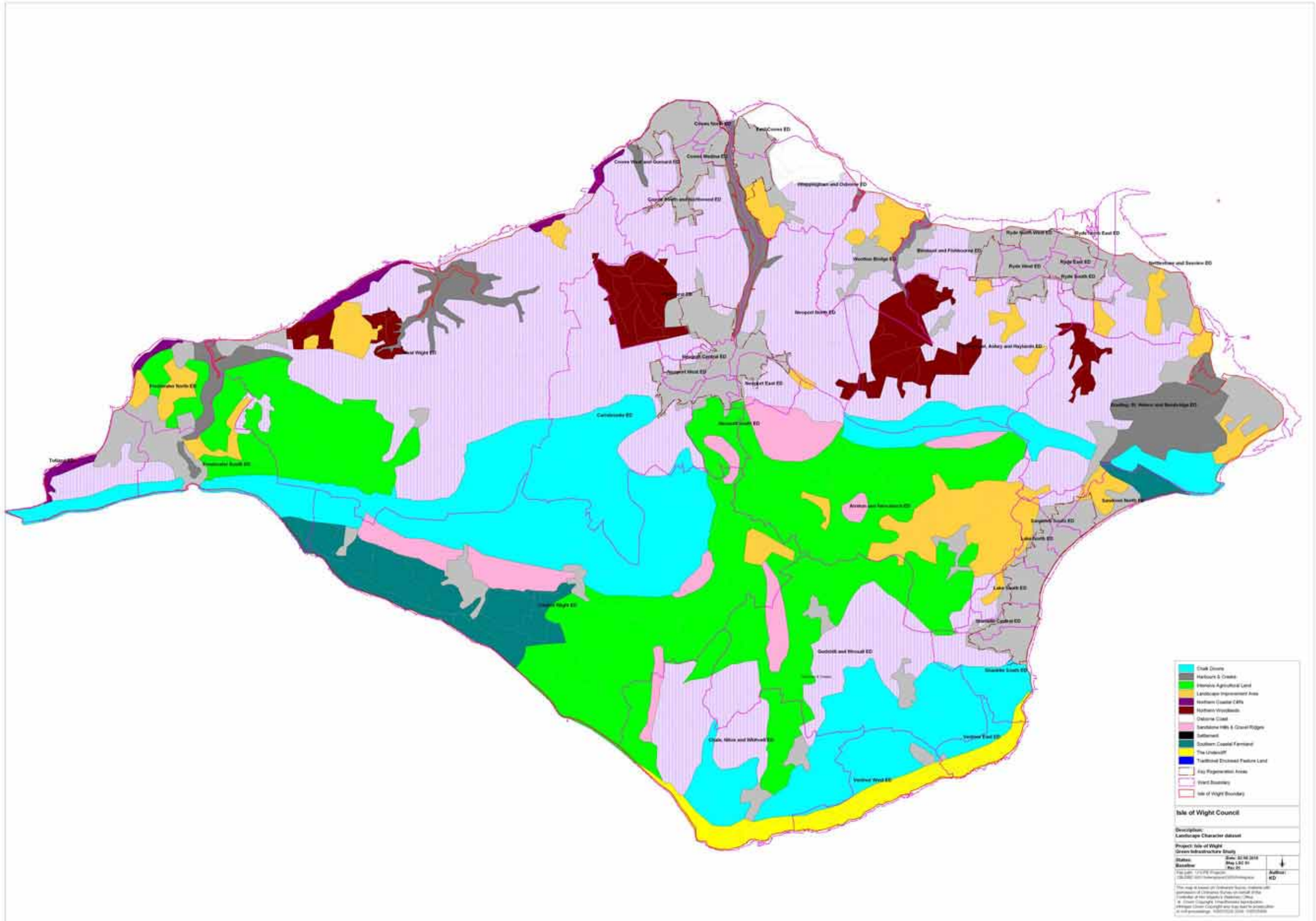
Data Set FOURTEEN - Archaeology and Conservation, Landscape Character

- Scheduled Ancient Monuments
- Conservation Areas
- Historic Landscape Characterisation
- Historic Parks and Gardens


Isle of Wight Boundary
City Regeneration Areas
Ward Boundary
Historic Landscape Character Areas
Scheduled Ancient Monuments
English Heritage Parks & Gardens
Conservation Areas
Isle of Wight Council
Description:
Archaeology and Conservation dataset
Project: Isle of Wight
Green Infrastructure Study
Status:
Analysis
Author:
KD

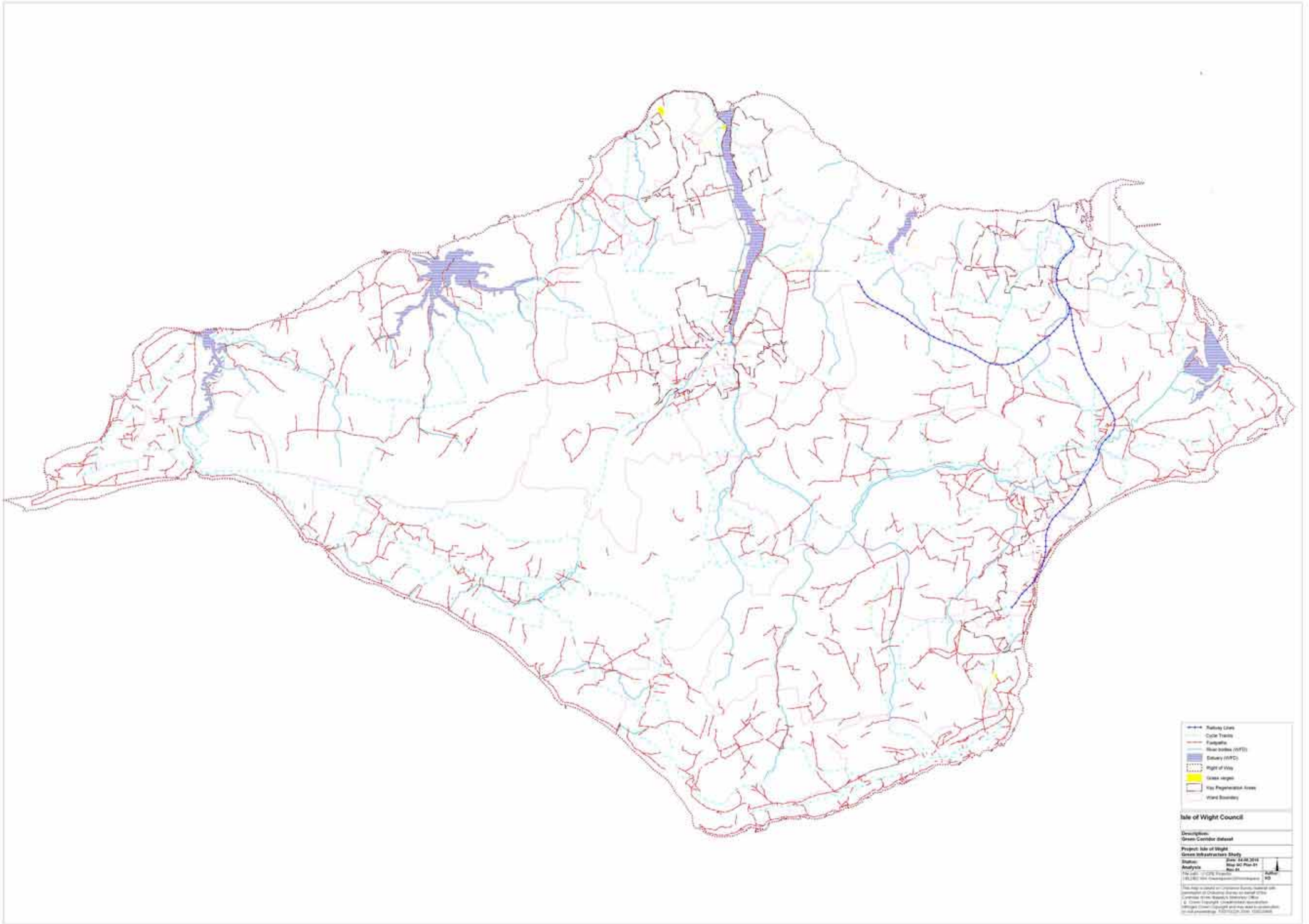
Data Set FIFTEEN – Landscape Character Areas (Source Isle of Wight AONB)

- Chalk Downs
- Harbours and Creeks
- Intensive Agricultural Land
- Landscape Improvement Area
- Northern Coastal Cliffs
- Northern Woodlands
- Osborne Coast
- Sandstone Hills & Gravel Ridges
- Settlement
- Southern Coastal Farmland
- The Undercliff
- Traditional Enclosed Pasture Land


Chalk Downs
Harbours & Creeks
Intensive Agricultural Land
Landscape Improvement Area
Northern Coastal Cliffs
Northern Woodlands
Osborne Coast
Sandstone Hills & Gravel Ridges
Settlement
Southern Coastal Farmland
The Undercliff
Traditional Enclosed Pasture Land
Key Regeneration Areas
Ward Boundary
Isle of Wight Boundary
Isle of Wight Council
Description:
Landscape Character dataset
Project: Isle of Wight
Green Infrastructure Study

Data Set SIXTEEN - Green Corridors

- Rivers,
- Estuaries,
- Cycleways,
- Long distance footpaths,
- Railway lines,
- Grass verges


Railway Lines
Cycle Tracks
Footpaths
River bodies (WFD)
Estuary (WFD)
Right of Way
Grass verges
Key Regeneration Areas
Ward Boundary
Isle of Wight Council
Description:
Green Corridor dataset
Project: Isle of Wight
Green Infrastructure Study
Author:
KG

7. Isle of Wight Green Infrastructure Analysis – The Local Context

Using the evidence base gathered and analysing the data sets produced, a comprehensive view of the environmental characteristics of the Island has been produced and can now be defined further. Deficiencies and needs in relation to green infrastructure functions have also been identified, together with the initial assessment of opportunities and key delivery partners and projects.

A small number of information gaps existed but a decision was made that as comprehensive a view of GI on the Island has been determined by the collation of data to date.

Some elements that might be classed as 'grey', but which contribute to the wider functioning of green infrastructure were treated as part of the green infrastructure network. Grey infrastructure, such as bus routes, could be made to integrate with green infrastructure networks rather than vice-versa.

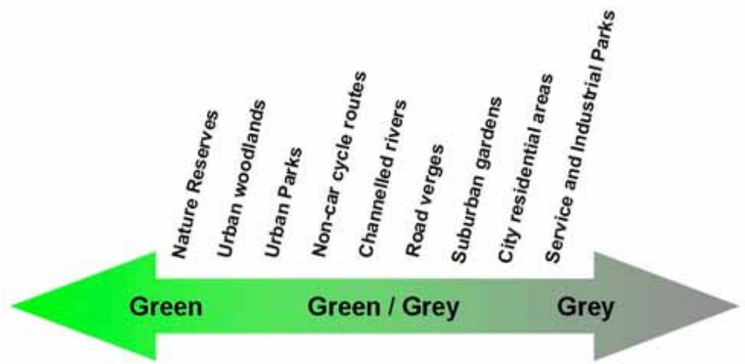


Figure 7-1: Green/Grey Infrastructure Scale

One of the problems encountered in considering green infrastructure planning is that it is often hard to visualise and therefore may not be accounted for properly. The green-grey continuum concept may help to overcome the lack of obviousness of green infrastructure compared to grey infrastructure, which is well understood in the planning process.

The role of the GIS in this analysis is to enable planners to make informed judgements in response to a number of questions. It should be borne in mind throughout that the GIS is simply a tool; the critical thing is awareness of the geographical dimensions of GI.

The following questions all relate to the matrix in Figure 2 below. The matrix provides a framework for the assessment of individual green spaces and links and their interrelationships. There are two dimensions to this assessment, quality and infrastructure. Quality is multi-dimensional and methods for the assessment of green spaces are detailed in the PPG17 Open Space, Sport and Recreation Study and is summarised later on in this study, but the vertical axis broadly distinguishes between low, acceptable and high quality spaces. The horizontal axis focuses on the connectivity and integrity of the networks which combine to form infrastructure. A high quality green infrastructure will be made up of high quality green spaces and linear routes that are linked together to form coherent networks of multi-functional areas and linear features. This matrix is important in determining where we are in relation to GI on the Isle of Wight and to determine the direction of travel any GI Strategy needs to take.

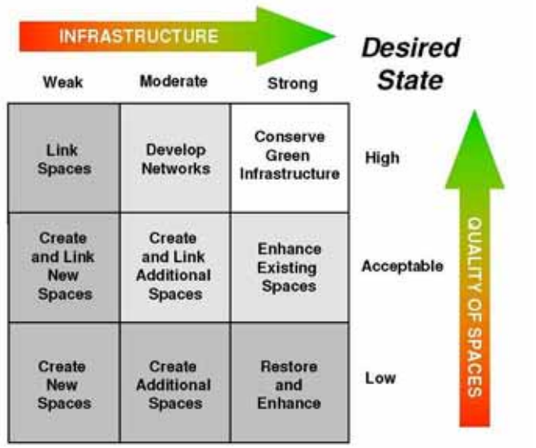


Figure 7-2:Quality of Spaces, Green Infrastructure and the 'Direction of Travel'

There are three key dimensions to the analysis and assessment of green spaces and green infrastructure on the Isle of Wight which should inform judgements about conservation, enhancement, linkages, creation and development initiatives, opportunities and proposals:

Context: the needs, wants, aspirations and problems of Island communities, groups and individuals who are actual or potential users of GI must be considered in making judgements about conservation, change or development. This is effectively a demand side issue and relates not just to total population, but also aspects of demography, deprivation and disadvantage. In short, certain areas of the Island may have a higher priority need for GI developments by virtue of their characteristics.

Quality: although quality is to a degree an absolute concept, the quality of green spaces and links on the Island is also determined by the concepts of sufficiency and suitability. It is entirely appropriate for planners to conclude that an area has GI that is both sufficient (relative to defined and meaningful standards) and suitable (relative to a careful analysis of the needs of the surrounding area), although this conclusion should be based on the available evidence and in the case of the Isle of Wight, the recently completed PPG17 Study.

Interaction: GI has multiple functions and many of these functions derive from connections between elements. For example, non-car transportation will be enhanced when high density residential areas are connected to centres of employment, and wildlife corridors are more likely to be effective when they link together relevant nature reserves and other habitats. Thus, linking green spaces to make networks and integrating networks to form an infrastructure realises synergies and can meet demand with supply. However, it is often the case that the links which may have real impact are non-obvious, or are not considered by planners in making decisions which could potentially have ramifications, either negative or positive, for the attainment of these outcomes.

Clearly these elements interrelate, but planners should bear these in mind as the three dimensions which determine the significance of individual elements, links and networks in GI.

Fundamentally there are two points at which planners may focus on Island-wide GI issues:

3. In considering how to enhance quality of environment, quality of life and quality of place through a focus on green spaces, links and networks of green spaces; and

4. In considering how to manage development pressures and the implications of development scenarios on existing green spaces, access to green spaces and wider green infrastructure.

A simple division like this might identify the first as being positive planning in relation to green infrastructure and the second as being essentially reactive, but in essence these should effectively be seen as linked activities; the emphasis is on forward planning and working through scenarios and their implications to promote development that does not degrade environmental quality, promotes quality of life and drives up quality of place. To do this there is a requirement for principles (what are we trying to achieve and why?) and information (what are our options and which is the best way forward?).

8. Deficiencies and Opportunities

To analyse any deficiencies on the Island, a range of standards need to be addressed and a view taken on what is locally appropriate. As part of the recent PPG17 analysis for open spaces, sport and recreation, a range of standards were produced relating to quality, quantity and accessibility. These were based on a detailed PPG17 compliant local needs assessment which looked at existing provision, local perceptions, a site based qualitative analysis of publicly accessible open space and a range of factors such as how far local people are prepared to travel to certain typologies of open space. As well as taking into account existing policies, guidance and recommended standards, a new set of provision standards was proposed for the Isle of Wight. These are summarised in the table below. We have also highlighted existing provision based on GIS analysis of publicly accessible open space carried out as part of the PPG17 Open Space, Sport and Recreation Study. Analysis of existing provision was important in deriving new proposed quantity standards. As we have already stated though, whilst quantity of open space is important, consideration is also needed of the structural networks in which these open spaces are found and the important linkages which it may be necessary to form to improve the networks. This is developed later.

Open Space Type	Proposed Standard m2 per person		Existing provision m2 per person	
	URBAN	RURAL	URBAN	RURAL
Parks and gardens (PG)	6	6	6.35	2.05
Natural and semi-natural areas (NGS)	N/A	N/A	114	323
Local amenity green space (AGS)	5	5	6.4	7.5
Provision for children and young people (CYP)	0.6	0.6	0.69	0.49
Outdoor sports facilities (OSF)	16	8	14.1	9.3
Green corridors (GC)	N/A	N/A	4.2	5.8
Allotments and community gardens (ACG)	3	3	1.85	0.52
Cemeteries and churchyards (CC)	N/A	N/A	4.2	5.8

Table 8-1: Open Space Provision Standards and Existing Provision

PPG17 Audit and Analysis Summary

Prior to developing the PPG17 study the general viewpoint was that there was an adequate provision of open space within the urban areas but there were increasing pressures on these spaces for housing developments. The detailed and comprehensive audit and analysis undertaken in developing the PPG17 study reaffirmed this viewpoint.

When applying the provision standards to the PPG17 typologies, the following key points were extracted:

Parks & Gardens: both the urban and some rural areas are well endowed with parks and gardens across the Island with some excellent provision in some of the towns in particular.

Natural and Semi-Natural: Based on acknowledged provision standards used elsewhere and national guidance, there are deemed few quantity deficiencies across the Island in relation to natural green space, except the Bay Growth Area. There are large quantities of open available areas especially in relation to coastal areas, country walks, woodlands and country parks across the Island and actual provision per person per square metre is considerable. It was considered therefore unnecessary to set a new provision standard for Natural Green Space.

However, as no new 'local' standard was derived for Natural Green Spaces from the PPG17 study, it was felt that the current ANGSt standard as recommended by Natural England in *"Nature Nearby - Accessible Natural Green Space"* was the standard that the Isle of Wight should be using. Analysis was carried out based on the following:

ANGSt recommends that everyone, wherever they live, should have an accessible natural greenspace:

- Of at least 2 hectares in size, no more than 300 metres (5 minutes walk) from home
- At least one accessible 20 hectare site within two kilometres of home
- One accessible 100 hectare site within five kilometres of home
- One accessible 500 hectare site within ten kilometres of home
- A minimum of one hectare of statutory Local Nature Reserves per thousand population.(the current population of the Island is estimated at 140,200, the current area of designated LNR is 80.09ha, with a current provision of one hectare per 1750 of the population)

What is also important in relation to the Isle of Wight is the need to take into account the objectives of the Isle of Wight's 10 Local Biodiversity Opportunity Areas (LBOA). Covering 43% of the land surface of the Island, these areas have been chosen in relation to where there are the greatest opportunities to maintain and enhance biodiversity. These have been mapped as a separate data set and are discussed later in Section 9 – Strategic and Local Green Infrastructure Network – Opportunities

Amenity Greenspace: There are very few deficiencies across the Island in relation to amenity green space, with most of the towns only having localised smaller deficiencies.

Provision for Children and Young People: there are considerable deficiencies in accessibility but in relation to quantity, there are no deficiencies between urban and rural, although accessibility to play facilities is far more important than overall quantity of provision.

Green Corridors: there is a large amount of provision of green corridors across both the urban and rural areas linking settlements, including cycleways, bridleways and the coastal footpath.

Outdoor Sports Facilities: there is a surplus of outdoor sports facilities within the urban areas but a deficiency in some of the rural areas but this does not necessarily mean a surplus of playing pitches.

Allotments: there is an overall deficiency of allotments within the urban area and rural areas. There are no allotment sites in West Wight.

Cemeteries and Churchyards: the provision of cemeteries and churchyards appears to meet existing demands.

Quality

As part of the PPG17 study, a qualitative assessment was carried out for all publicly accessible open spaces across the Island. For the purpose of the PPG17 study, quality related to the range of features or facilities on a site and their nature or condition. The quality audit covered factors such as site accessibility, safety and security, management and maintenance and the presence of planting, trees, biodiversity, seats, and other facilities.

The quality scores provided a basis for comparing sites and provided an overview of the present state of open space on the Island. They also provided a preliminary identification of those spaces the Council should protect through the planning system and those that are a priority for future enhancement.

The PPG17 study found that there were many high quality open spaces provided on the Island with the majority of sites rated as well above average and more sites than any other rated as 'good'. This was the case for both the urban and rural areas. The study acts as a good benchmark in relation to defining quality of green spaces on the Island but the inherent measurement of quality for Natural Green Spaces and their character may also be viewed differently when taking into account their quality in relation to their prime purpose. For instance, a SSSI may be high in quality in relation to the visitor experience (accessibility, interpretation, litter management etc) but as a result of the number of visitors, overall quality of the habitats in relation to local biodiversity may be much less. This is further complicated by the number of landscape character areas that exist across the Island, all with their own characteristics and quality issues. "The Isle of Wight Landscape – An assessment of the AONB" carried out in 1994 describes the complex nature of the Island's Landscape. It divides the landscape into 11 landscape character areas (LCA) which are distinct enough to warrant their own identity. These are shown in Data set 15.

Chalk downs – described as dramatic, appreciating the full variety and grandeur of the Island's Landscape, open with extensive views, BUT a number of introductions have jeopardised the integrity of this area in a number of locations such as gun batteries, telecom masts, incongruous plantations and reservoirs.

Traditional enclosed pastureland – lush green pastures, surrounded by large hedges and small woodlands which predominate BUT includes more recently enclosed land with straighter hedgerows and is an area at risk as the fabric of the landscape is seen as largely unproductive and relies on smaller traditional farmers.

Typology	Sites audited	Average urban quality score	Average urban value score	Average rural quality score	Average rural value score	Range of quality scores	Range of value scores
Parks & gardens	24	83	62	91	59	51-100	40-75
Local amenity green space	125	80	52	91	54	8-100	13-75
Natural & semi-natural green spaces	69	83	58	93	59	63-100	13-67
Cemeteries & churchyards	64	85	53	93	57	59-100	22-63
Allotments	25	81	70	81	53	56-100	38-100
Green corridors	14	84	54	98	61	75-100	57-63
Children & young peoples facilities	52	81	61	84	66	48-100	5-97
Outdoor sports facilities	51	85	50	92	58	59-100	14-84
Civic spaces	27	96	59	96	50	86-100	26-63

Table 8-2: PPG17 Summary of Quality Scores

Intensive agricultural lands – large open fields predominantly in arable use with large scale hedge removal. The relic hedgerows are degraded and there are no hedgerow trees. Trees are restricted to shelterbelts, often around the large farms and farm buildings. It is described as having sweeping views, crisp air and sea breezes and has not seen the ad hoc development experienced elsewhere.

The northern woodlands – covering 3 large woodland blocks of Parkhurst Forest, Firestone Copse and Whitefield Wood. Some of these blocks are remnants of the ancient woodland that covered much of the Island.

Southern coastal farmland – gently undulating, with a sharply defined coast defined by the parallel lines of eroding cliffs and the Military Road and where valleys are affected by cliff erosion, steep coastal "Chines" occur.

Harbours and creeks – the six main estuary systems (the two Yars, Newtown, the Medina, Wootton Creek and Bembridge Harbour) and the three silted creeks (Gurnard Luck, Kings Quay and the Duver at Spring Vale) make up this LCA. The area consists mainly of tidal mud flats and shingle, salt marsh and greater or lesser amounts of fringing oak woodlands. The western Yar and Newtown estuaries are fine examples of unaltered inlets and are deemed to be very high quality.

Northern coastal cliffs – rough cliff edges, often partly enclosed by scrub growth, or hollows in the landform. This area has limited access and is often free from development. Intrusions exist with modern chalets, barbed wire, scrub and concrete rubble above Fort Albert render the coast a sort of builder's backyard.

The Undercliff – a sheltered secret landscape with open sea views and often described as a "gardenesque" coastal resort with planting of exotics and ornamental plants that have thrived in the warm, moist, almost sub tropical microclimate of the south facing slopes. Problems exist with coastal erosion and early conventional engineering have damaged the continued appreciation of the dynamic cliff landscape.

Sandstone hills and gravel ridges – small areas on the Island fit within this LCA and are of considerable landscape importance in the south of the Island with sharp topography and distinct gorse, bracken or woodland vegetation in contrast with the smoother slopes and more intensive agriculture of the surrounding farmland. Some areas are marred by now seriously windblown mixed planted forestry.

Osborne coast – the coastal area around the Osborne Estate on the northern coast. It is unique in character and is defined by exotic ornamental planting and Victorian architecture within an otherwise undistinguished agricultural landscape. It is described as leafy, predominantly evergreen and secluded without informal public access.

Landscape improvement area – found primarily at the edges of settlements and defined by the presence of a number of diverse land uses superimposed onto the traditional agricultural landscapes, such that the original character is changed. Some areas appear neglected and have been replaced with horse paddocks and stables, waste disposal sites and mobile homes and caravan sites. Some introductions have been introduced into existing broadleaved woodlands and integrate well into the landscape. The town edge is seen as an area that needs to be strengthened and existing developments screened either by improving hedgerows or by extensive tree planting. Development needs to be of the highest standard. The LCA includes many untidy and confused views and is considered to be the priority area for action in order to safeguard the AONB from uncontrolled urban influence.

The Isle of Wight AONB Management Plan 2009-2014 is a detailed document and specifically highlights the distinctive qualities of the AONB, the changes and issues affecting the AONB and sets priorities incorporating specific objectives that will help secure that vision. It provides a strategic overview of the whole AONB and links to other plans, in particular Local Plans such as the Shoreline Management Plan, West Wight Landscape Character Assessment and Shorwell Landscape Character Assessment. These documents highlight landscape details at a more localised scale. These and others are useful tools in highlighting the qualities, character and appropriate management considerations at a much more localised level.

At the same time, the Island has many areas designated in the interests of nature conservation and local, regional and international biodiversity such as Special Sites of Scientific Interest (SSSI's) or Sites of Importance for Nature Conservation (SINC's). Measuring the quality of these sites is also difficult to assess, when considering what conflicting issues affect local biodiversity as well as access and recreational opportunities. There are a range of qualitative issues affecting many of these sites and the relevant management plans, site assessments, management regimes for many of these are in place to sustain and improve most of them. The Isle of Wight BAP summarises the main strategic issues which arise in relation to quality.

Woodland - Woodland occupies around 11% of the Island and the total extent is relatively stable, with any losses offset by gains through new planting and natural regeneration.

Around 40% are on 'ancient' (pre 1600) woodland sites. These are often the richest in biodiversity. Although some 900ha of these retain their original character, a further 714ha have been replanted with conifers or non-native broadleaves. Many are gradually being restored by removing non-native species.

Grassland and heath - The survival of flower-rich grasslands and heathlands are dependant upon traditional management such as grazing by livestock and minimal or no use of fertilisers. These habitats have become scarce in today's modern countryside, and yet the Island's chalk grassland has fared better than most habitats and is now one of the Island's special wildlife treasures.

Farmland - Farming has helped shaped the Island's unique landscape for thousands of years. Not only does it provide a source of food, employment and an asset to attract visitors, but the land itself contains a mosaic of different habitats which collectively are of biodiversity value.

In recent years, agriculture has been on a 'roller coaster ride' with fluctuating world grain prices, poor harvests, gluts and unpredictable trends affecting the industry. Since 2000, the trend on the Island has been to have more land under grass and less under arable. For livestock farmers, Foot and Mouth and Blue Tongue diseases have caused extra expense, worry and devastating effects.

Wetlands - The requirements for water abstraction for agriculture and for the public water supply are placing increasing pressure on wetlands. Recent initiatives, such as the Land Care project, to reduce diffuse pollution of watercourses by nutrient and soil run-off will assist in improving water quality in the long-term. The aim is to maintain and restore the Island's existing rivers and wetland habitats and re-instate additional areas from suitable floodplain land but these areas have yet to be quantified.

Coast - The north coast of the Island is dominated by sheltered mudflats and muddy gravels, with areas of saltmarsh within estuaries, vegetated shingle, sand dunes and saline lagoons. The Island's 160ha of saltmarshes are amongst the best in the Solent but they are at risk from sea level rise and hence are likely to be in long-term decline. The south coast of the Island is dominated by 51km of actively eroding cliffs and chines of great biodiversity and geological importance, they also support nationally important populations of invertebrates. They are not threatened as a habitat but in some places, erosion is so rapid that vegetation fails to become established and their biodiversity value can be reduced.

Species - 135 species of national conservation concern (BAP Priority Species) are found on the Island. In addition 461 locally distinctive species have been identified by local experts and assessed in terms of how well they are faring. Some are increasing, others decreasing and for many we are still lacking in data to make a judgement.

A range of species and the issues which affect them have been highlighted.

These are broad based issues affecting many areas of the Island and impacting on a range of habitats and green spaces. The Isle of Wight BAP is underpinned by the South East Biodiversity Strategy (SEBS) which has developed a number of Biodiversity Opportunity Areas for the SE, including the Isle of Wight. The Opportunity Map identifies areas which are priorities for restoration and creation of Biodiversity Action Plan habitats in south east England including the Island.

There are now agreed regional targets for the extent, maintenance, restoration and creation of Biodiversity Action Plan habitats for the Island.

The IW Biodiversity Steering Group has identified ten Local Biodiversity Opportunity Areas (LBOAs) to help deliver the Isle of Wight Biodiversity Action Plan, based upon work first carried out by the Wildlife Trust.

The areas cover 43% of the land surface of the Island, where there are the greatest opportunities to maintain and enhance biodiversity.

Up until now, nature conservation has focused on protecting important sites which are often fragmented and isolated. The identification of LBOAs will help to work at a landscape scale, expanding sites, developing linking habitats and buffer areas.

The BAP Steering Group has already identified several potential collaborative projects in the LBOAs which could help maintain, restore, and recreate habitats across the Island. These are mapped as data set 7.

The quality of greenspace within most typologies across the Island is very positive overall. There are a number of issues within landscape character areas and that have been highlighted in a range of plans and the implementation and prioritisation of projects to be delivered through a GI Strategy need to consider the quality of sites at a local level which may not necessarily be available in a mapped format or within a report or survey but simply from local user or management knowledge.

Quality has also been defined by Natural England in their current and most up to date assessments of Nature Conservation designations, in particular SSSI's which are assessed on condition. The condition of the SSSI land in England is assessed by Natural England, using categories agreed across England, Scotland, Wales, and Northern Ireland through the Joint Nature Conservation Committee. There are six reportable condition categories: favourable; unfavourable recovering; unfavourable no change; unfavourable declining; part destroyed and destroyed. These are mapped in data set 19.

Favourable (F)

Favourable condition means that the SSSI land is being adequately conserved and is meeting its 'conservation objectives', however, there is scope for the enhancement of these sites.

Unfavourable recovering (UR)

Unfavourable recovering condition is often known simply as 'recovering'. SSSI units are not yet fully conserved but all the necessary management measures are in place. Provided that the recovery work is sustained, the SSSI will reach favourable condition in time.

In many cases, restoration takes time. Woodland that has been neglected for 50 years will take several years to bring back into a working coppice cycle. A drained peat bog might need 15-20 years to restore a reasonable coverage of sphagnum

Unfavourable no change (UNC)

This means the special interest of the SSSI unit is not being conserved and will not reach favourable condition unless there are changes to the site management or external pressures. The longer the SSSI unit remains in this poor condition, the more difficult it will be, in general, to achieve recovery.

Unfavourable Declining (UD)

This means that the special interest of the SSSI unit is not being conserved and will not reach favourable condition unless there are changes to site management or external pressures. The site condition is becoming progressively worse.

Part Destroyed (PD)

Part destroyed means that lasting damage has occurred to part of the special conservation interest of a SSSI unit such that it has been irretrievably lost and will never recover. Conservation work may be needed on the residual interest of the land.

Destroyed (D)

Destroyed means that lasting damage has occurred to all the special conservation interest of the SSSI unit such that it has been irretrievably lost. This land will never recover.

We have therefore analysed this further in relation to quality and sensitivity of sites. Natural England's qualitative assessment of current sites including SSSI's and Special Areas of Conservation has been summarised below along with comments on sensitivity from Conservation Officers from the Isle of Wight.

The SSSI quality has been described as the current NE assessment and abbreviated and is based on the majority condition even though there may be lesser areas that are in a different condition.

Sensitivity has been assessed using descriptions of each designation (International down to Local) as well as advice from Conservation officers and is simplified as either '**High**', '**Medium**' or '**Low**'. This analysis is mapped in dataset 18 and summarised in Table 8-2 (opposite). Appendix A shows the methodology agreed for all the sites and all the site scores

Methodology

Sites have been assigned to a traffic light system categorised as follow:

Red – High Sensitivity. Sites of high ecological sensitivity to public pressure. In order to conserve and enhance the nature conservation interests of these sites, increased public access needs to be managed with great care and will, in some instances, be inappropriate.

Amber – Medium Sensitivity. Ecologically sensitive sites which may be able to accommodate some increase in visitor pressure provided that this is in a controlled measure.

Green – Low Sensitivity. Theses are relatively robust habitats which may be able to accommodate increased public pressure without adversely affecting their nature conservation interests.

The resilience of habitats to public pressure is generally well understood and so habitats have been assigned sensitivity scores as follows:

- Woodlands - **Low sensitivity**
- Maritime cliffs – **Low sensitivity**
- Arable land (plants) – **Low sensitivity**
- Grassland sites (downland, meadows, heathland) – **Medium sensitivity**
- Wetland habitats – **Medium sensitivity**
- Intertidal rocky shores – **Medium sensitivity**
- Estuaries and all associated habitats – **High sensitivity**
- High tide roosts – **High sensitivity**

The principal habitats present within a designated site have been used to assign a sensitivity score to the site. This approach has been used for both SSSIs and SINCs, in order to capture the full extent of the habitat types. Where sites incorporate more than one habitat type, the scoring allocated to that site reflects the significant presence of the most sensitive habitat. International designated sites (SAC, SPA, Ramsar) have been assigned scores relating to the sensitivity of the habitats or species they support. All other areas of the GI resource have been classed as low sensitivity.

Name	Designation	Size	NE Quality score	Principal habitats	Red / Amber / Green
St Lawrence Bank	SSSI	0.14ha	F	Grassland	Amber
Rew Down	SSSI	23.65ha	UR	Grassland	Amber
Compton Chine to Steephill Cove	SSSI	628ha	UR	Maritime cliffs	Green
The Wilderness	SSSI	12.37ha	UD / UR	Wetlands	Amber
Cridmore Bog	SSSI	15.05ha	R / UD	Wetlands	Amber
Mottistone Down	SSSI	32.82ha	UR	Grassland	Amber
Compton Down	SSSI	199.44ha	F / UR	Grassland	Amber
Garstons Down	SSSI	21.29ha	UR	Grassland	Amber
Freshwater Marshes	SSSI	23.24ha	UR	Wetlands	Amber
Yar Estuary	SSSI	132.04ha	F	Estuaries	Red
North Park Copse	SSSI	9.97ha	F	Woodlands	Green
Bouldnor and Hamstead Cliffs	SSSI	97.39ha	F	Maritime cliffs	Green
Cranmore	SSSI	12.42ha	F / UR	Grassland	Amber
Newtown Harbour	SSSI	615.8ha	F	Estuaries	Red
Parkhurst Forest	SSSI	182.56ha	UR	Woodlands	Green
Thorness Bay	SSSI	86.35ha	F	Estuaries	Red
Medina Estuary	SSSI	100.75ha	F	Estuaries	Red
Kings Quay Shore	SSSI	90.55ha	F/UR	Estuaries	Red
Ryde Sands and Wootton Creek	SSSI	419.9ha	F/UR/UD	Estuaries	Red
Briddlesford Copses	SSSI	167.45ha	F/UR	Woodlands	Green
Shide Quarry	SSSI	5.02ha	F	Grassland	Amber
Arreton Down	SSSI	28.88ha	UR	Grassland	Amber
Alverstone Marshes	SSSI	37.05ha	UR / UNC	Wetlands	Amber
America Wood	SSSI	21.42ha	F/ UR / UD	Woodlands	Green
Ventnor Downs	SSSI	161.73ha	UR	Grassland	Amber
Greatwood & Cliff Copses	SSSI	15.89ha	F/UR	Woodlands	Green
Lake allotments	SSSI	0.25ha	F	Arable	Green
Bembridge Down	SSSI	57.51ha	F	Grassland	Amber

Name	Designation	Size	NE Quality score	Principal habitats	Red / Amber / Green
Bembridge School & Cliffs	SSSI	11.64ha	F	Maritime cliffs	Green
Brading Marshes to St Helens Ledges	SSSI	488.56ha	F/UR/UD	Estuaries	Red
Priory Woods	SSSI	3.02ha	F	Woodlands	Green
Rowridge Valley	SSSI	39.11ha	UR / UD	Woodlands	Green
Locks Farm Meadow	SSSI	2.06ha	F	Grassland	Amber
Rew Down	LNR	11.61ha		Grasslands	Amber
Sibden Hill and Batts Copse	LNR	5.81ha		Woodland (some amenity grassland)	Green
Alverstone Mead	LNR	15.18ha		Wetlands	Amber
Shide Chalk Pit	LNR	5.02ha		Grassland	Amber
Dodnor Creek	LNR	9.52ha		Estuaries	Red
Afton Marshes	LNR	14.75ha		Wetlands	Amber
Newtown Harbour	NNR	615.8ha		Estuaries	Red
Calbourne Down	SSSI	15.06ha	UR	Grassland	Amber
Headon Warren and West High Down	SSSI	269.42	F	Grasslands	Amber
Laceys Farm Quarry	SSSI			Grassland	Amber
Colwell Bay	SSSI	14.08	F / UD	Maritime cliffs	Green
Eaglehead and Bloodstone Copses	SSSI	10.04ha	F/UR	Woodlands	Green
Bonchurch landslips	SSSI	26.52ha	UR / F	Maritime cliffs	Green
Whitecliff bay and Bembridge Ledges	SSSI	132.02ha	F	Maritime cliffs	Green

Table 8-3: Sensitivity Analysis of Natural Areas (National and Local Designations except SINCs)

Assessment of European Sites

The following approach has been taken to assessing the sensitivity of European sites to public pressure.

Solent & Southampton Waters SAC

The site comprises estuaries and associated habitats and intertidal habitats which are all considered sensitive to public pressure and through designation, receive a high level of protection. Collectively, the whole of the site has been flagged as **high sensitivity**. There may be localised opportunities to develop and enhance public enjoyment of these areas but these decisions will need to be considered carefully in the light of detailed information to ensure that they do not compromise the integrity of the designated site.

Solent & Southampton SPA

The site comprises estuaries and associated habitats and intertidal habitats which are designated for the passage and overwintering waterfowl which they support. These bird populations are sensitive to public pressure and collectively, the whole of the site has been flagged as **high sensitivity**. There may be localised opportunities to develop and enhance public enjoyment of these areas but these decisions will need to be considered carefully in the light of detailed information to ensure that they do not compromise the integrity of the designated site.

Solent & Isle of Wight lagoons SAC

Brackish lagoons are considered to be highly sensitive to public pressure; consequently the whole of this site has been flagged as **high sensitivity**.

Solent & Southampton Waters Ramsar site

The features of the Ramsar site are reflected within the SAC and SPA designation above. Consequently, the whole of this site has been flagged as **high sensitivity**.

Briddlesford Copses SAC

This site has been designated for its important population of Bechstein's bats. These are tree-dwelling, woodland bats and woodland as a habitat has been flagged as low sensitivity to disturbance and capable of accommodating public pressure. Since the site has been designated, Bechstein's bat has been shown to be widespread as a breeding species in ancient woodlands on the Island. There is no evidence to suggest that visitor pressure compromises Bechstein's bat populations. Consequently, the site has been flagged as **low sensitivity** to public pressure.

Isle of Wight Downs SAC

The site has been designated for its early gentian populations, chalk grasslands and vegetated sea cliffs. These are all considered to be sensitive to public pressure. However, the Isle of Wight downs are already subject to considerable public pressure along the rights of way network which avoids the sensitive areas and has not to date resulted in adverse impacts upon the features of interest. Consequently, the whole of this site has been flagged as **medium sensitivity**.

South Wight Maritime SAC

The site has been designated for its vegetated sea cliffs and reefs. Vegetated sea cliffs are generally inaccessible but have a well developed coastal footpath network along the top of the cliffs. This does not generally compromise the interest features of the SAC. There are no identified cliff top vegetation communities at viewpoints which are susceptible to excessive trampling. The vegetated sea cliffs have been flagged as **low sensitivity**.

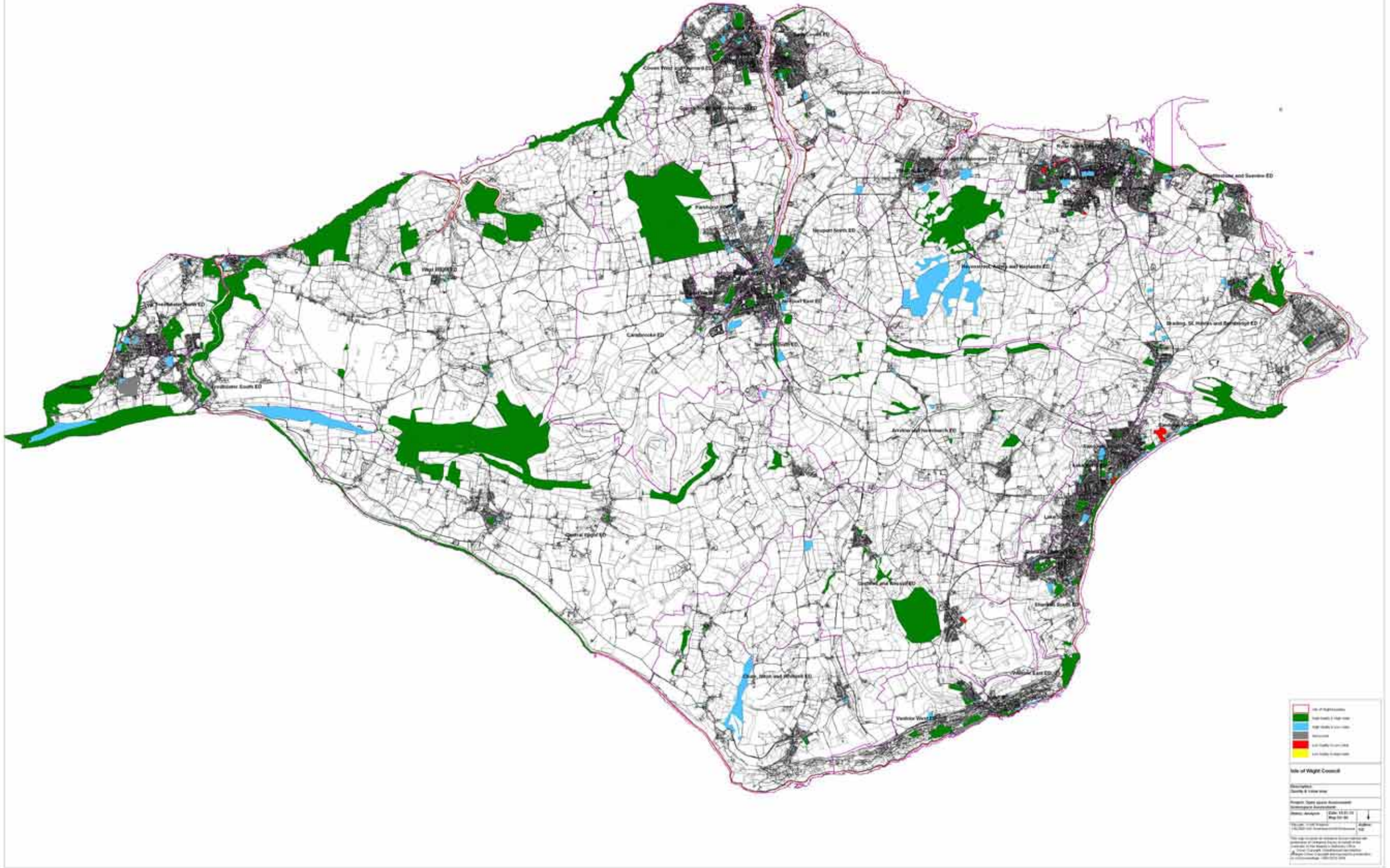
The intertidal rocky shores are well used by the public and very resilient to trampling. However, activities associated with but over-use have the potential to compromise their interest features. Consequently, the intertidal component of this SAC has been flagged as **medium sensitivity**.

When assessing opportunities in creating the GI network, we have considered the quality and sensitivities of all of these sites in relation to developing future proposals.

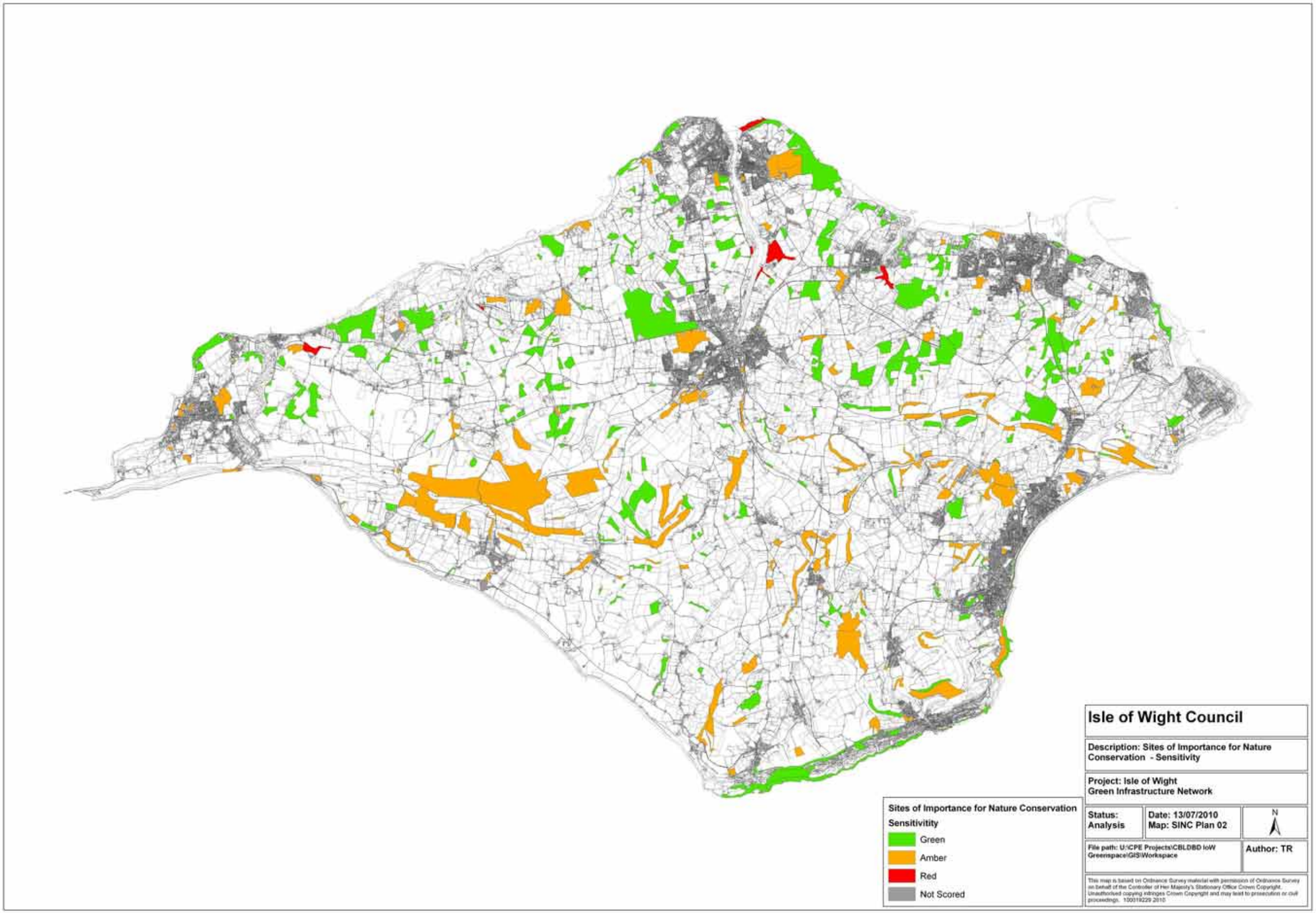
Quality Data Sets follow.

Data Set SEVENTEEN – PPG17 Quality & Value Map

- Parks and Gardens
- Local Amenity Green Space
- Natural Green Space
- Children and Young Peoples Facilities
- Outdoor Sports Facilities
- Cemeteries and Churchyards
- Green Corridors
- Allotments and Community Gardens



Data Set EIGHTEEN -SINC Sensitivity Map


Isle of Wight Council
Description: Sites of Importance for Nature Conservation - Sensitivity
Project: Isle of Wight Green Infrastructure Network
Status: Analysis
Date: 13/07/2010
Map: SINC Plan 02
N
File path: U:\CPE Projects\CBLDBD IoW Greenspace\GIS\Workspace
Author: TR
Sites of Importance for Nature Conservation
Sensitivity
Green
Amber
Red
Not Scored
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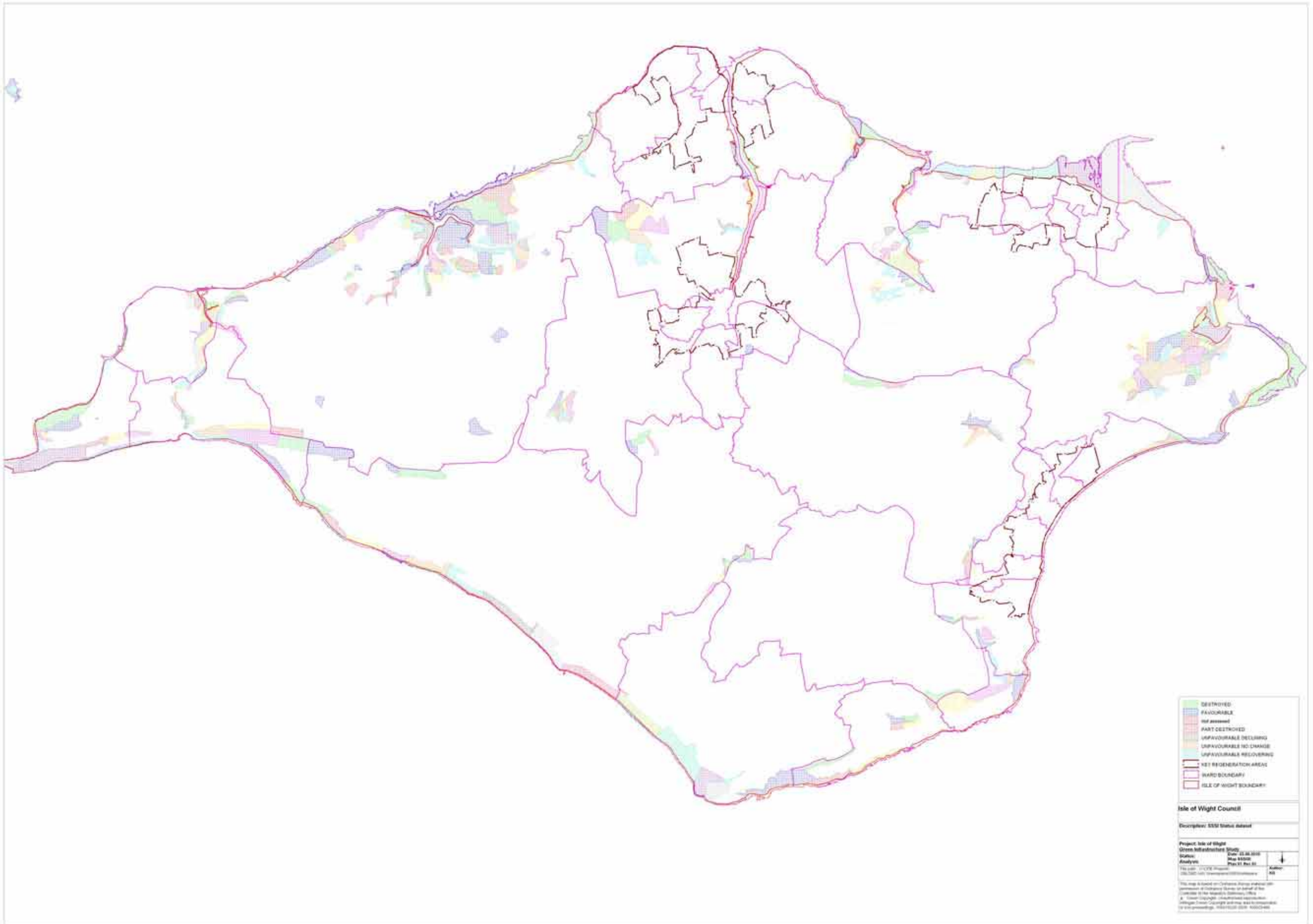
Data Set NINETEEN – NE SSSI Quality Map


DESTROYED
FAVOURABLE
Not assessed
PART DESTROYED
UNFAVOURABLE DECLINING
UNFAVOURABLE NO CHANGE
UNFAVOURABLE RECOVERING
KEY REGENERATION AREAS
WARD BOUNDARY
ISLE OF WIGHT BOUNDARY
Isle of Wight Council
Description: SSSI Status dataset
Project: Isle of Wight
Green Infrastructure Study
Status:
Analysis

Accessibility

For green spaces or facilities to be of value to people on the Island they have to be accessible. Accessibility is therefore of critical importance to assessing the adequacy of provision on the Island. An evaluation in terms of accessibility to different types of open spaces and recreation facilities was undertaken as part of the PPG17 Study.

In order to assess accessibility deficiencies, a range of distance thresholds/accessibility standards for all typologies was developed. Appropriate walking and driving thresholds were set. Buffer zones were also set for each typology.

There are 3 key factors relating to the Isle of Wight's geography which has an important bearing on the formulation of distance thresholds for the Island and determining which communities have 'accessibility deficiencies' to different forms of provision.

The key factors were identified as:

- The compact nature of the Island and lack of easy access to neighbouring authority facilities
- The relatively high degree of community severance between the towns and some of the rural areas as well as between the rural West of the Island
- The low levels of multiple deprivation and related high levels of car ownership

Distance thresholds are not hard facts, but a broad and flexible guide to the distance which people in general will be willing to travel in order to use or visit a facility or space. This point is made in paragraph 5.9 of the Companion Guide to PPG17 by Kit Campbell Associates. They are affected by many issues – such as human factors and individual circumstances and variations in external circumstances.

The distance that people in any particular area travel to spaces or facilities is a function of the distribution of provision, coupled with the range of factors summarised above. In an area with little provision, empirically established distance thresholds will be much higher than in another area with a high level of well distributed provision.

Based on considerable recent research on distance thresholds as well as local consultation, the PPG17 Study determined appropriate distance thresholds for straight-line walking and driving distance thresholds. Table 8-4 provides a summary of the distance thresholds for open space.

TYPOLOGY	Walking	Driving
Parks and Gardens	400 m	3.3 km
Local Amenity Green Space	400 m	
Natural Green Space	1200 m	3.3 km
Allotments	600 m	
Outdoor Sports facilities	650 m	3.5 km
Play Areas	400 m	4.5 km

Table 8-4: PPG17 Distance Thresholds

Most forms of green space are multi-functional in nature and serve other uses besides their primary function. For these reasons, it would be wrong to apply the distance thresholds in a mechanical manner and assume that those areas beyond them automatically require additional provision. There will nearly always be a proportion of dwellings slightly beyond the distance thresholds for most forms of provision. Accordingly, the PPG17 study made a pragmatic judgement based on a number of factors:

- The character of the location: in some areas, amenity green space is not a priority, for example in a residential area where the dwellings have large garden grounds or where there is easy access to rural countryside areas
- Whether the facility or space that requires a Island - wide catchment to support it or is one to which people would generally drive
- Whether there are likely to be sufficient people within the area of deficiency who would support or require a specific type of provision in order to justify the additional spaces or facilities. If so, what form of provision would meet local needs most effectively and economically?
- Quality issues: are the available sites of such unusually high quality that people may be willing to travel further? People will readily travel much further to a higher quality facility, bypassing a poor facility nearby
- Is there any land available for new provision?

The Study analysed walking distance thresholds for outdoor sports facilities, play areas, parks and gardens, natural and semi natural spaces, local amenity green space as well as allotments and community gardens. It then combined parks and gardens, local amenity green space and natural/semi-natural green space, as these are the most easily accessible, as well as often being multi functional to assess any overall wider accessibility deficiencies.

Allotments and Community Gardens – There is reasonable accessibility across the urban areas but particular deficiencies to the north and north west of Newport, the west of Ventnor, mid Shanklin, Binstead, East Cowes and West Wight where none exist.

Parks and Gardens - For the sites audited, overall accessibility across the Island's main urban areas is reasonable with Ventnor, Shanklin and Ryde with a number of accessible parks and gardens. There are some deficiencies in Newport and in particular West Wight where no parks and gardens are present.

Natural/Semi-natural Green Spaces – As the largest typology area, it is not surprising to see that accessibility is also very good across the whole of the Island urban areas with no deficiencies that are a concern.

Local Amenity Green Space – with only a 400m threshold for walking, this should be the most accessible of green spaces and this is shown by the very good access across the Island's towns apart from some minor deficiencies in the SW of Newport, south of Cowes, and central Ryde.

Combined Parks and Gardens/Natural/Semi-natural/Local Amenity Green Space – as the most accessible types of green space, when these are combined across the urban areas there is total accessibility across the whole of the urban areas with no deficiencies identified.

Sports Pitches –there is almost total accessibility across the urban areas highlighting excellent provision and access to sports facilities with only minor deficiencies in East Cowes.

Children's and Young People's Facilities – with a 400m distance threshold for walking, a number of accessibility issues are highlighted, especially in Newport east, centre and north, West Wight, Shanklin centre, Ryde west, Cowes centre and south. In comparison to other areas however, coverage is good.

Access to green space overall within the Island urban areas is excellent with a number of deficiencies highlighted in certain typologies. However, when combined, everyone in the urban areas has access within the walking distance threshold to some kind of green space.

Island Rural Areas – Including Larger Villages

The use of distance thresholds is particularly relevant within the rural areas as is the classification and typology of open spaces. In many areas within local villages, green space is truly multi functional with recreation grounds often acting as a sports pitch, playing field and local amenity space. The PPG17 study also derived driving distance thresholds for some of the typologies based on national recommended guidance.

Allotments and Community Gardens – Rural provision is supply led and accessibility in relation to walking is reasonable to the eastern half of the Island but with several communities having no access within walking distance. The west of the Island has no provision at all. This is not unusual as the number of properties with gardens in the rural areas is obviously higher than in the urban area itself.

Parks and Gardens – These are few and far between within the rural area with most village recreation grounds being dominated by playing pitches and with a number of village greens and Commons, classed as amenity green space and the Country Parks being classed as natural/semi-natural green space, parks and gardens are less desirable.

Natural and Semi-natural Green Space – on the doorstep of much of the rural area, both driving and walking thresholds show very good accessibility to this typology, provided by the Country Parks, Commons, and coastal areas in particular. There is access to this typology for all residents within the driving distance threshold.

Local Amenity Green Space – many villages and rural settlements have local amenity green space and access to it, but as previously stated, this may be classified predominantly as sports pitches.

Combined Parks and Gardens/Natural/Semi-natural/Local Amenity Green Space – as the most accessible types of green space, when these are combined across the rural area, there is total accessibility across the whole of the rural area with few deficiencies highlighted at all. Nearly all rural settlements have access to green space when combined.

Sports Pitches – As with the urban areas, walking distance thresholds show excellent accessibility to playing fields across the whole rural area and to a large number of settlements. As previously discussed, teams play at home and away so driving distance thresholds are especially relevant and when applied, shows total coverage across the whole Island.

Children's and Young People's Facilities – Access within the rural areas to children and young peoples facilities is poor. There are a number of play facilities in many villages but almost as many without access to fixed play or youth facilities. These obviously need to be within a walking distance threshold to be of any value to the local community.

Conclusion - Accessibility within the Island rural areas is reasonable. Local facilities such as play and allotments are in many areas sporadic and accessibility is an issue with some villages not having any provision. However for the typologies covering natural / semi natural green space and sports pitches, where driving accessibility is more relevant, accessibility is very good with no deficiencies identified.

ANGSt Standards

Since updated in 2010 in "Nature Nearby Accessible Natural Greenspace Guidance", Natural England's Accessible Natural Greenspace Standard (ANGSt) provided a set of benchmarks for ensuring access to places near to where people live.

These standards recommended that people living in towns and cities should have:

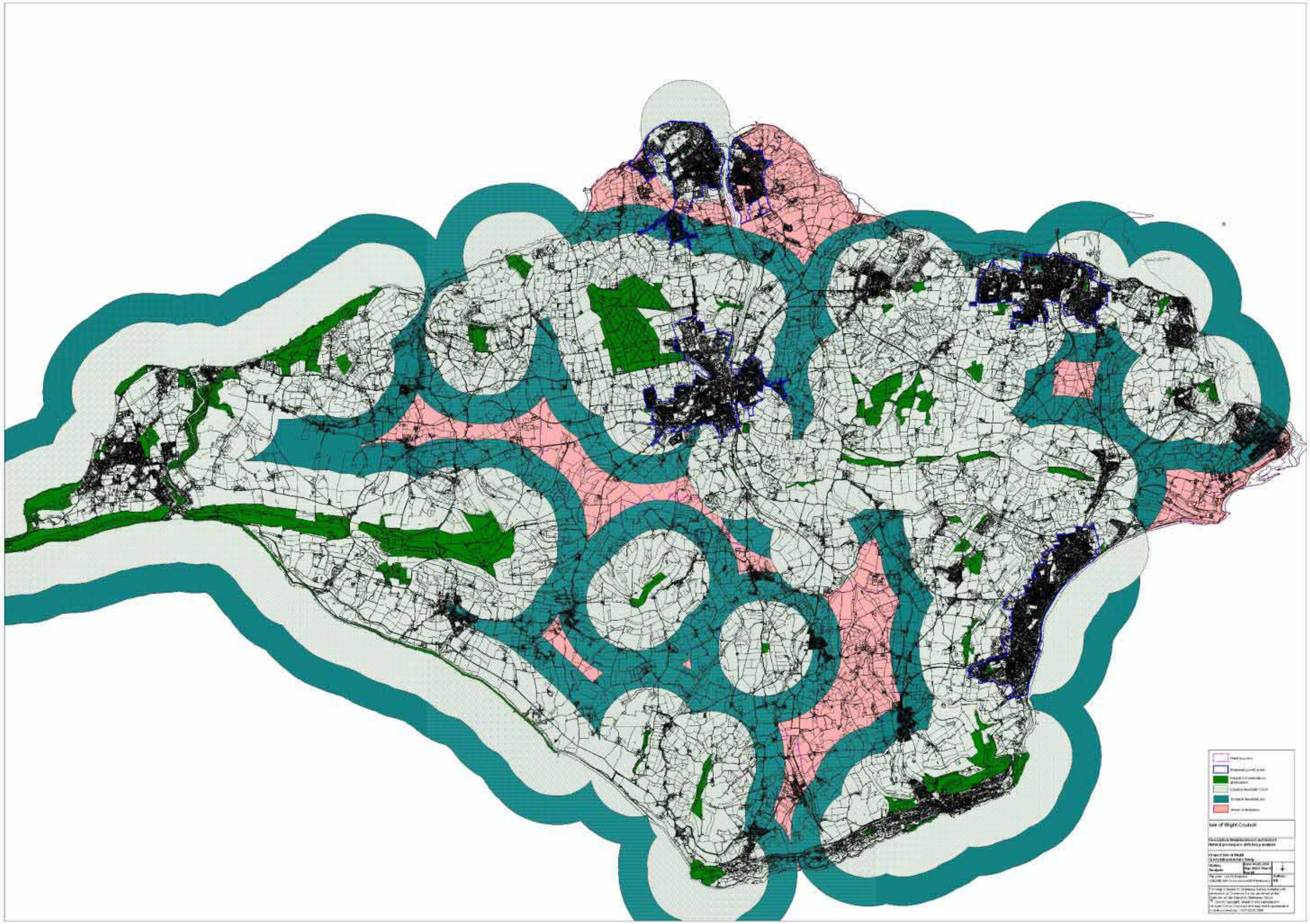
- An accessible natural greenspace of at least 2 hectares in size, no more than 300 meters (5 minutes walk) from home
- At least one accessible 20 hectare site within two kilometers of home
- One accessible 100 hectare site within five kilometers of home
- One accessible 500 hectare site within ten kilometers of home
- One hectare of statutory Local Nature Reserves per thousand population

These have been plotted and are shown in Data set 20 overleaf.

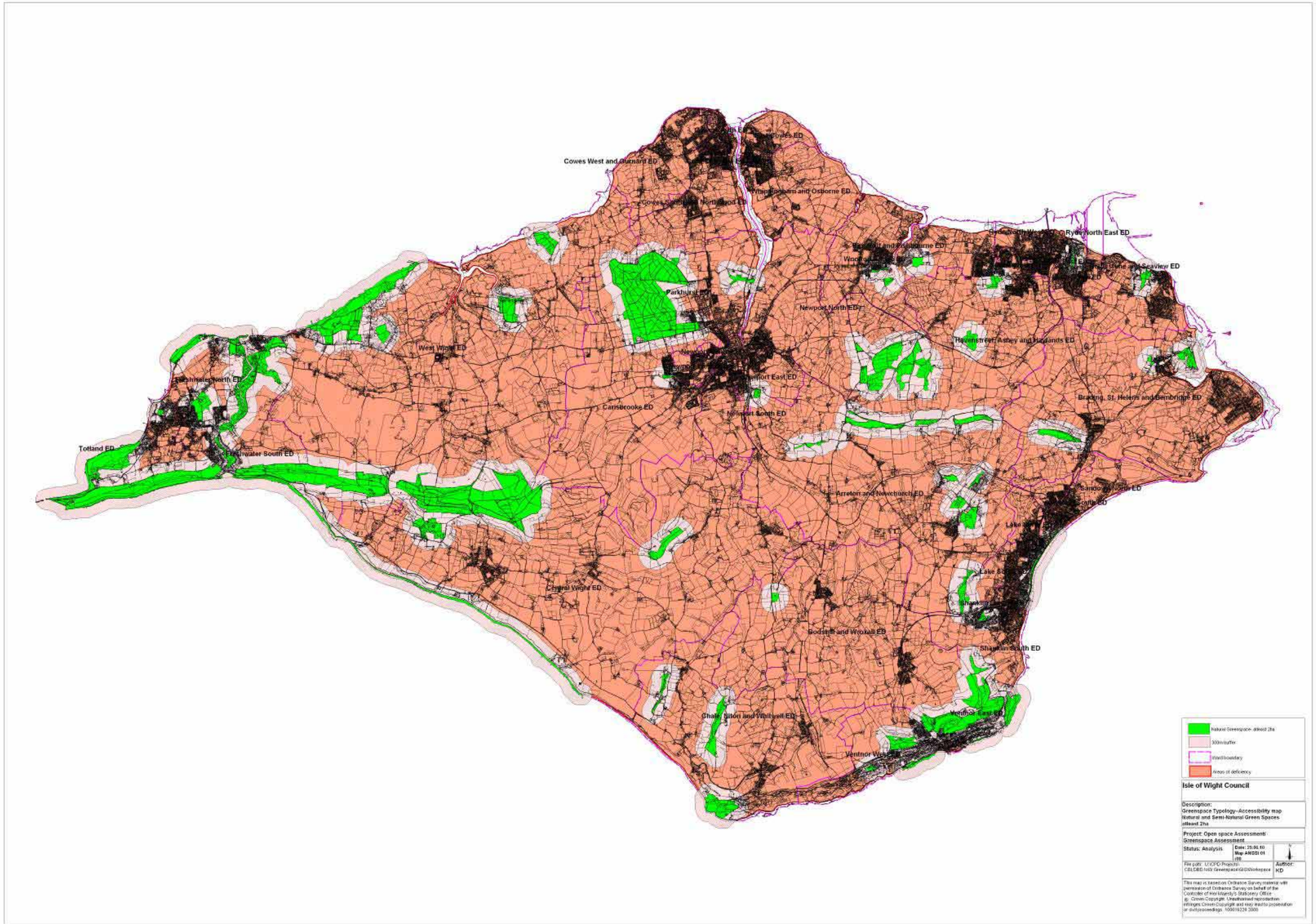
From the PPG17 analysis as well as mapping according to ANGSt, overall accessibility to green space is excellent with a small number of localised deficiencies.

Taking all this into account, any analysis of GI assets on the Island would suggest that overall quantity of provision and accessibility is adequate across the Island and that whilst quality is an issue in some areas, overall quality is generally very high, therefore using the model suggested in Figure 2, the 'direction of travel' should be based on a high quality of open spaces and that the real issue in relation to the Island may well be linkages and the network itself rather than quantity and accessibility.

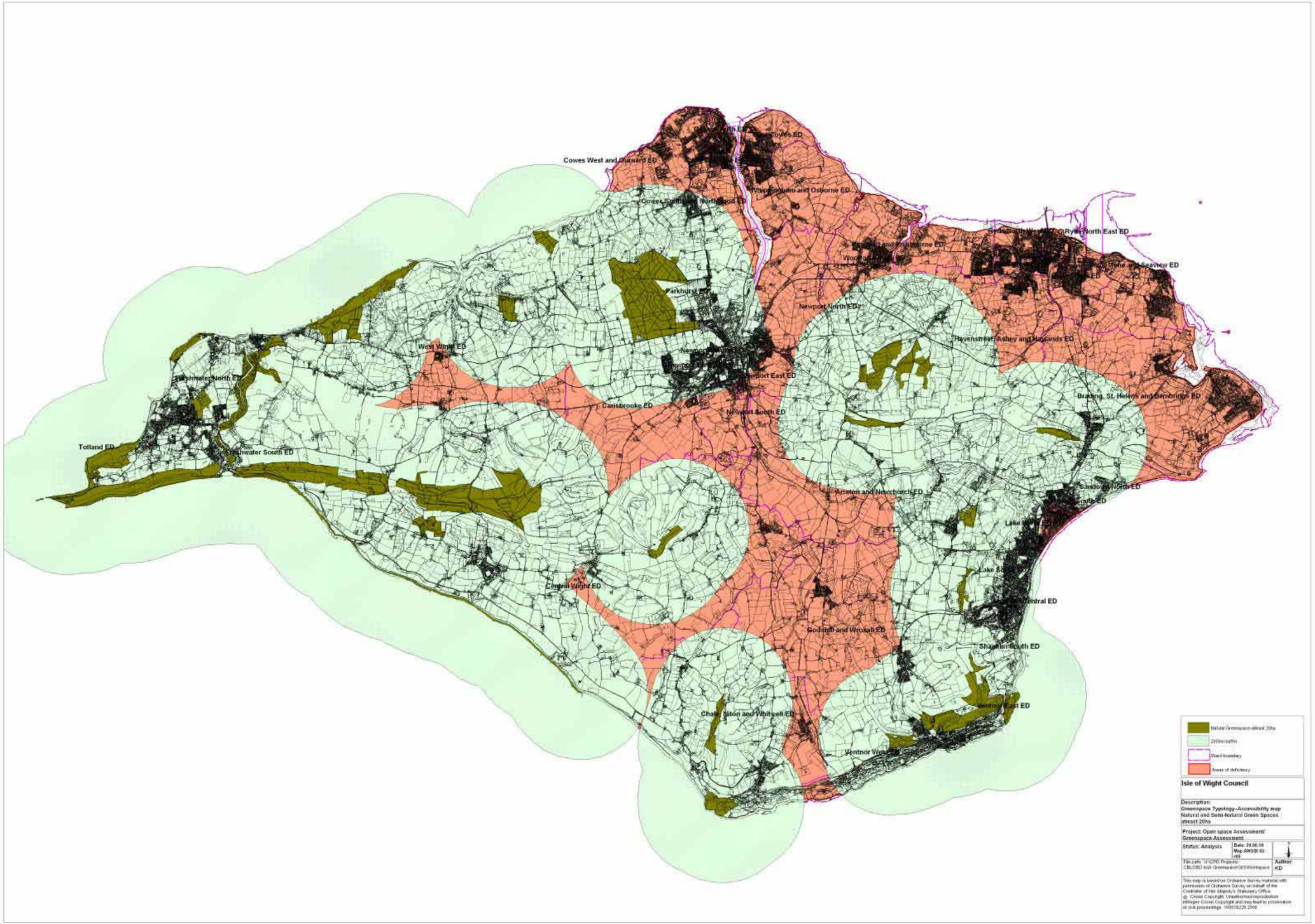
Data set 20 – Accessibility - Distance threshold based on PPG17 accessibility standards



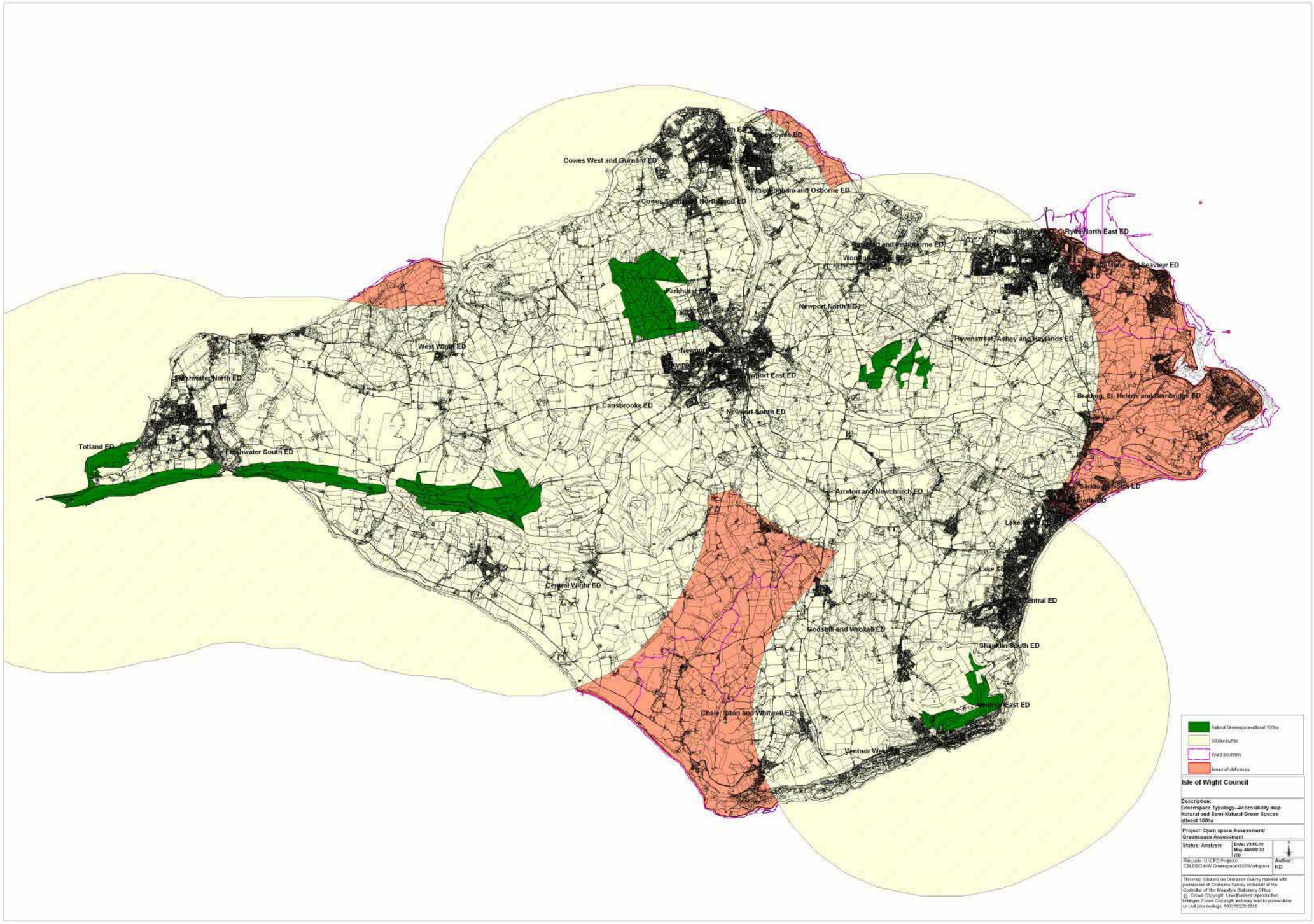
Data set 20 – Accessibility - ANGSt – Sites of 2 hectares in size, based on no more than 300 meters (5 minutes walk) from home



Data set 20 – Accessibility - ANGSt – Sites of 20 hectare in size within two kilometres of home



Data set 20 – Accessibility - ANGSt – Site of 100 hectare in size within five kilometres of home



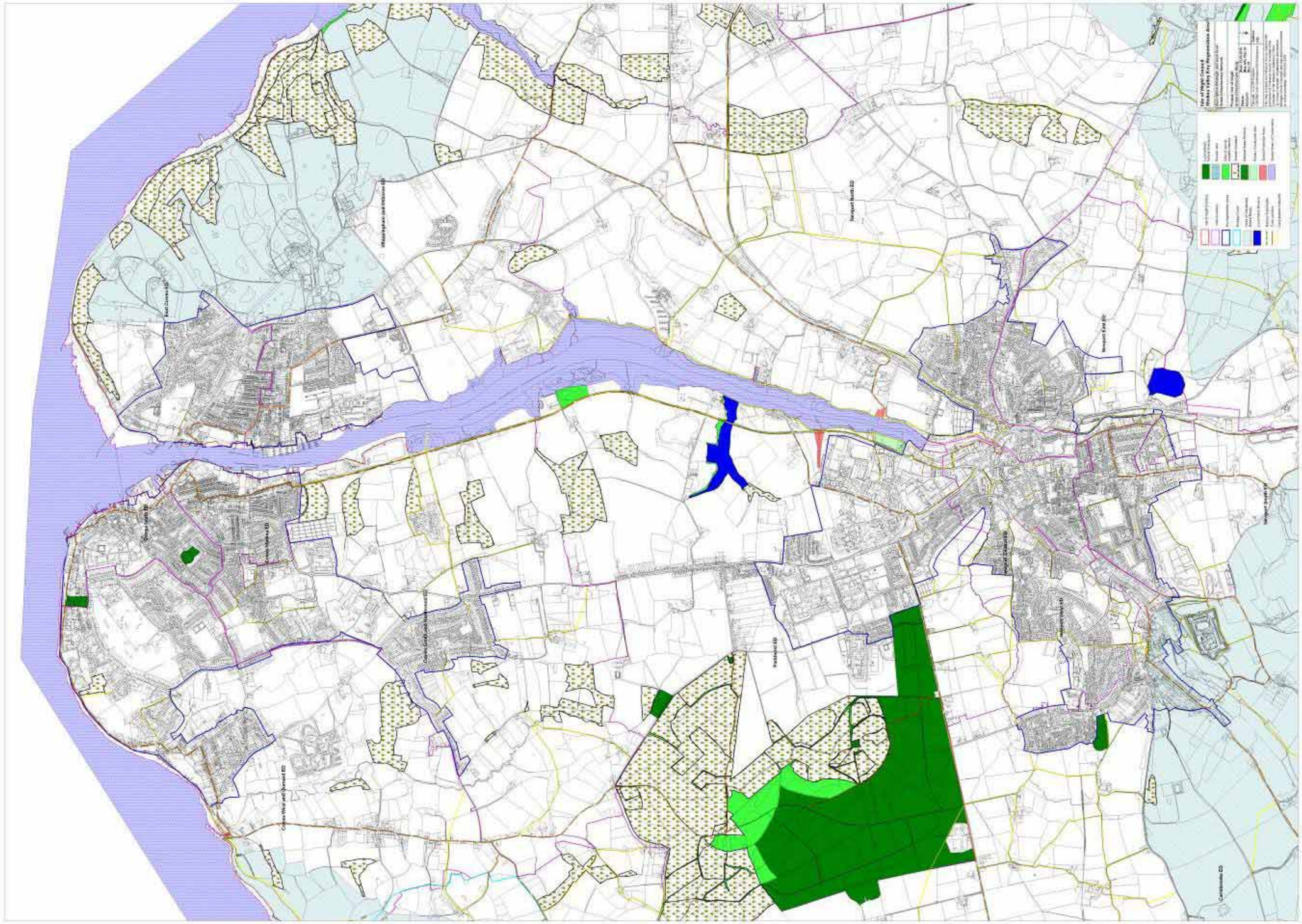
However, we have carried out further analysis of the GI evidence gathered to ascertain any deficiencies based on the environmental characterisation process based on:

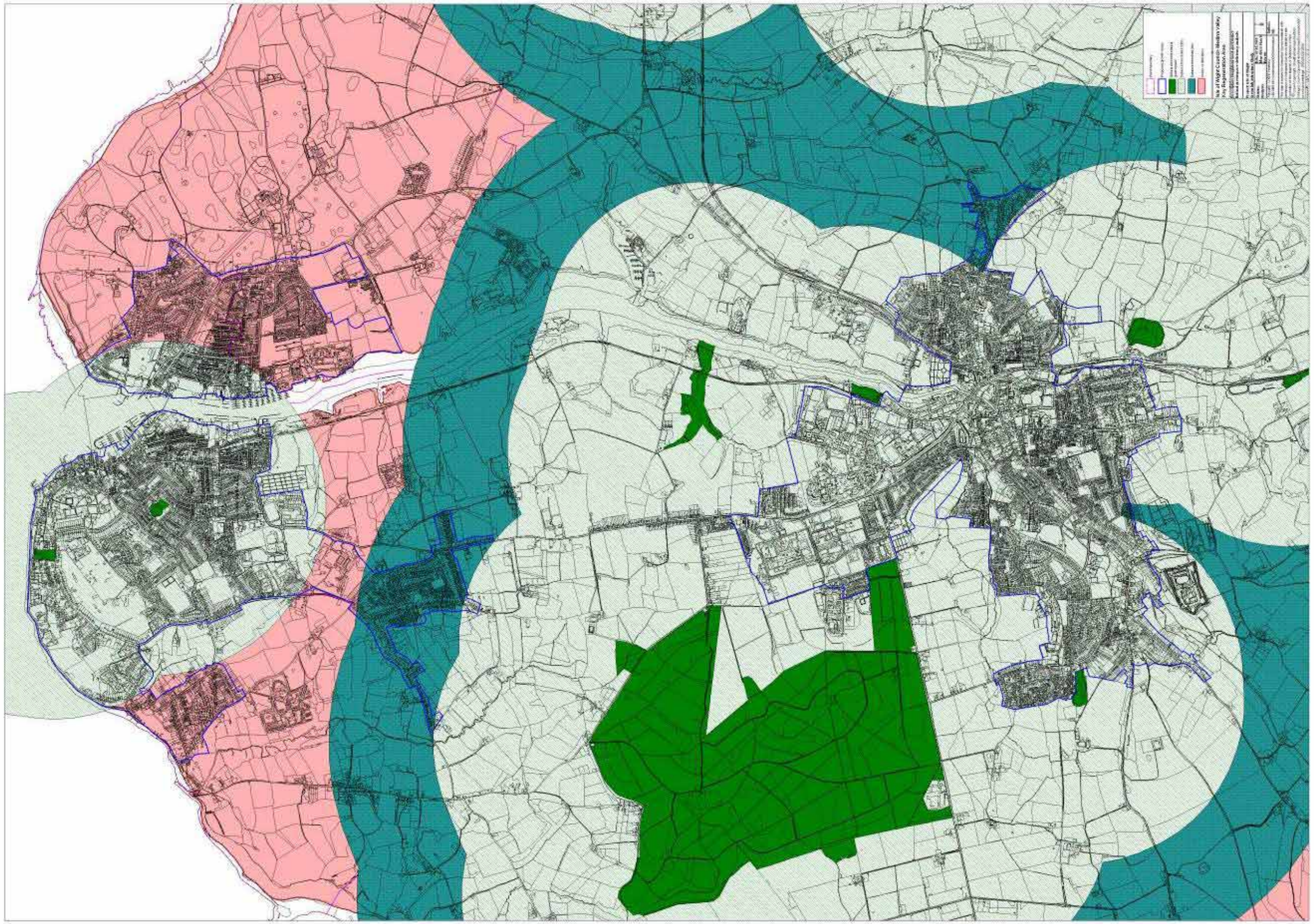
1. The Islands Key Regeneration areas

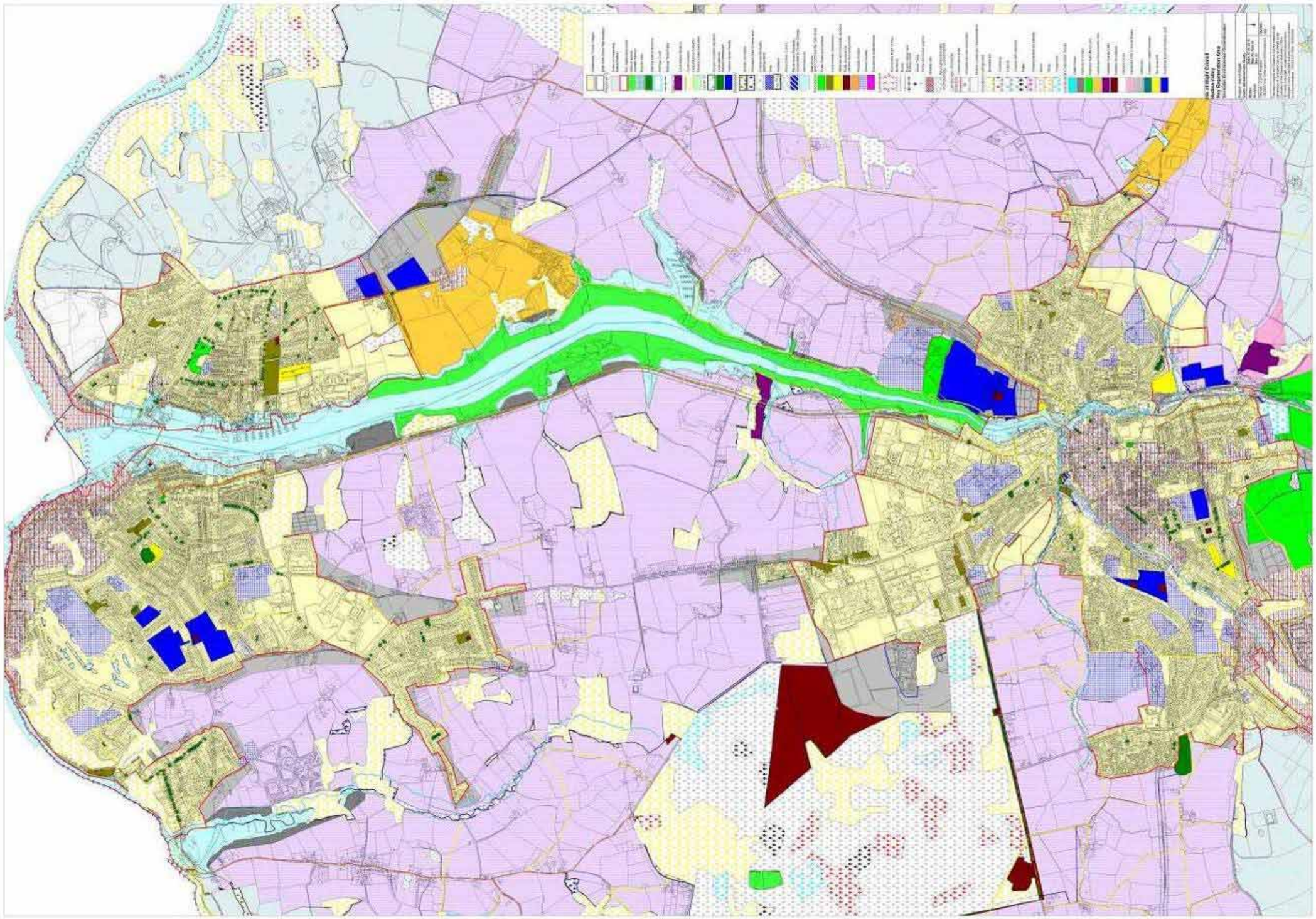
- **Medina Valley Key Regeneration Area**
- **Bay Key Regeneration Area**
- **Ryde Key Regeneration Area**

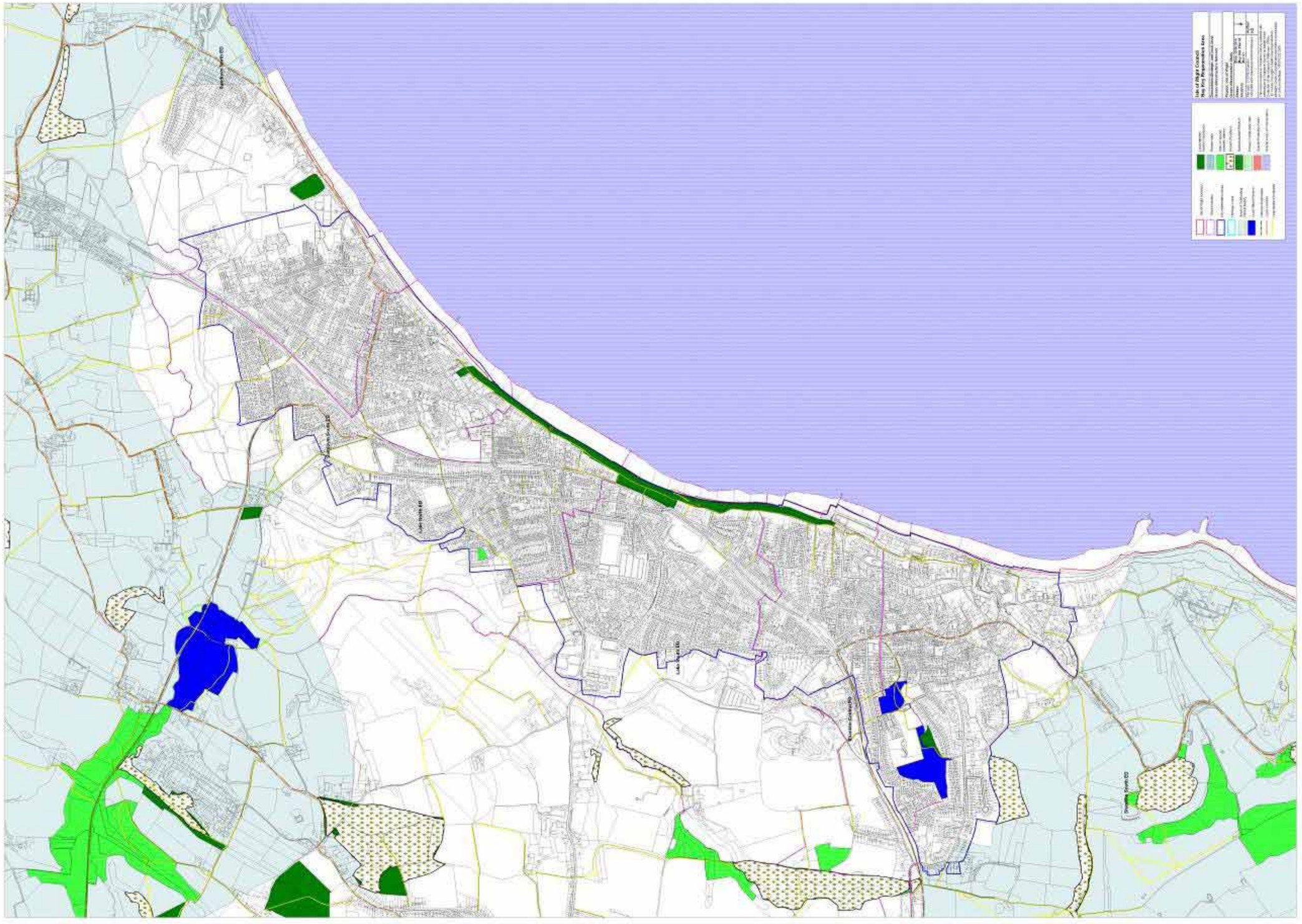
2. The Island as a whole

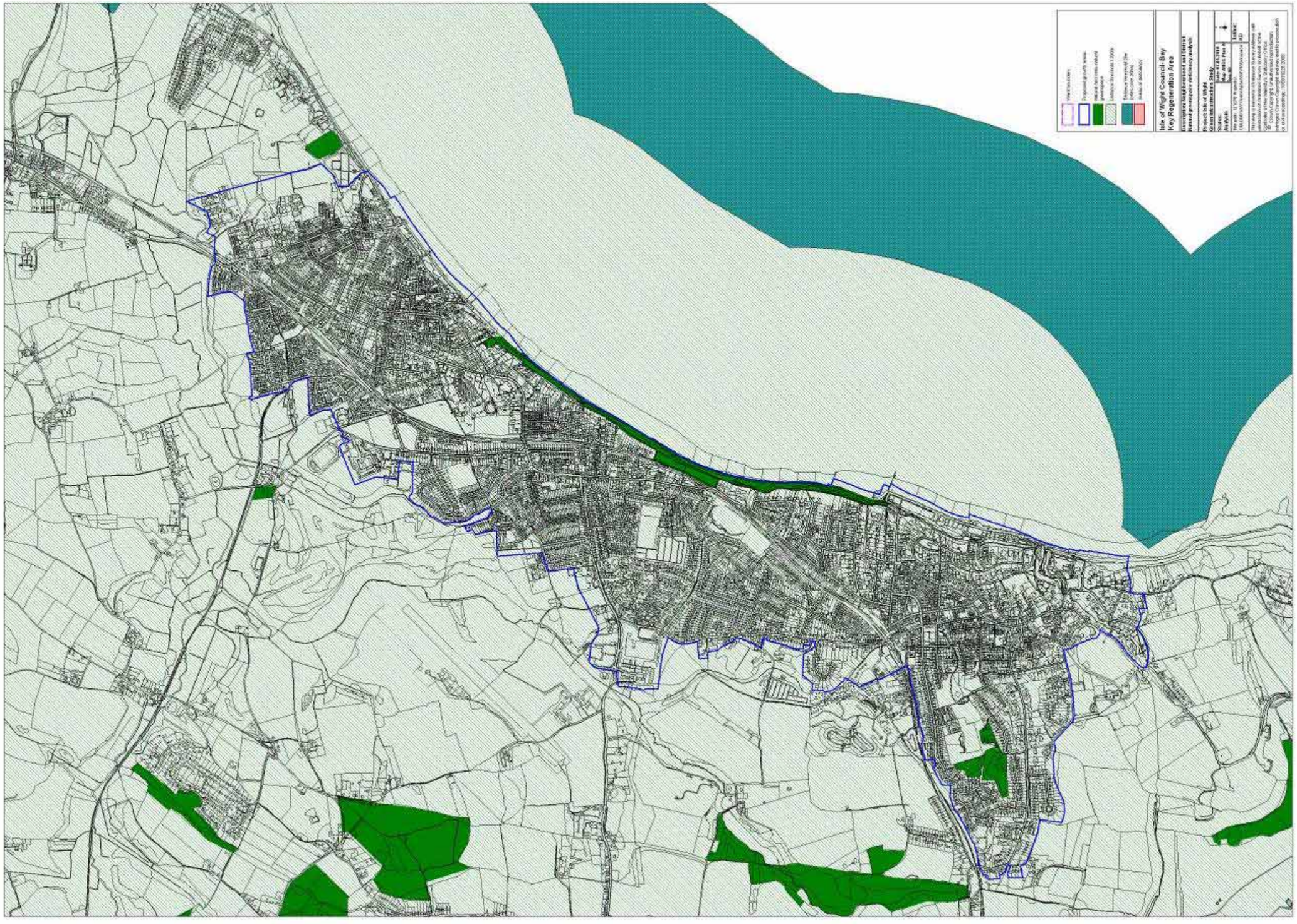
For each key regeneration area and the Island as a whole, we have highlighted the full extent of the GI assets and their environmental character. We have also analysed all Natural Areas (SSSI, LNR, SAC, NNR, LNR, Open Access Land, Countryside Managed sites, Heritage Coast, and NGS typologies) including the AONB, as well as woodland areas. These have been mapped in relation to each regeneration area alongside the PPG17 proposed accessibility standards.

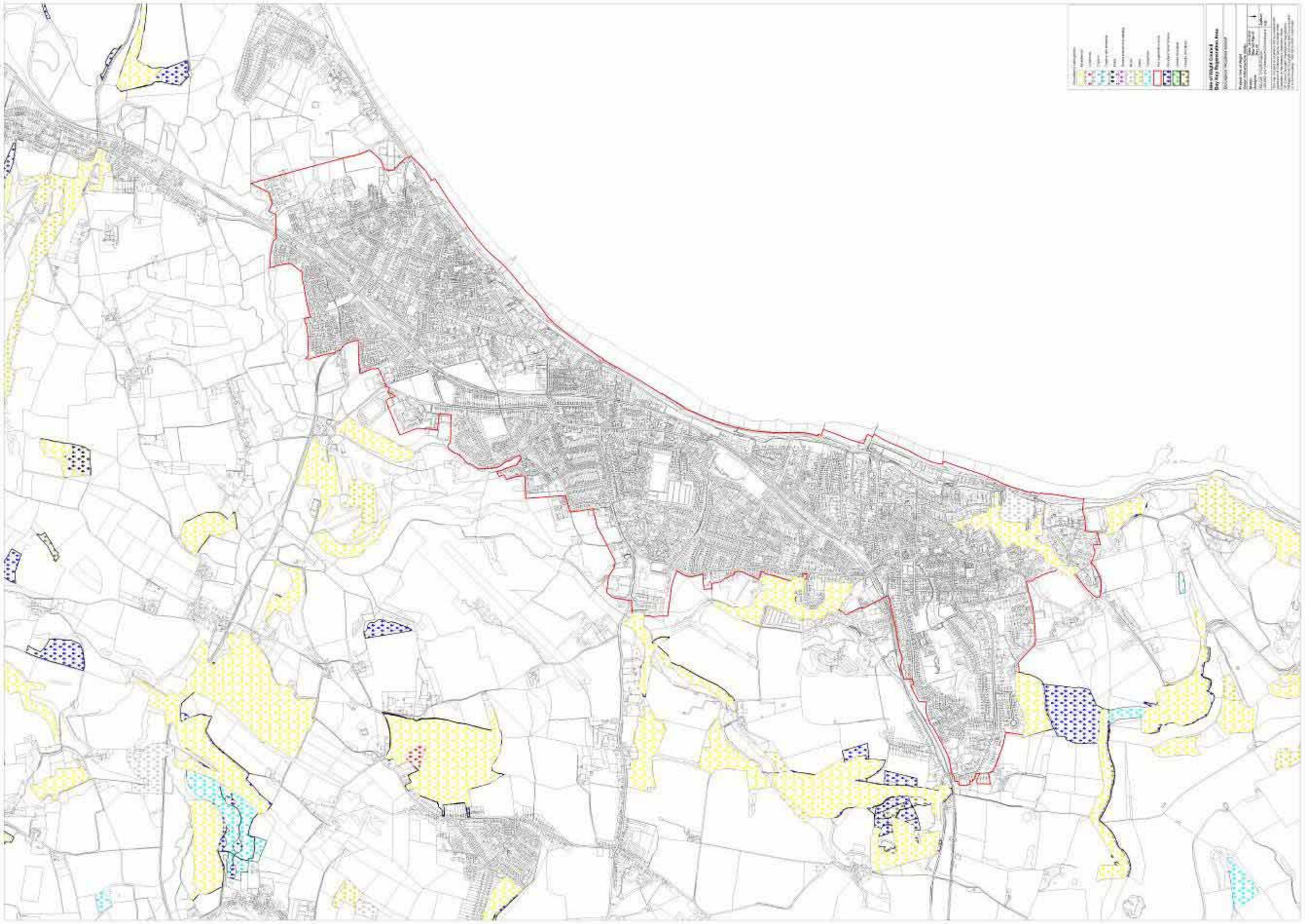


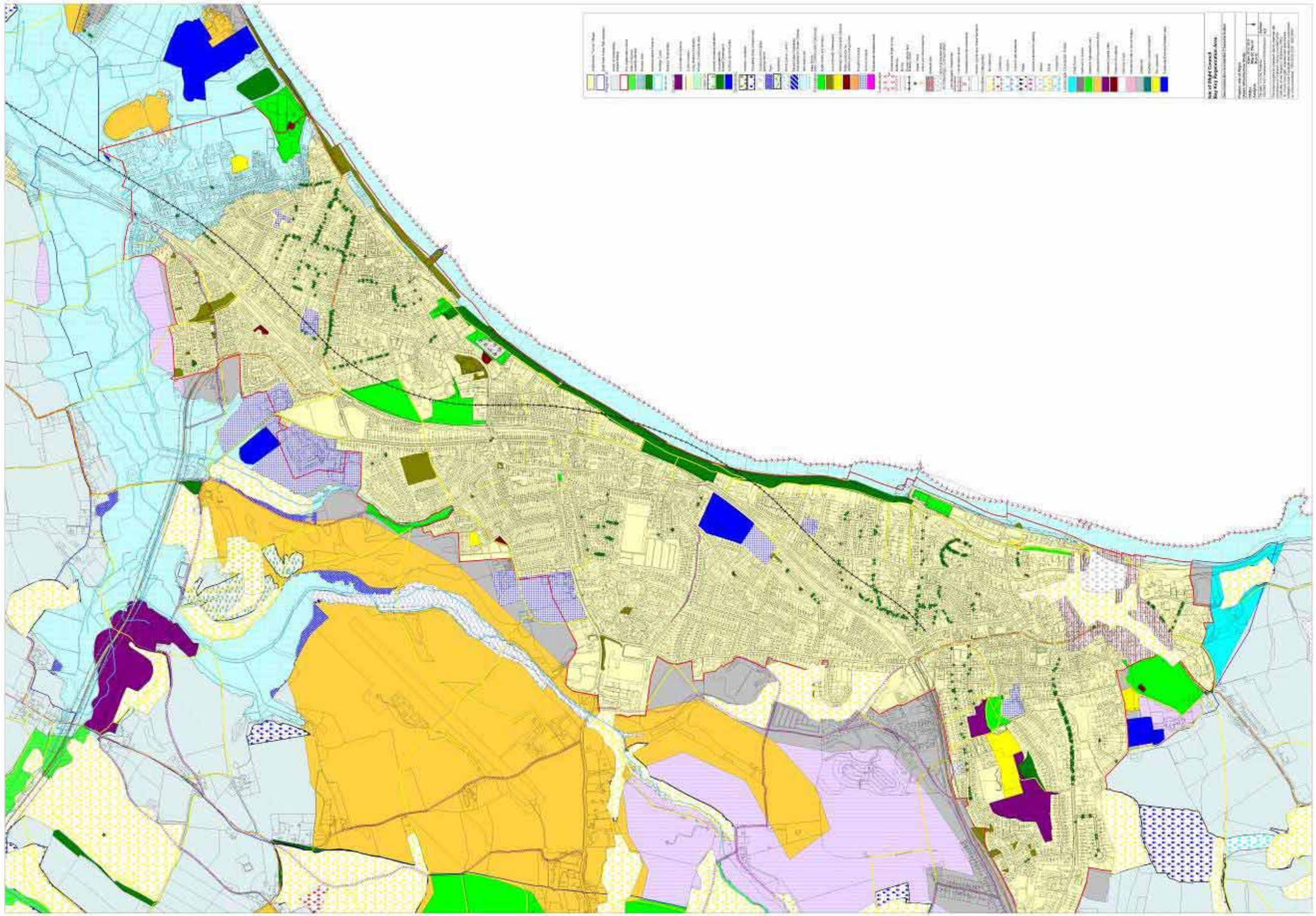




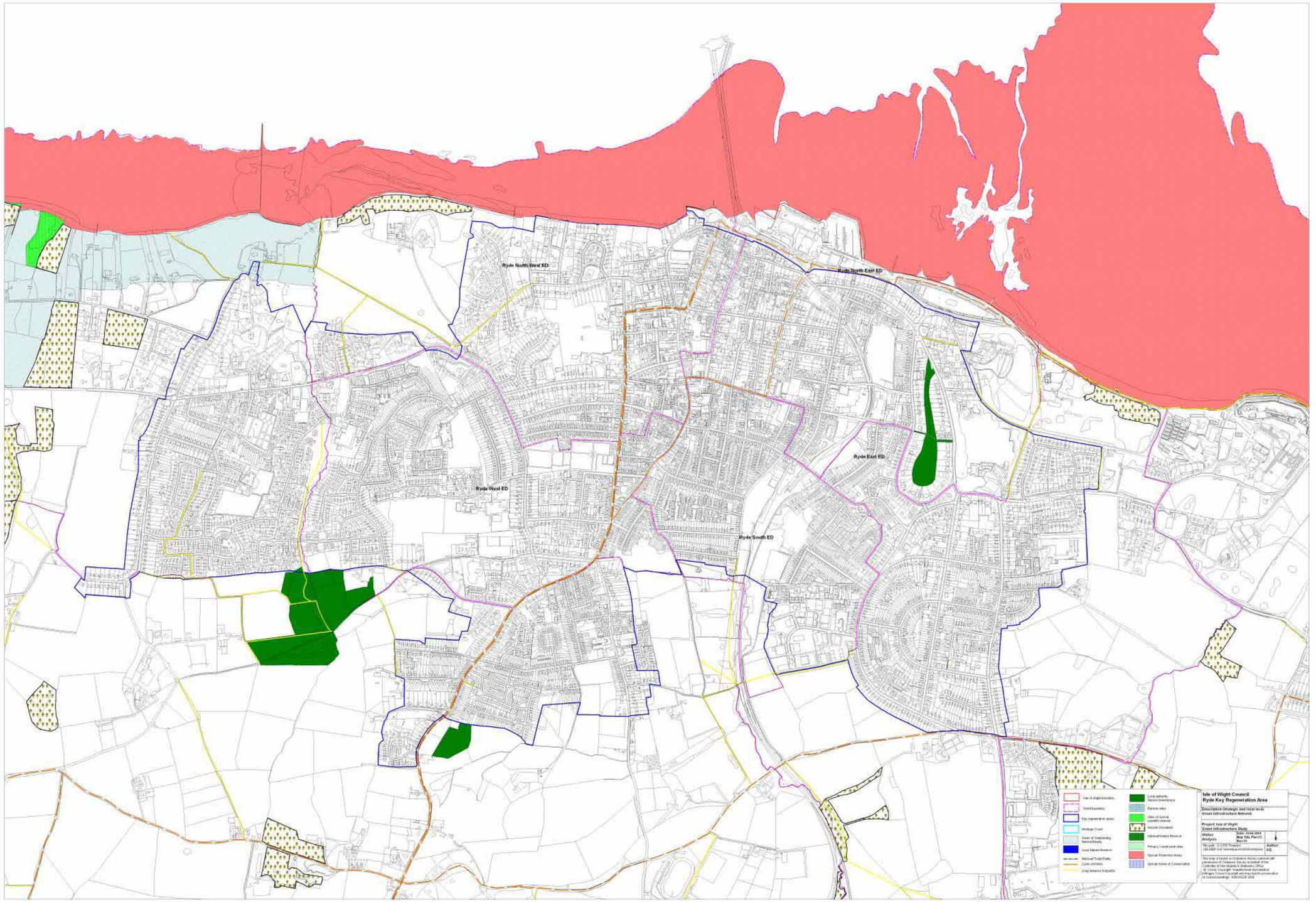


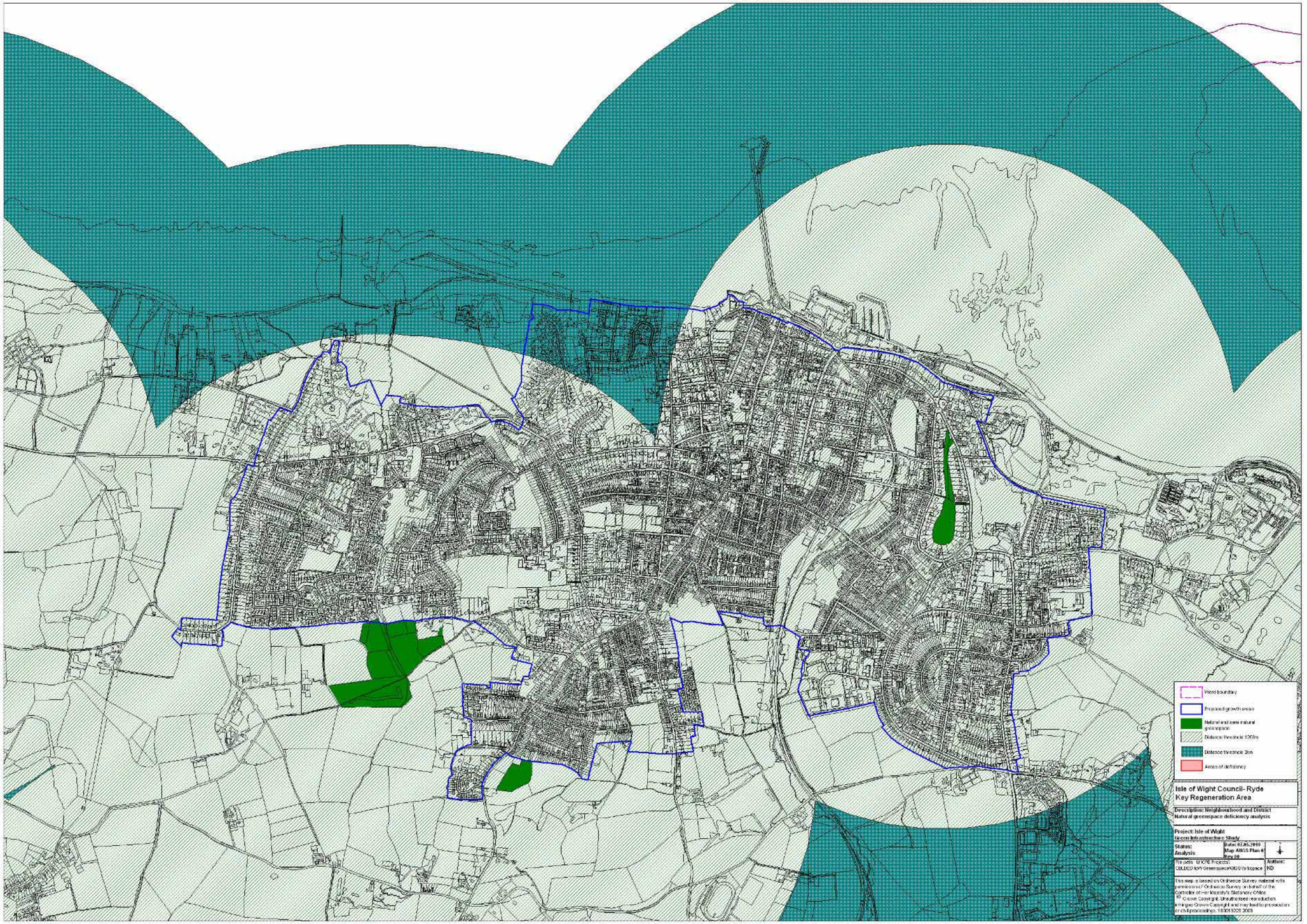

Isle of Wight Council Bay
Key Regeneration Area





Ryde Key Regeneration Area - Strategic and Local GI Natural Areas




Ward boundary
Proposed growth areas
Natural and semi natural greenspace
Distance threshold 1200m
Distance threshold 2km
Areas of deficiency
Isle of Wight Council- Ryde
Key Regeneration Area
Description: Neighbourhood and District
Natural greenspace deficiency analysis
Project: Isle of Wight
Green Infrastructure Study
Status:
Analysis
Date: 07.05.2010
Map: A1IGS Plan 6
Rev: 00
File path: U:\GIS Projects\
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Author:
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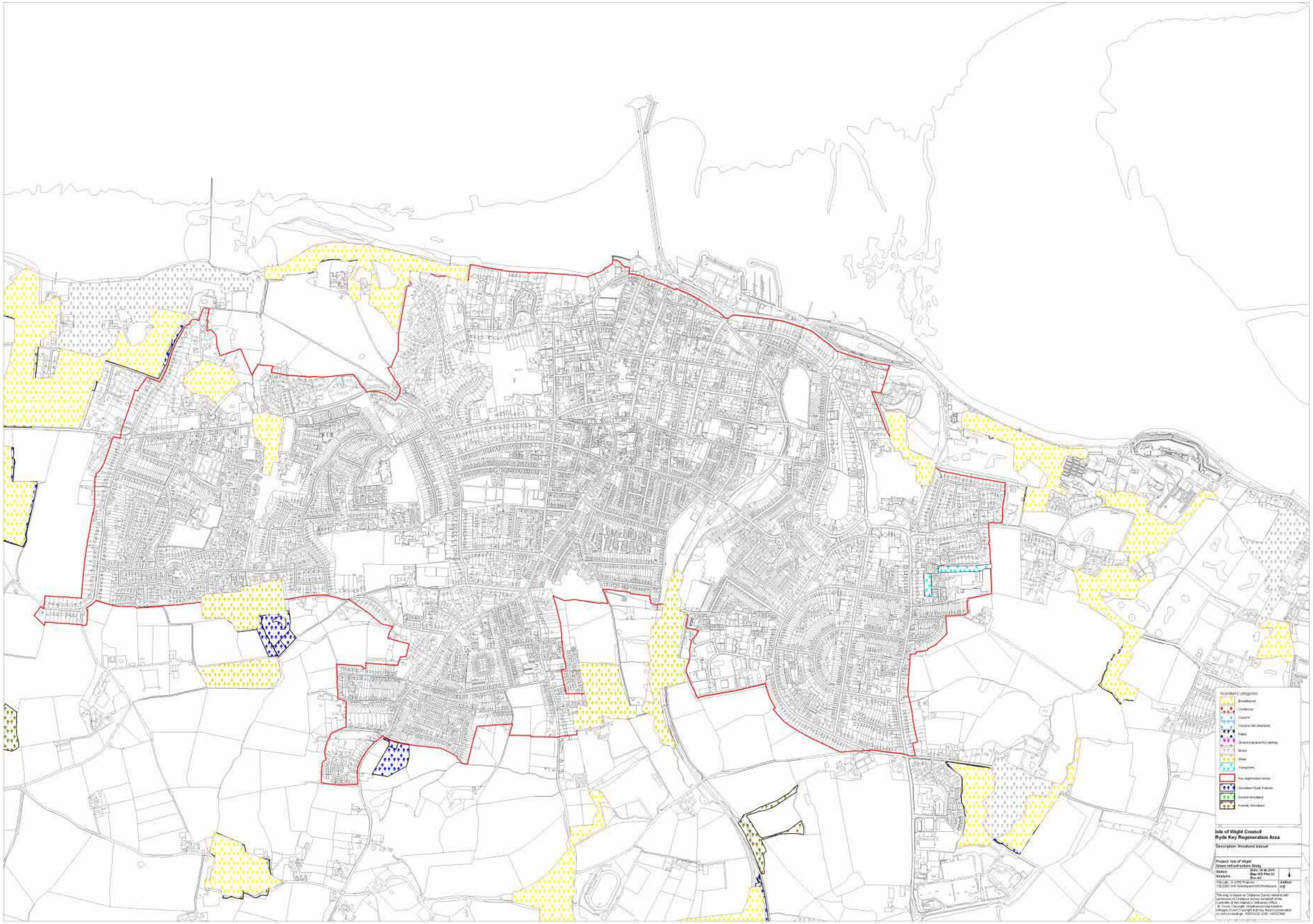
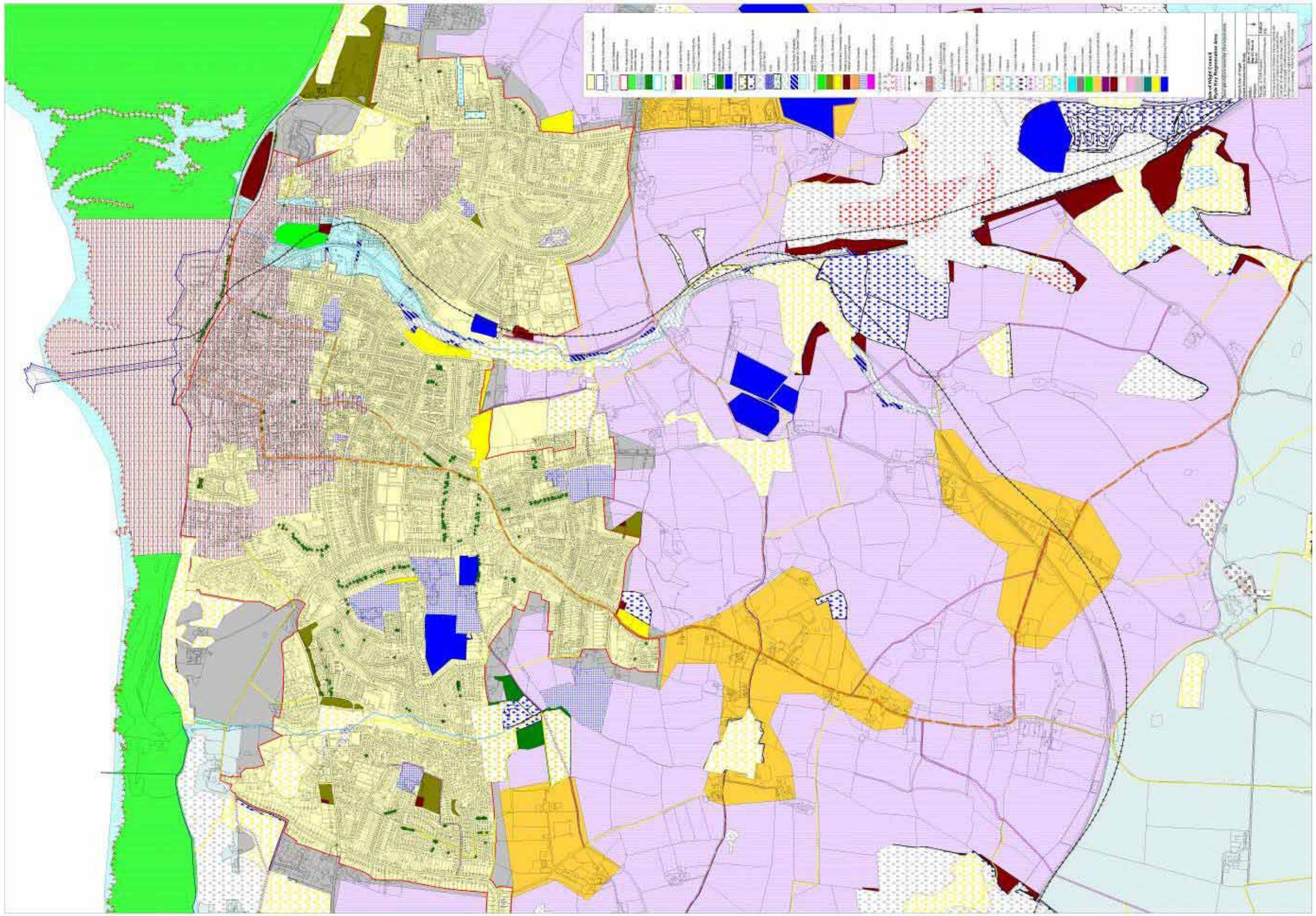
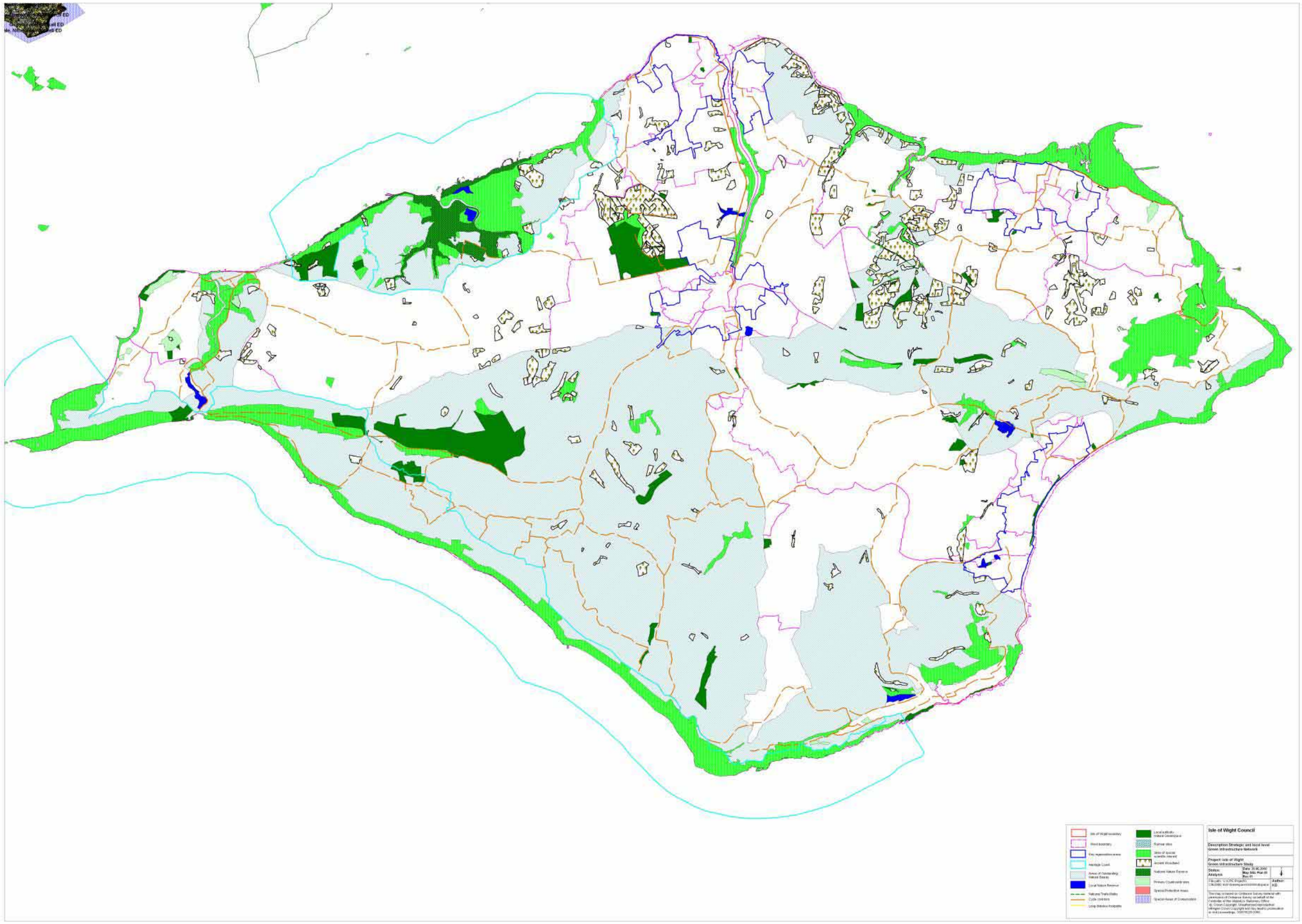
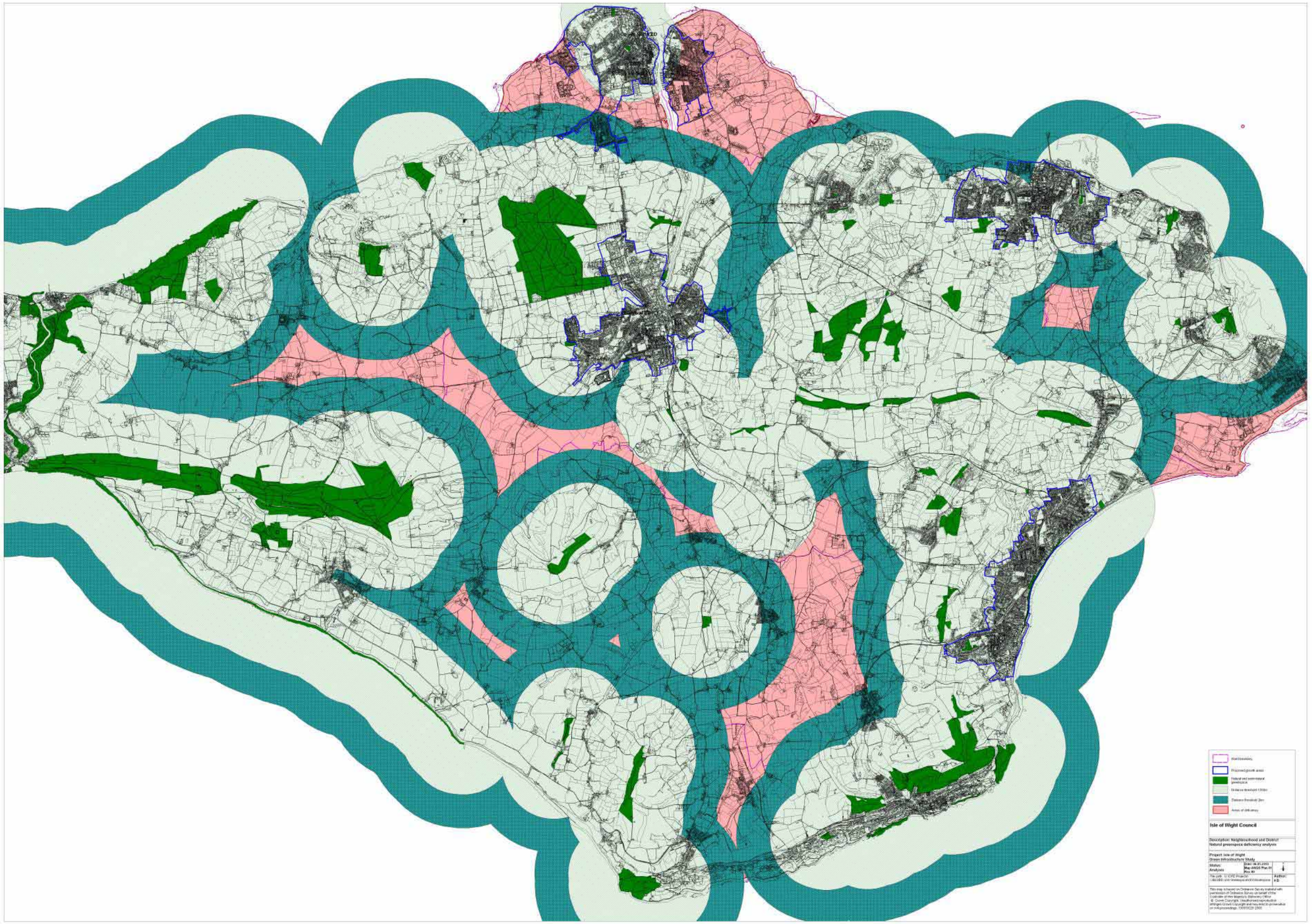
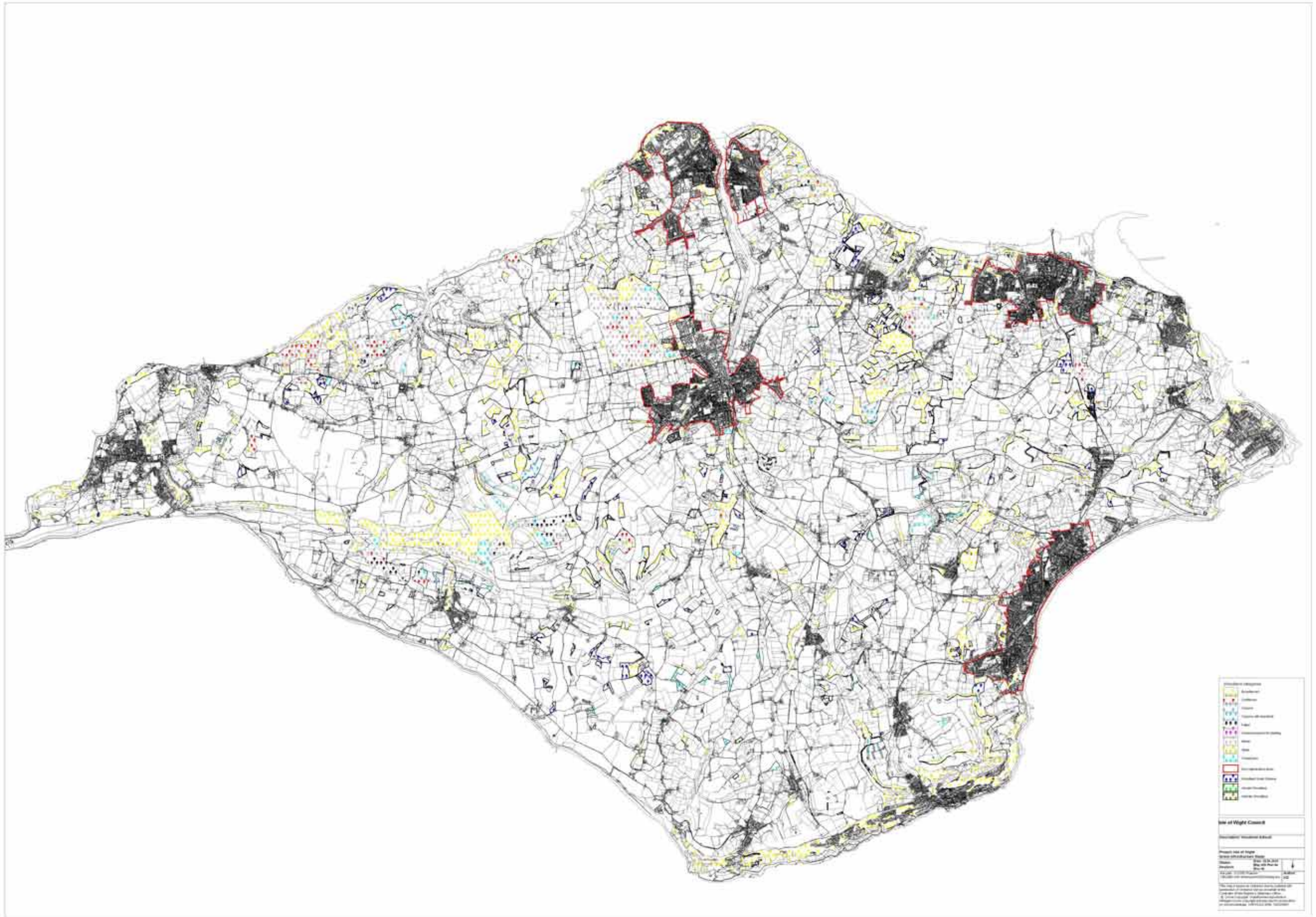
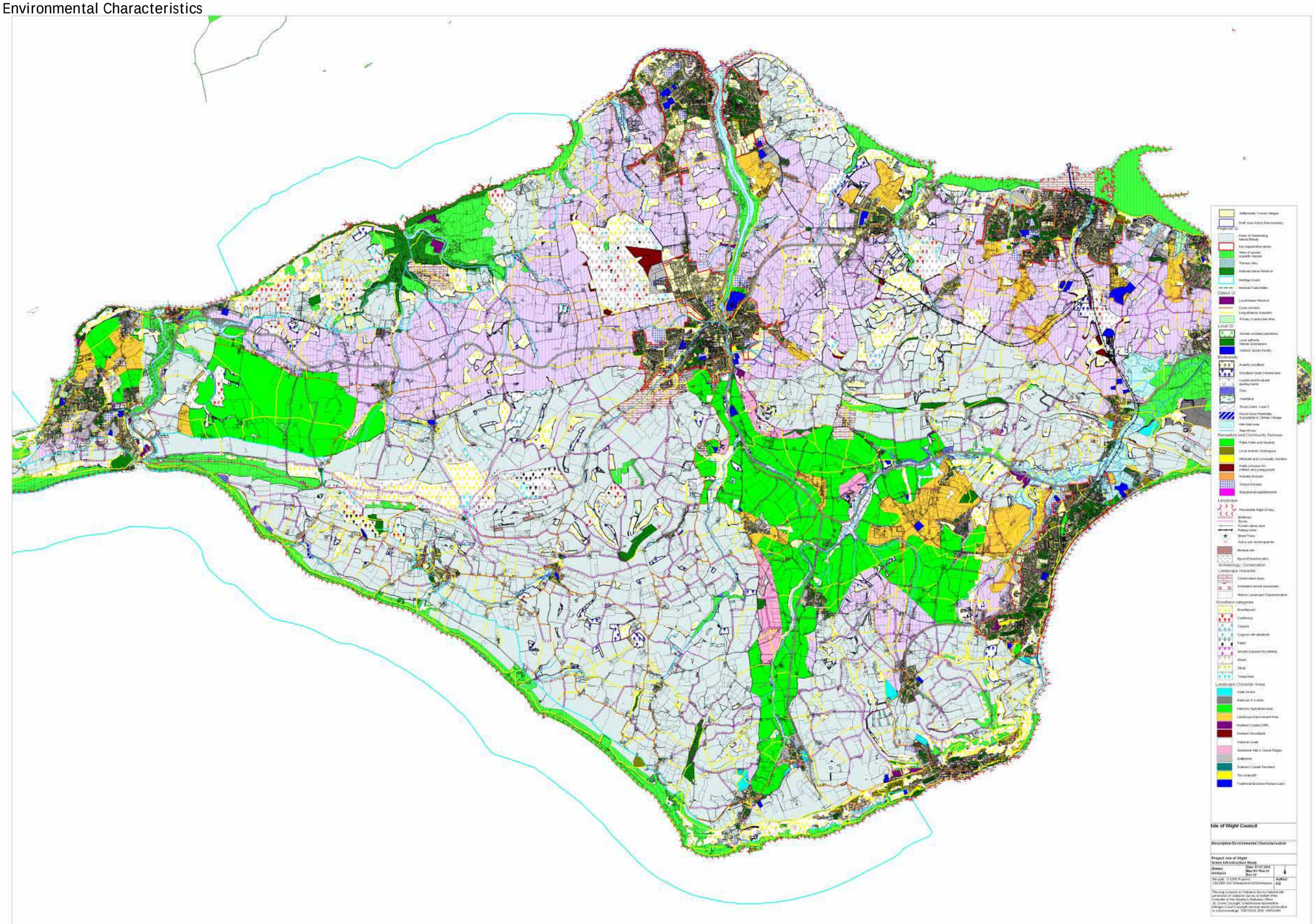

Woodland categories
Broadleaved
Isle of Wight Council
Ryde Key Regeneration Area
Description: Woodland dataset
Project: Isle of Wight
Green Infrastructure Study
Status:
Analysis
Author
KB






Isle of Wight Council




Isle of Wight Council
Description:Environmental Characterisation
Project: Isle of Wight
Green Infrastructure Study
Status:
Analysis
Date: 01.07.2010
Map ID: Plan 01
Rev: 02
Author:
MD

In summary, across the Island as a whole as well as the key regeneration areas, accessibility to GI assets and in particular, Natural Green Space is excellent with the exception of Cowes and East Cowes to the north of the Island. There are few clearly defined deficiencies across the Island. This is significant as this now raises a number of questions relative to the Island.

- What green infrastructure elements on the Island must be protected?
- What elements on the Island should be changed in character or enhanced?
- Where is there a need to create new elements and what type should they be?
- Where should the development of grey infrastructure be integrated with GI?
- Which elements should be linked together on the Island?
- Which elements are possibly tradable to achieve net environmental gains in both an infrastructure and qualitative sense as well as creating any missing links?

In answering these questions, this allows us to develop a Green Infrastructure Network based on "corridors and stepping stones" or strategic hubs and linkages, highlighting a number of opportunities that can then be delivered through the adoption of a Green Infrastructure Strategy.

What to protect?

The concept of Critical National Infrastructure is well established: it defines the power, transportation and communications networks, food and water supply systems and other infrastructure components without which basic economic, welfare and social systems cannot effectively function. It is important that we apply the same principles in attempting to identify what comprises the Critical Green Infrastructure. The question is 'what can we not afford to lose'? This question must be answered with regard to (a) context (e.g. what else is there nearby?), (b) quality (e.g. is this one of the most significant and valued sites in the area) and (c) interaction (e.g. is this the only green link between a community and a nature reserve or between two large areas of green space?). The answer does not have to be yes to all three to conclude that this is critical GI, and it may be that restoration or enhancement is required, but the critical issue is to identify those elements where loss or further degradation cannot be permitted.

Why is this expressed in essentially negative terms? The reality for many Local Authorities is one of managing development pressures where green spaces, and Previously Developed Land (PDL) which also has GI significance, are at a premium. Planning gain agreements may be attractive in realising net gains from developments, yet judgements about whether certain areas may be developed or whether they must be protected and conserved, have to be based on the right information.

In the case of the Isle of Wight, green space has been identified at a premium and the quality of the open space as being generally high. There are considerable concerns in relation to management and maintenance of land across the Island as well as pressures in certain areas, particularly in some of the more sensitive and fragile habitats, ecosystems and environmental designations across the Island. The PPG17 study recommended an adoption of a Strategic Open Space Network, the open spaces that are a "priority" in managing, maintaining and protecting and include parks, gardens, natural green spaces as well as outdoor sports facilities. This network should be central to any proposed Green Infrastructure Strategy. At the same time, with the new Conservation of Habitats and Species Regulations 2010, there is now added pressure for Local Authorities in relation to managing sites that are high in ecological value, sensitivity and environmental designation, how these are managed and how pressures on already valuable and sensitive habitats can be mitigated. Opportunities need to be highlighted where certain habitats are currently under threat or pressure and where there may be opportunities to mitigate these pressures by either "retrofitting" sites elsewhere or improving the "missing links" or as has been suggested, creating "stepping stones" that allow greater migration of species, as well as people between sites. At the same time, other opportunities may be identified which can be changed or enhanced making them more attractive and "visitor friendly". The Isle of Wight already has a number of sites already that are under pressure and include the following European, National and Local designations:

- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)
- Ramsar Site
- National Nature Reserve (NNR)
- Sites of Special Scientific Interest (SSSI)
- Heritage Coast Areas
- Local Nature Reserves (LNR)

Their level of sensitivity is detailed in Table 8-3 based on designation, quality and local knowledge. The development of a network must take these levels of protection into consideration.

What to change/enhance?

Although multifunctionality is one of the underpinning principles of GI planning, the reality is that many elements have a defined or actual primary purpose based on their principal typology. An appreciation of the context should help gain an understanding of whether the site is appropriate. It may be the case that some sites are simply not fit for purpose; there is not necessarily anything 'wrong' with them, but they fail to supply the demands evident in the surrounding area.

There may be a quality issue, for example where use of an area is depressed by problems such as vandalism, poor drainage, excessive litter or dog fouling. In this case qualitative enhancement is required. Alternatively it may be that use is depressed by a mismatch with demand. For example, some areas have a good supply of amenity grassland yet a paucity of green spaces that are more natural and 'interesting'. This is in part a spatial issue. For example, densely populated areas with a high proportion of children are likely to see high levels of use of such space. As another example, where several such green spaces are nearby or there is one large expanse of such space, the potential exists for a change to the character of some of the available green space.

The PPG17 Study highlighted the need to create more Natural Green Spaces within some of the urban settlements on the Island by changing or enhancing existing typologies such as Local Amenity Green Spaces, Outdoor Sports Facilities such as playing fields. Although accessibility based on distance thresholds, to natural green space is excellent across the Island, it was considered that access to "on the doorstep" natural green space was important or that links to outer countryside and sites elsewhere needed improving. This was especially the case in settlements such as Cowes, East Cowes and Ryde. As mentioned above, there are issues in relation to the Conservation of Habitats and Species Regulations 2010 where opportunities need to be identified that increase the multifunctionality of other green spaces, alleviating pressures on a number of valuable sites.

What/where to create?

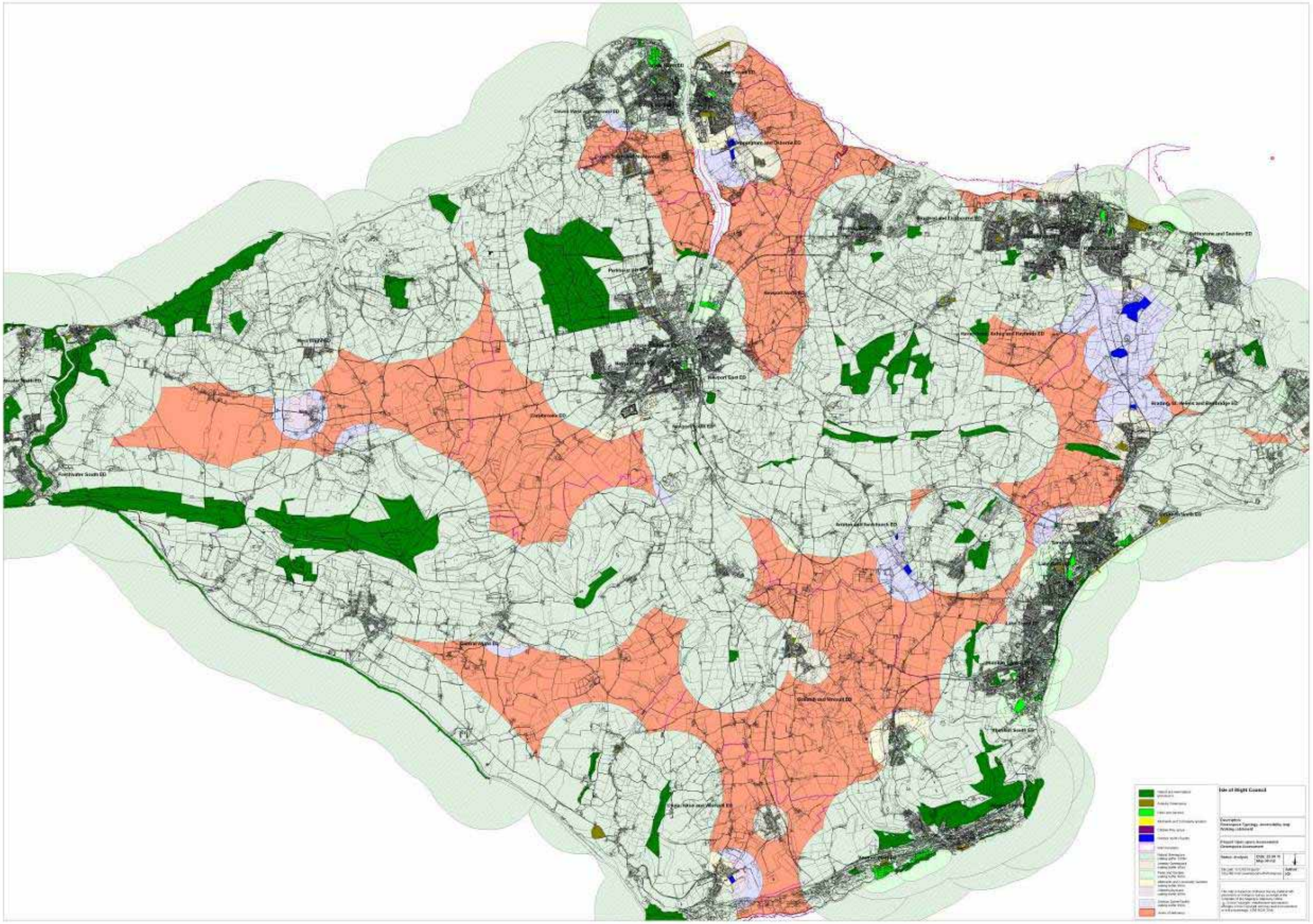
'Gap analysis' is a widely applied term and is increasingly used in a non-spatial context. However it is used here in an explicitly geographical way to define areas that have a level of provision and access to green infrastructure that fails to meet defined standards, or is otherwise judged to be deficient. However, although multifunctionality lies at the heart of green infrastructure thinking, it is a reality that most spaces and links have a clearly identifiable primary function or use, and this is reflected in the GI typology. For example, playing fields are distinctively different from areas of woodland which in turn are different from publicly accessible common land that is used for grazing. An awareness of the sufficiency of supply must be complemented with an appreciation of the suitability of supply. So, specific questions that arise from this include:

Where are there gaps?

As a basic principle, reasonable access to green space of any type is better than no access at all. Whilst there may be small localised deficiencies in some typologies of green space e.g. Parks and Gardens, there may well be alternative provision such as natural green space or outdoor sports facilities nearby. At the same time, whilst we have a range of standards for green space typologies for the Isle of Wight which can help define absolute gaps in access to certain types of green space, we must also bear in mind that these standards must be carefully applied and sensitive to barriers such as major roads. We have determined standards for the Island carefully as a failure to determine any that are locally meaningful and then apply them intelligently is critical if unduly optimistic or simply false levels of provision are to be avoided. We have used ANGSt as well as the PPG17 accessibility standards to look at a range of options for the Island as a whole as well as the Key Regeneration Areas.

In supply of specific types of GI?

While the basic principle set out above is that access to any green space is better than no access at all, it is often the case that one particular type of GI may be over-provided relative to the spatial pattern of demand, to the detriment of other types of GI where demand may be unmet. Demand in this context is not necessarily straightforward and measurable in human terms through local consultation. For example, the development of a wildlife corridor may require decisions to transform the character of open spaces away from those which have utility for informal games, football, kite flying, etc towards a more natural form of land cover that has landscape and nature conservation gains. The key point is that communication needs to be wide and involve partner organisations such as Wight Wildlife and Natural Enterprise and Natural England in determining where the perceived gaps in GI are, why they may be significant and what might be done to address them. The PPG17 Study when it was determining provision standards assessed the current provision of publicly accessible green space partly used this information to derive new standards. Along with the mapping carried out taking into account ANGSt, we are able to determine any deficiencies in GI.



Combined Accessibility for Parks and Gardens, Natural Green Spaces, Outdoor Sports Facilities and Local Amenity Green Space

There are a number of defined accessibility deficiencies for single typologies when assessed separately but when combined as if seen as part of a network, there are only deficiencies within some of the rural areas alone and to the east of Cowes.

In Linkages? Green infrastructure as we have discussed, is fundamentally a network of networks. These networks may be very localised and of local significance, or they may incorporate features, areas and links that are of regional or national significance, such as National Nature Reserves or Long Distance Footpaths.

How these networks are linked is significant; at a physical level links may be either an area or linear area of green space or they may be more towards the grey end of the green-grey infrastructure spectrum, such as multi-user routes or cycle paths through urban areas which link green spaces and networks. They may also be important linkages which encourage the natural dispersal of wildlife. However such links must exist for green infrastructure to develop. In addition to their simple physical existence, links must be of an appropriate level of quality to encourage users, make them feel safe and enjoy the experience. Context can pose challenges to this, as routes through areas of high deprivation often experience problems such as vandalism, graffiti, broken glass and damaged lighting and signage which require a high and often sustained level of revenue expenditure to resolve or education and community involvement.

The Isle of Wight has a comprehensive network of rights of way, long distance footpaths, green corridors, estuaries, and bridleways that contribute to the network. However there are a number of issues that have been identified which include the lack of bridleways in the south where the majority of horse owners are and the profusion of bridleways in the north where there are fewer horse owners. The quality of the network ranges from poor to excellent both at the local level and district level. A survey of the Rights of Way network exists but this is extremely detailed and is not mapped in a format that can be used in GIS. However, local Rights of Way Officers are aware of where the network is poor to where it is considered excellent. The development of projects and aims with objectives needs to be considered as part of the development of the GI Strategy. Accessibility from the towns to outer countryside also needs to be improved with more joined up "linkages" being created.

These will be highlighted later as 'opportunities'.

In areas of higher need? The question of demand is relatively straightforward to resolve if the premise that all areas are of equal significance is adopted. However, this premise is questionable on two levels:

a) Population is unevenly distributed: all other things being equal, the greatest effort should be targeted where the greatest net benefit may be realised for the investment and this means targeting where population density is highest.

b) Deprivation is unevenly distributed: the use of datasets such as the Indices of Multiple Deprivation (IMD) provides an evidence base for targeting investment where deprivation and relative disadvantage is highest. In the context of green infrastructure it is something of a leap to infer that demand for GI is highest in areas of the greatest relative deprivation, but the principle that areas of high deprivation should have priority attention for GI development, enhancement or creation works is proposed. The basis for this is multi-dimensional but, for example, opportunities for exercise are critical in areas of long term illness, obesity and heart disease, all of which are associated with disadvantage and deprivation. Car ownership is lower in areas of high deprivation so attention to journeys that link foot, bicycle and public transport is important. Finally, and more contentiously, areas of low deprivation are often those where access to private green space (primarily gardens) is good, and where car transport is available to access more distant areas of green space in the countryside.

When analysing health data for the Isle of Wight, there are indeed a number of particular issues that are highlighted and are of concern. Information obtained from the South East Public Health Observatory (SEPHO) shows concerns related to:

- Physically active children
- Obese children
- Under 15's not in good health
- Incapacity benefits for mental health

All are significantly higher than the national average with real concerns with obesity among children.

When analysing the Indices of Mass Deprivation, in 2007, over half the wards on the Island were in Group 4 of the National Deprivation Groups, Group 5 being in the worst fifth in the country. Areas that were especially high included:

- Parkhurst
- Pan
- Fairelee
- Osbourne
- East Cowes North
- Ryde North East
- Ryde North West
- Ryde South East
- Ryde South West

When deprivation is analysed at a local level, the local perspective is very similar with the following in Group 5, the worst fifth on the Island:

- Fairlee
- Parkhurst (most of it)
- Pan
- Ryde North East
- Ryde South East
- St. Johns East
- St. Johns West

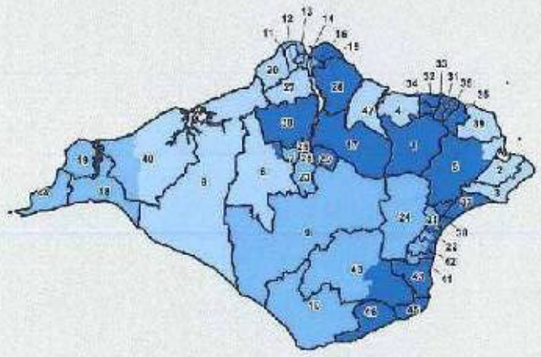
These are mapped (overleaf) and give clearer indications of locations and how they correlate with the Island urban populations, in particular the key regeneration areas.

Deprivation: a national perspective

This map shows differences in deprivation between small areas in this local authority, *compared to the whole of England* (based on IMD 2007).

National deprivation groups

- 1 Least deprived fifth of areas in England
- 2
- 3
- 4
- 5 Most deprived fifth of areas in England

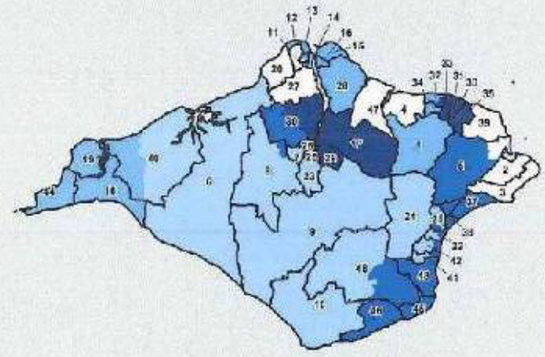


Deprivation: a local perspective

This map shows differences in deprivation between small areas in this local authority, *compared to the local authority as a whole* (based on IMD 2007).

Local deprivation groups

- 1 Least deprived fifth in this local authority
- 2
- 3
- 4
- 5 Most deprived fifth in this local authority



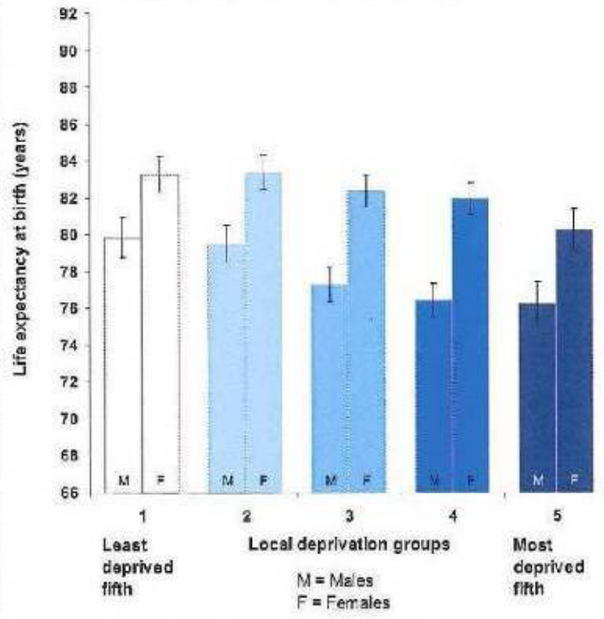
Ward legend

1 Ashey
2 Bembridge North
3 Bembridge South
4 Binstead
5 Brading and St Helens
6 Brighstone and Calbourne
7 Carisbrooke East
8 Carisbrooke West
9 Central Rural
10 Chale, Niton and Whitwell
11 Cowes Castle East
12 Cowes Castle West
13 Cowes Central
14 Cowes Medina
15 East Cowes North
16 East Cowes South
17 Fairlee
18 Freshwater Afton
19 Freshwater Norton
20 Gurnard
21 Lake North
22 Lake South
23 Mount Joy
24 Newchurch
25 Newport North
26 Newport South
27 Northwood
28 Osborne
29 Pan
30 Parkhurst
31 Ryde North East
32 Ryde North West
33 Ryde South East
34 Ryde South West
35 St Johns East
36 St Johns West
37 Sandown North
38 Sandown South
39 Seaview and Nettlestone
40 Shalfleet and Yarmouth
41 Shanklin Central
42 Shanklin North
43 Shanklin South
44 Totland
45 Ventnor East
46 Ventnor West
47 Wootton
48 Wroxall and Godshill

Ward boundaries 2005 are superimposed upon MSOA (Middle Super Output Area) boundaries. Each MSOA is shaded by Index of Multiple Deprivation (IMD) 2007. For details refer to www.communities.gov.uk. Numbers correspond to ward legend. Ward boundaries may have changed.

Health inequalities: a local perspective

Inequalities in life expectancy (2002-2006) for men and women who live in areas with different levels of deprivation (within this local authority).



95% confidence interval. These indicate the level of uncertainty about each value on the graph. Longer/wider intervals mean more uncertainty. When two intervals do not overlap it is reasonably certain that the two groups are truly different.

Isle of Wight

www.healthprofiles.info

Deprivation – National and Local Perspectives

Addressing many of the issues identified above may initially be done at a relatively strategic scale, to identify where investment should be targeted to protect, conserve, enhance or create green infrastructure. However, actions on the ground must of course be targeted at a tactical level which gives rise to another question:

Where are there viable opportunities to create new elements and links?

Working towards strategic objectives and a vision for green infrastructure ultimately requires actions on the ground, in specific areas and locations. To achieve this an appreciation of which opportunities are viable in respect of, for example, land ownership, financial implications and land conditions requires appropriately detailed information in a GIS database. Conservation, especially at a landscape scale, has in the past been described as 'the art of the possible' and the development of green infrastructure that exhibits both network connectivity and coherence and element-specific quality and fitness for use requires that tactical opportunities are matched with strategic need. Despite these limitations, it is still appropriate to establish long term networks irrespective of these factors to ensure that the necessary networks are protected until suitable implementation opportunities arise. Again, GIS enables a range of datasets to be integrated that allow this level of connected decision making to be supported.

What/where to integrate?

This is not just about grey OR green infrastructure or simple metrics of loss and gain – there is a qualitative dimension that requires green and grey infrastructure to be developed together. Two key questions are identified in this context:

a) Should new housing be developed in an area that is already well served with GI, so that the quality of place, environment and life for the incoming residents is high?

b) Should new housing be planned in an area of low quality or spatially incoherent GI so that design and planning gain can be used to 'leverage' net gains for the new residents, and also enhance the coherence and quality of the wider GI?

What to link?

This element is relatively self-evident. Analysis of existing patterns in the green infrastructure and the grey-grey infrastructure through the developed datasets and rights of way network should establish the areas of highest priority for network extensions and enhancements.

What is tradable?

This is definitely the most contentious of the questions, but the reality of planning is one of managing change, and at the heart of green infrastructure planning lies the three qualities of environment, place and life. In many settings, perhaps most commonly in urban fringe areas, we can have low quality places and environments that contribute little to quality of life. Regeneration requires development, and even environmentally-led regeneration involves building and the transformation of brownfield and Greenfield sites. GI planning is not proposed as an approach to block such developments, rather it is an approach that should guide land allocation, siting and design of developments such that the green infrastructure is not weakened, and also that existing GI can provide high quality settings for development and those that live and work there. In addition, there must be a focus on net gains and this requires an ability to determine where trade-offs might best be made. Such trade-offs might result in the loss of an area of green space, but planning gain agreements may potentially make available land and/or resources that could strengthen the green infrastructure in other ways or in other areas. There is no simple, universal equation to determine whether elements of GI may be traded and if so for what and where. The approach adopted here has been to encourage planners:

a) To take an explicitly geographical view on the relationship between green spaces, links, other green spaces and networks

b) To promote communication with partners and other interested parties to understand and appreciate the significance of elements and links

c) To promote communication with partners and other interested parties to understand and appreciate the significance of gaps in provision and networks

These are not issues that GIS can resolve, however data rich they are, nor are they issues which individual agencies, working in isolation, can resolve either. They require appropriate information, consultation and careful judgement, but the potential gains from trading in a development context are considerable.

Taking this all into account, a number of opportunities present themselves, and as recommended in the PPG17 study as well as this GI Mapping Study, such opportunities should manifest themselves in the creation of a Strategic and Local Green Infrastructure Network.

9. Strategic and Local Green Infrastructure Network - Opportunities

The GI mapping analysis carried out as part of this study as well as the PPG17 study has highlighted a number of issues which can be summarised as:

- Quantity of open space generally is excellent across the Island for most typologies
- Accessibility to most open spaces including Natural Green Space is very good with some local deficiencies in a small number of locations. There are local deficiencies within towns to natural green space typologies
- There are concerns in relation to health especially among children and young people with figures well above the national average.
- The rights of way network is comprehensive and high quality across the Island but there are a number of gaps
- There are a considerable number of sites that are considered "sensitive" and are under pressure and need to be considered under the wider Habitat Regulations
- The PPG17 study recommends developing a Strategic and Local Network which should form the core of any future GI strategy

The purpose of this section is to take into account all these findings and look at developing a Strategic and Local Green Infrastructure Network based on opportunities that are available and can be realised through the development and long term delivery of a Green Infrastructure Strategy.

A number of delivery priorities should be developed through the GI Strategy. It should be noted that the list of priorities will vary according to the spatial scale of the planning taking place or the landscape context, nevertheless by taking a high level view it is possible to identify a list of delivery priorities in each category.

Delivery priorities for sustainable resource management: *Green infrastructure that…*

- Protects key assets (and also extends their beneficial qualities) including critical water resources and delivers aspirations arising from catchment planning in the context of the Water Framework Directive as well as habitats considered at risk under the new Habitats Regulations directive
- Delivers both the strategic goals and implements the key strategies of competent authorities and leading NGO's (such as Environment Agency, Natural England, RSPB etc)
- Delivers the outputs and outcomes identified within key regional strategies (such as regional spatial strategy, environment strategies and sustainable community strategies)
- Improves or protects essential environmental capital including 'soils' and 'air quality'
- Ameliorates the anticipated impact of climate change especially in regards to liveability in urban settings

Delivery priorities for biodiversity: *Green infrastructure that…*

- Maintains and enhances existing green areas by:
  - o Preventing deterioration of overall quality
  - o Bringing quality improvements which are of direct benefit to communities whose local environment is currently deficient in the qualitative benefits of access to nature
  - o Maintaining critical biodiversity assets and providing long term security for these as identified in Biodiversity Action Plans and Local Biodiversity Opportunity Areas
  - o Providing connectivity at the landscape scale where this will favour expansion of biodiversity assets and lead to an overall increase in ecotones (edge habitats) and 'stepping stones'. It is noted that strategic isolation can be a positive green infrastructure approach in certain situations
  - o Facilitating the re-wilding and natural regeneration of Brownfield land leading to the creation of habitat rich post industrial landscapes
  - o Diversifying (and hence increase the multifunctional benefits) monotonous green landscapes (stakeholders critically refer to extensive areas of close mown municipal green space), through for example meadow management or landscape planning which introduces new features.
  - o Maintaining existing Geodiversity assets and providing access and interpretation of these
- Provides new green areas which:
  - o Secures additional biodiversity facilitated through the strategic planning system, new commercial and housing developments
  - o Enables new 'green links' to be attained between existing green areas
  - o Provides transitional landscape types (these can be highly beneficial for biodiversity for example young woodland types)
  - o Buffers existing green infrastructure assets (for example by providing woodland buffer zones achieved through natural regeneration or planting of local provenance material adjacent to Ancient Semi Natural Woodland)
  - o Creates new Geodiversity assets

Delivery priorities for recreation: *Green infrastructure that…*

- Provides 'close in' green infrastructure development which provide opportunities for green exercise (examples include walking and cycling routes close to places of work and links to areas with high levels of multiple deprivation)
- Provides local 'gateway' access to 'natural areas' at confluence points between significant pavement networks (for example on housing estates) and open green areas
- Enables delivery of Rights of Way Improvement Plans and links to open access areas
- Facilitates delivery of local authority walking and cycling strategies
- Provides space for outdoor sport and active recreation activities (e.g. orienteering, equestrian, running)
- Provides a resource to educators and families for learning and creative play

Landscape: *Green infrastructure that…*

- Works at the landscape scale, achieves connectivity between landscapes and provides a framework for landscape enhancement, renewal and where necessary recreates landscape quality
- Improves the diversity of urban green areas and delivers multi-functional benefits achieved through landscape led improvements
- Connect 'green areas' together to achieve a 'strategic whole' that is greater than the sum of the parts
- Achieves cooperative management of joined green areas whether they are in private ownership (such as gardens) with adjoining public areas (such as parks or the street scene)

Regional development and promotion: *Green infrastructure that…*

- Provides a landscape framework (for example by screen planting) to ameliorate visually unappealing industrial and commercial structures for the benefit of local residents, investors, employees and visitors
- Provides a landscape framework adjacent to critical 'grey infrastructure' assets including trunk roads, passenger rail corridors and main transport hubs (e.g. airports and ferry ports)
- Tackles local environmental issues such as fixation of particulates (from motor transport or industrial processes) and creation of sound barriers
- Demonstrably ties together existing regional and local economic, social and environmental strategies
- Delivers environmental regeneration priorities (for example that release more land for tree planting in community forest areas)
- Contributes to the regional tourism offer either by adding value to existing tourism attractions, providing new attractions or creating links between them
- Enhances areas of poor or degraded landscape character

The Bay

Issues

A number of issues have been highlighted in relation to the Bay Area, including some issues on quantity, lack of multifunctionality of many open spaces as well as sensitivities of SSSI's and other designations.

Quantity - The PPG17 Study highlighted the lack of outdoor sports facilities although most other typologies were well catered for in relation to accessibility and quantity. Quality of open spaces was generally classed as high. Levels of quantity per m2 per person are shown in the adjoining table along with the PPG17 recommended provision standard.

Typology	Existing Provision Bay growth area (M2) per person	Provision Standard
Parks and Gardens	8.7	6
Local AGS	6.6	5
Green Corridors	1.2	N/A
Natural Green Space	19	N/A
Allotments	2.0	3
Churchyards & Cemeteries	3.7	N/A
Outdoor Sports Facilities	9.3	16
Children and Young Peoples Facilities	0.24	0.6
Civic Spaces	0	N/A
TOTAL	**51**	

Table 9-1: The Bay

Multifunctionality - The PPG17 Study also recommended a number of sites that should form part of an Island Wide Strategic network serving the Bay area. Those recommended were:

Strategic Parks

- Rylstone Gardens, Shanklin
- Los Altos Park, Sandown
- Big Mead Park, Shanklin
- Esplanade Gardens, Shanklin
- Neighbourhood Parks
- Lake Common, Lake
- Newport Road Rec, Lake
- Eastcliff Prom, Shanklin
- Tower Cottage Gardens, Shanklin
- Batts Road, Shanklin
- Lake Gardens, Sandown
- Battery Gardens, Sandown
- Ferncliff Gardens, Sandown
- Sandhams Ground, Sandown

All Outdoor Sports Facilities and Play and Youth Facilities

Most of these sites currently display a lack of multifunctionality. As described by Natural England, 'multifunctionality' is central to the green infrastructure concept and approach. It refers to the potential for green infrastructure to have a range of functions, to deliver a broad range of ecosystem services. Multifunctionality can apply to individual sites and routes, but it is when the sites and links are taken together that we achieve a fully multifunctional green infrastructure network.

Sensitivities – America Wood and Alverstone Marshes SSSI's are close by and within the Bay area.

Alverstone Marshes to the west of the Bay area covers an area of 37ha with the majority of the SSSI is classed as condition "unfavourable – recovering" or "unfavourable – no change" with a small section classed "favourable". Wet and boggy most of the year, the site is currently traversed by a former now dismantled railway line, with a National Cycleway which runs through it. Isle of Wight Conservation Officers have classed it as amber status.

America Wood to the south west of the Bay area covers an area of 21.5 ha and is primarily classed as "Favourable condition" to "unfavourable – recovering" with a small section that has been classed as "part destroyed". There are also Live Management Agreements in place for this SSSI. Steep slopes cut by a small stream, it has characteristics of ancient wood pasture. Isle of Wight Conservation officers have classed it as green status.

Local issues raised include:

- Footpaths and bridleways are already well used and it would be useful to improve links with other habitats
- America Woods could be linked to other woods and surrounding woodland

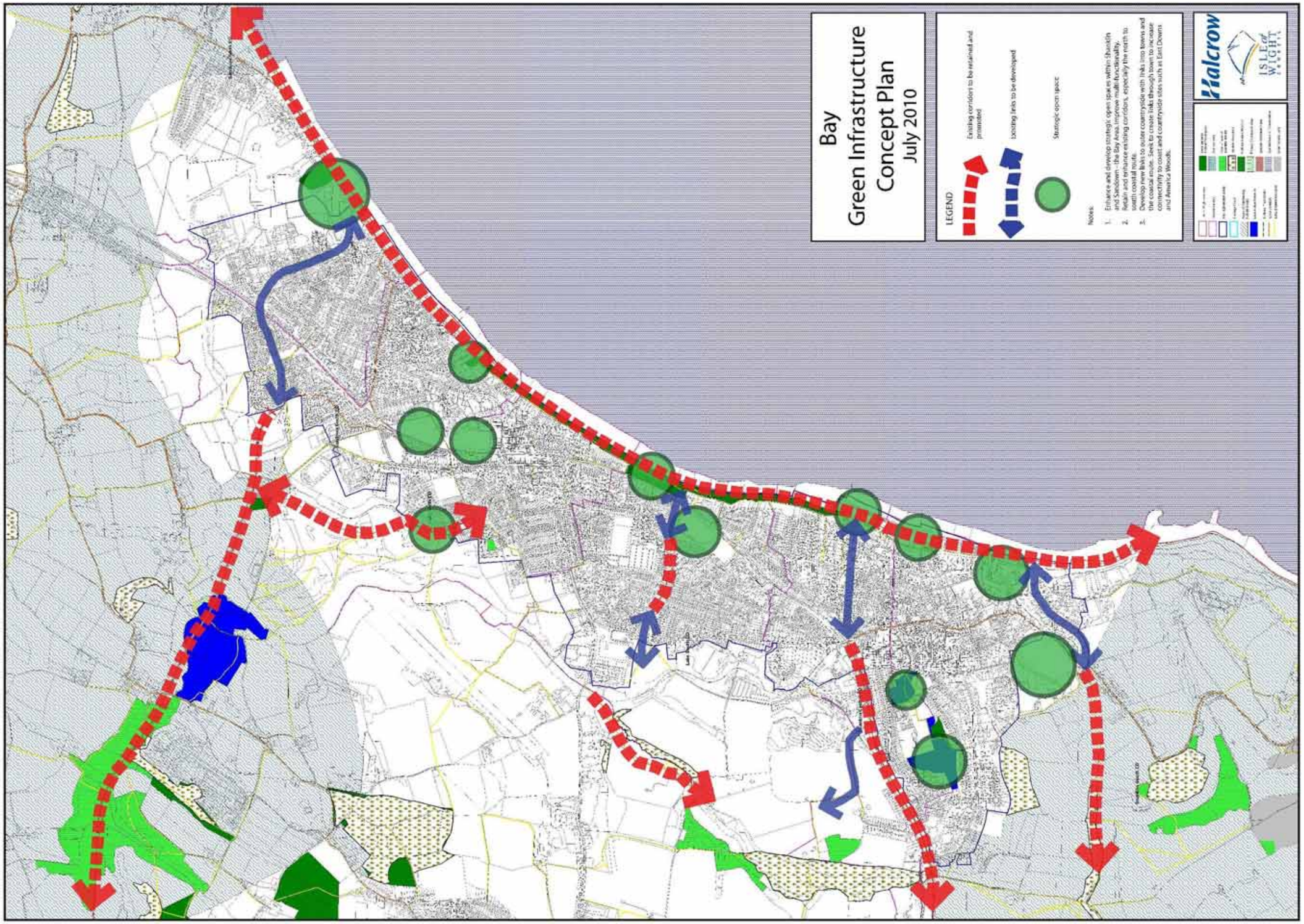
Needs

Despite the overall provision of green space being sufficient and distance thresholds showing good accessibility, the Bay area towns of Shanklin and Sandown display a compact and dense townscape bounded by the coastline to the east and countryside to the west. The typology maps show an array of typologies across the area but indicate little natural green space within the area itself. The Esplanade and foreshore are important but many of the green spaces such as playing fields, parks and amenity green space areas display little multi-functionality. There are a number of public footpaths and cycle trails which connect the Bay area with the outer countryside, in particular the Nunwell Trail and Worsley Trail.

Opportunities

Taking into account the delivery priorities at the beginning of the chapter, a number of opportunities become apparent and we have proposed a conceptual GI 'Plan' (in draft) which is based on the Environmental Characterisation plans for the Bay Area. The 'Plan' is a simplified way of expressing what our priorities are and what potential opportunities are possible and could be developed further within the GI Strategy. These are summarised below:

- The Esplanade from Shanklin to Sandown is an important green corridor and is a series of connected spaces linking a number of strategic open spaces such as Rylstone Gardens, the Esplanade Gardens and Sandhams Ground. Connectivity into the 2 main towns remains poor although potential exists to link to key routes to the wider countryside. Missing links have been identified
- A number of Strategic Open Spaces have been identified and the Council needs to continue to maintain these to a high standard, but at the same time develop and enhance these sites
- There are a number of open spaces that are currently displaying a principal use or typology where multifunctionality is limited or non existent. School playing fields, local amenity green space and neighbourhood parks should be improved by enhancing local biodiversity and giving 'nature on the doorstep'. There are limited if any opportunities to create new green space and with current green space provision standards satisfied, the need is not a requirement. Therefore increasing opportunities within existing green spaces by increasing and developing multifunctionality is seen as desirable. Creating 'doorstep' nature will also be effective in decreasing the pressure on some of the more sensitive habitats within the area
- The rights of way network is comprehensive with cycleways, and footpaths connecting to the wider countryside. The quality of the network has been assessed in considerable detail and work continues in improving the network. However we have identified Green Corridors (River corridors, cycleways) and Green Links (footpaths, rights of way) and suggest that a hierarchy of physical and local biodiversity corridors could be developed on the basis of 'local', 'district' and 'Island-wide'. This requires further analysis of the rights of way network and discussions with the Rights of Way Team. This would allow a means of prioritising the most important routes based on usage, quality and value. The Rights of Way Improvement Plan would be a key source of such information. Improved physical links to America Woods through the rights of way network need to be achieved to allow better access to local natural green space
- Concerns have been raised in relation to health and well being and IMD levels, with the Bay indicating higher than average rates in comparison to national levels. There is a need and therefore opportunities to develop initiatives in green spaces that will directly improve health levels in this area. Quantity and quality of open space is generally very good but opportunities are being missed in relation to improving local peoples health e.g. Green Gym, poor availability of allotments, healthy walks initiatives, low multifunctionality of open spaces, distinct lack of youth facilities e.g. Multi Use Games Areas, as well as partnerships with external stakeholders e.g. PCT, Sports Clubs and Schools
- Development opportunities within the Bay area need to seek to improve accessibility and quality of existing open spaces and green infrastructure based on the network of existing spaces through the development of a Strategic and Local Network as well as the hierarchy of corridors based on local, district and Island wide


Bay
Green Infrastructure
Concept Plan
July 2010
LEGEND
Existing corridors to be retained and promoted
Existing links to be developed
Strategic open space
Notes:
1. Enhance and develop strategic open spaces within Shanklin and Sandown - the Bay Area, improve multi-functionality.
2. Retain and enhance existing corridors, especially the north to south coastal route.
3. Develop new links to outer countryside with links into towns and the coastal route. Seek to create links through town to increase connectivity to coast and countryside sites such as East Downs and America Woods.
Halcrow
ISLE of WIGHT COUNCIL

Medina Valley

Issues

A number of issues have been highlighted in the Medina Valley region. There are 3 distinct areas – Newport, East Cowes and Cowes and all display a degree of differing characteristics.

Quantity and Accessibility

Quantity of open space within the whole area is generally satisfied with good provision across all typologies except allotments. There are however deficiencies in East Cowes, particularly when the ANGSt standard is applied as well as the PPG17 standard. When assessed with other typologies of green space such as parks and gardens, outdoor sports facilities and amenity green space, accessibility standards are much improved. However, access to natural green space in Cowes and East Cowes is a concern.

Typology	Existing Provision Medina Valley growth area (M2) per person	Provision Standard
Parks and Gardens	4.5	6
Local AGS	4.6	5
Green Corridors	8.4	N/A
Natural Green Space	110	N/A
Allotments	1.7	3
Churchyards & Cemeteries	5.4	N/A
Outdoor Sports Facilities	13	16
Children and Young Peoples Facilities	0.36	0.6
Civic Spaces	0.1	N/A
TOTAL	**148**	

Table 9-2: Medina Valley

Multifunctionality

The PPG17 Study also recommended a number of sites that should form part of an Island Wide Strategic network serving the Medina Valley area. Those recommended were:

Strategic Parks

- Litten Park, Newport
- Northwood Park, Cowes

Neighbourhood Parks

- Medina Arboretum
- Jubilee Road Rec, East Cowes
- Arctic Park, Cowes
- Victoria Grove Rec, East Cowes

All Outdoor Sports Facilities and Play and Youth Facilities

There are also a number of countryside sites around Newport, in particular Shide Quarry, Medina Riverside Park and Parkhurst Forest Park which are important natural green spaces within this area.

Most of these sites as previously stated, also display a lack of multifunctionality. In East Cowes and Cowes especially where accessibility issues exist, creating sites which satisfy local needs becomes more important therefore sites need to be multifunctional, with limitations inhibited by the Solent to the north, the Osborne Estate to the east as well as the lack of access to the Medina Estuary. The landscape character of the swathe of land between Cowes and Newport is classed as "Traditional enclosed pastureland" as well as the "Osborne Estate" and a small pocket of "Landscape Improvement Area". There are pressures on the landscape within these landscape character areas, particularly between Newport and Cowes with both town edges needing strengthening and existing developments screened by improving hedgerows or by extensive tree planting.

Sensitivities – The Medina Estuary and Parkhurst Forest SSSI's are very close by and display a number of sensitivities.

Medina Estuary – a 100ha SSSI, displaying an important estuarine habitat with 100% of this area classed as "favourable" in quality. Local Conservation Officers have scored this site as **red**. As part of the Solent Maritime SAC and Solent and Southampton Water SPA/Ramsar, it is an important component of the Solent estuarine system, with internationally important and overwintering migratory populations of wildfowl and wading birds, and important breeding populations of waders, gulls and terns. It also is the home for 5 nationally scarce plants and 2 nationally scarce invertebrates.

Parkhurst Forest – a broadleaved and mixed woodland and 182ha SSSI is currently classed as 100% "unfavourable – recovering" and is very popular with Island residents and visitors. It is a network of wide grassy rides within woodland, rich in heathland plants and insects, and also heathland regeneration after conifer felling. There are some pressures from dog walking which is intense in some areas. Local conservation officers class this area as currently **green**.

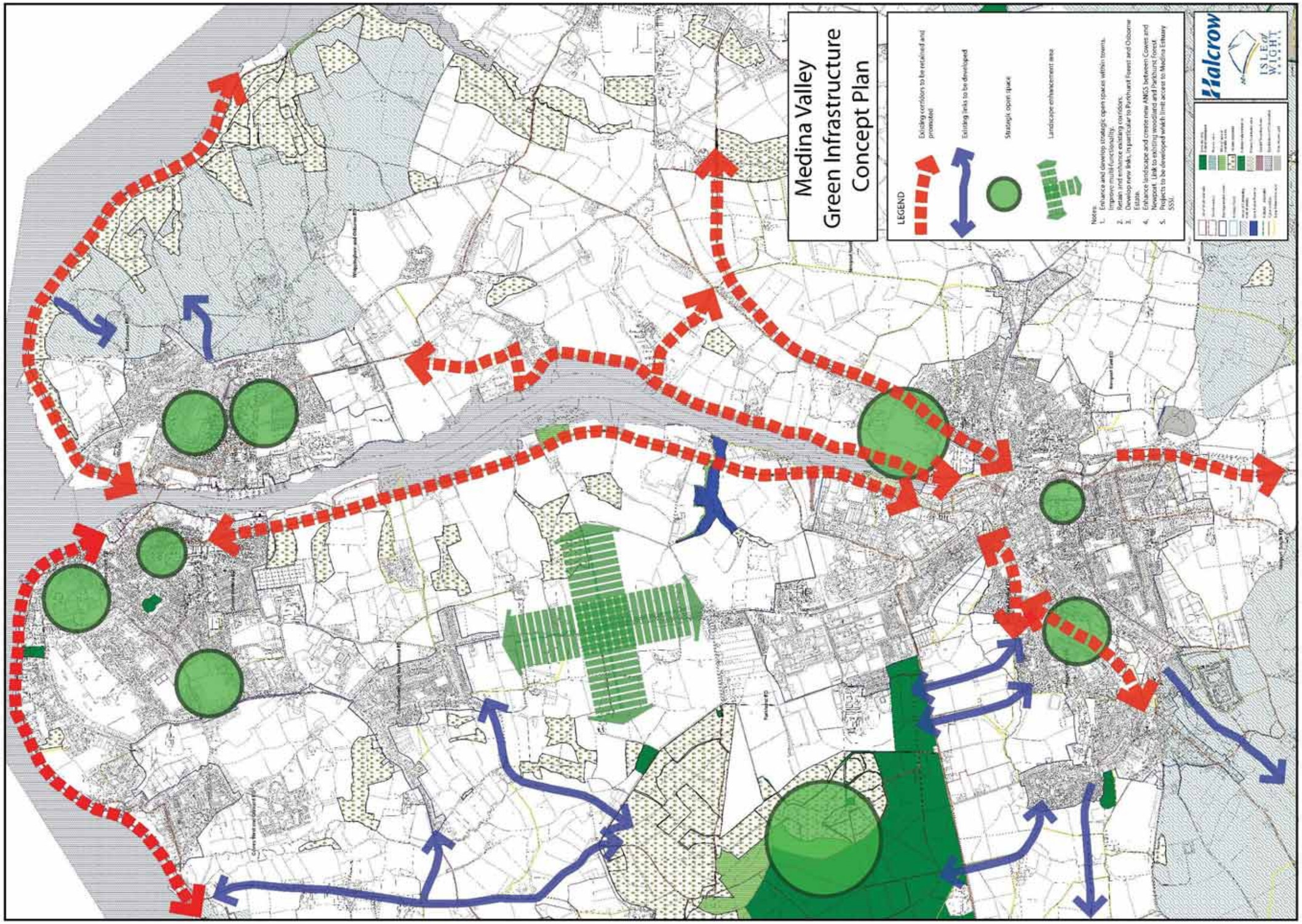
Needs

Despite the overall high provision of open space in the Medina Valley area, there are a number of concerns and needs. We have already highlighted the lack of discernible accessible natural green space in and around Cowes, despite the adjacent shoreline and coastal footpaths. Restricted by the Solent to the North, the Osborne Estate to the East (identified as a LCA but with no informal access) and the Medina estuary itself, there is a real need to looking at increasing ANGS in this area. This is further exacerbated by the limited network of footpaths and rights of way in the area and the Medina Estuary currently inaccessible in most areas and which is also highly sensitive to external pressures. Newport has also been identified as a major area for growth in relation to population through the Local Development Framework. The Pan Urban Extension is already underway which will deliver 846 houses and will integrate with the existing Pan focussing activities around a shared centre where the school and local shops will be enhanced and the recreation ground transformed into a new park and multi-purpose community facility. However, how this will be integrated into the wider green infrastructure network needs to be considered carefully.

Opportunities

A number of opportunities become apparent and we have proposed a conceptual GI 'Plan' (in draft) which is based on the Environmental Characterisation plans for the Medina Valley Area. The 'Plan' is a simplified way of expressing what opportunities are available and these are summarised below:

- A number of Strategic Open Spaces have been identified and the Council needs to continue to maintain these to a high standard, but at the same time develop and enhance these sites, particularly the important Northwood Park. This is especially important in Cowes and East Cowes where there are limited opportunities to create new open spaces to satisfy current deficiencies.
- A number of green corridors exist with the excellent Cowes to Newport Cycleway running the length of the Medina Estuary as well as the Medina Estuary itself. There are also excellent cycleway connections on former railway lines to the south of Newport. Routes include the Stenbury Trail, the Tennyson Trail, and the Shepherds Trail. These corridors are valuable green infrastructure assets utilising disused railway lines. However, they do not link well with the wider network such as Parkhurst Forest Park, the largest natural green space in the area as well as being a SSSI, or the coastal walk and if possible, negotiate links to the Osborne Estate. Opportunities exist to enhance existing rights of way to these corridors or by filling in the missing links. As with the Bay area, the development of a hierarchical approach to local, district and island wide green corridors may help to prioritise the development of such routes
- The Medina Estuary displays some of the most sensitive characteristics of Island habitats and despite overall difficulty in accessing this area, this area is important for bird feeding, roosting and socialising areas and highly sensitive to recreational disturbance. It suffers from development pressures, access and recreational pressures. Accessibility needs controlling by restrictions to many areas as well as creating and managing limited points of access along the corridor. Further opportunities need to be considered elsewhere that alleviate pressures on this area
- The landscape between Cowes and Newport is a mixture of agricultural (mainly less than 20% BMV land assessment) and suffers from patchy residential development, ribbon development and a number of woodland copses. There is potential and opportunities for creating additional natural green spaces by increasing the number of woodland planting opportunities by increasing the size of many of these through environmental stewardship schemes. Increasing the accessibility to these as well as links to Parkhurst Forest Park would serve to mitigate some of the existing ANGS deficiencies which currently exist. The road corridor between Newport and Cowes is currently developed and gives the impression of one continuous residential area and requires substantial improvement and enhancement as a 'gateway' to the Island and its capital. Its integration into the wider landscape would be seen as beneficial and could be improved as part of increasing the accessibility to natural green space
- There are also a number of open spaces that are currently displaying a prime use or typology where multifunctionality is limited or non existent. School playing fields, outdoor sports facilities, local amenity green space and neighbourhood parks should be improved by enhancing local biodiversity and giving "nature on the doorstep". There are limited if any opportunities to create new green space within the built up areas. Therefore increasing opportunities within existing green spaces by increasing and developing multifunctionality is seen as desirable
- Concerns have been raised in relation to health and well being and IMD levels, with the Medina Valley, especially in Newport North and Fairlee, indicating higher than average rates in comparison to national levels. There is a need and therefore opportunities to develop initiatives in green spaces that will directly improve health levels in this area. Quantity and quality of open space is generally very good but opportunities are being missed in relation to improving local peoples health eg Green Gym, poor availability of allotments, healthy walks initiatives, low multifunctionality of open spaces, distinct lack of youth facilities e.g. Multi Use Games Areas, as well as partnerships with external stakeholders e.g. PCT, Sports Clubs, Forestry Commission and Schools
- The development of the Pan Urban extension offers a number of opportunities to the SE of Newport in improving access to the GI network and creating new sustainable open spaces as well as enhancing existing green space


Medina Valley
Green Infrastructure
Concept Plan
LEGEND
Existing corridors to be retained and promoted
Existing links to be developed
Strategic open space
Landscape enhancement area
Notes:
1. Enhance and develop strategic open spaces within towns. Improve multi-functionality.
2. Retain and enhance existing corridors.
3. Develop new links, in particular to Parkhurst Forest and Osborne Estate.
4. Enhance landscape and create new AONBS between Cowes and Newport. Link to existing woodland and Parkhurst Forest.
5. Projects to be developed which limit access to Medina Estuary SSSI.
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Ryde

Issues

A number of issues exist in the Ryde area, in particular the deficiencies in quantity of provision of parks and gardens and natural green space, which are well below the proposed quantity standards. However, a number of small sites do satisfy accessibility distance thresholds within the area. Links to the wider countryside are also relatively limited within the Ryde area. The area is however well catered for in relation to outdoor sports facilities and playing fields displaying the highest quantity on the Island.

Typology	Existing Provision Ryde growth area (M2) per person	Provision Standard
Parks and Gardens	1.03	6
Local AGS	7.8	5
Green Corridors	0.95	N/A
Natural Green Space	5.43	N/A
Allotments	2.5	3
Churchyards & Cemeteries	2.3	N/A
Outdoor Sports Facilities	18	16
Children and Young Peoples Facilities	1.3	0.6
Civic Spaces	0	N/A
TOTAL	**40**	

Table 9-3: Ryde

Multifunctionality

The PPG17 Study recommended a number of sites that should form part of an Island Wide Strategic network serving the Ryde area. Those recommended were:

Strategic Parks

- Appley Park, Ryde

Neighbourhood Parks

- HMS Royal George Gardens, Ryde
- Vernon Square, Ryde
- Waterside Pool, Ryde
- Simeon Road Rec, Ryde
- Adelaide Place Gardens, Ryde
- Oakfield Rec, Ryde

All Outdoor Sports Facilities and Play and Youth Facilities

There are a number of countryside sites around Ryde, in particular to the south and south west of the area with some of the largest areas of woodland on the Island.

As with the majority of sites across the Island, despite high quality, there are a number of deficiencies in parks and gardens and natural green space. Improving the multifunctionality of existing spaces such as Outdoor Sports Facilities would satisfy and rectify these deficiencies. Pressures therefore exist on a number of sensitive sites and in particular Ryde Sands and Wootton Creek which is a SSSI.

Sensitivities - Ryde Sands and Wootton Creek SSSI, as well as Briddlesford Copses SSSI are both important natural green spaces within the Ryde area.

Ryde Sands and Wootton Creek SSSI - a 420ha natural green space and part of the Solent and Southampton Water SPA/Ramsar. Intertidal sand and mud and other varied shoreline habitats. It is made up primarily of littoral sediment, grassland and some broadleaved woodland. Affected by coastal defences and pressure from hovercraft and other development, 72% condition is "favourable", with 21.5% "unfavourable – recovering" and 6.5% "unfavourable – declining". It is also a vital feeding and roosting ground for internationally important and over-wintering waterfowl populations. Local Conservation officers have graded this area as **red**.

Briddlesford Copses SSSI – 167.45ha mainly broadleaved mixed woodland, with 80.5% "favourable", 13.5% "unfavourable – recovering" and 6% "unfavourable – declining". Also a SAC, varied and structurally diverse and spevcies rich ancient broadleaved, rides and railway verges supporting species rich neutral to acidic grassland. Transition from woodland through freshwater marsh to saltmarsh. Scarce local flora and fauna. Local Conservation Officers have graded as **green**.

Needs

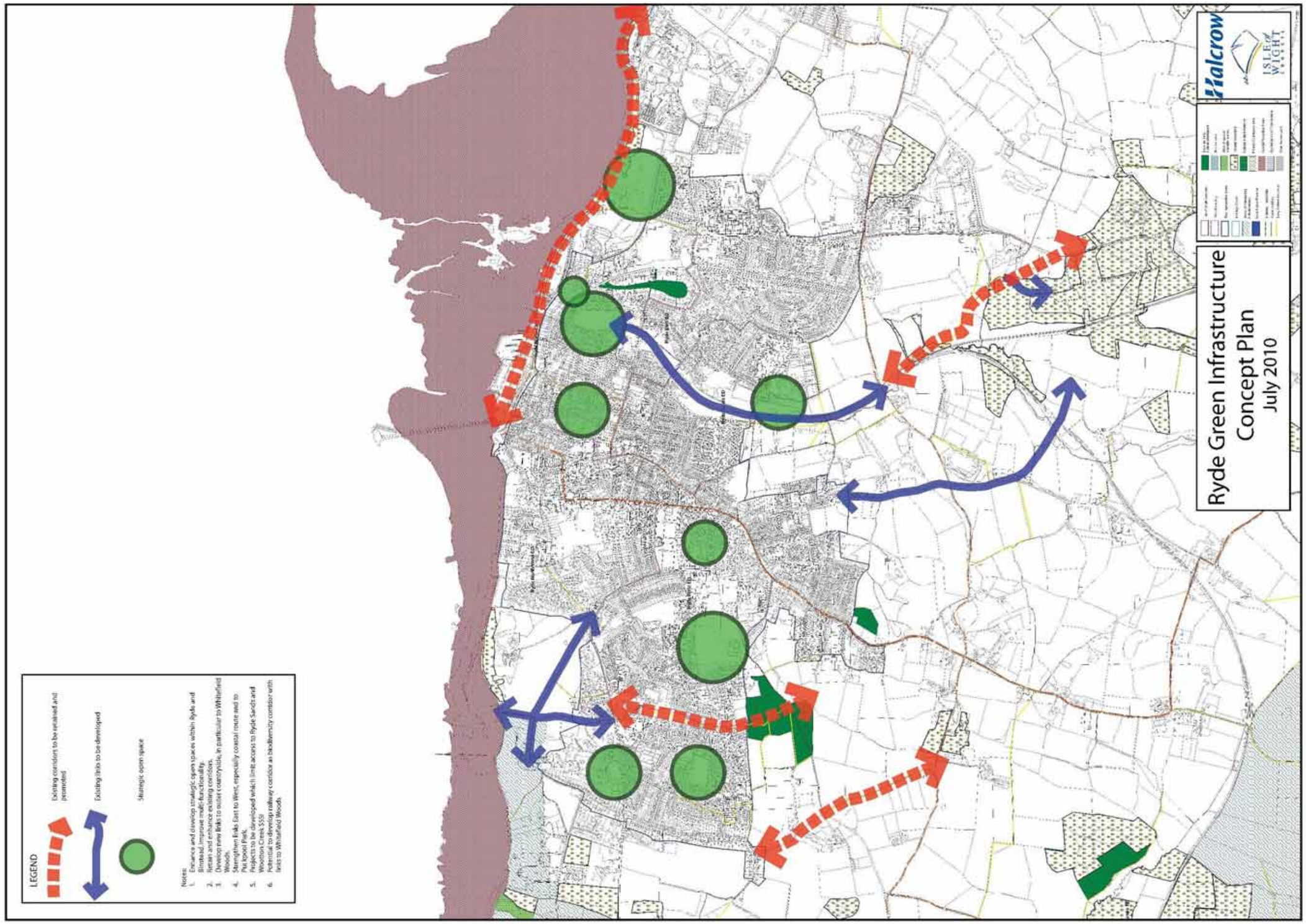
Access to natural green space as well as provision of more formal parks and gardens are all needs and requirements as well as improving access to the wider countryside and some of the more significant countryside sites. Again, there is little likelihood of creating new open spaces within the area itself but potential to increase accessibility and increasing multifunctionality of existing green spaces. There is also a need to mitigate some of the pressure on Ryde Sands and Wootton Creek.

Opportunities

A number of opportunities become apparent and we have proposed a GI concept 'Plan' (in draft) which is based on the Environmental Characterisation plans for the Ryde Area. The 'Plan' is a simplified way of expressing what opportunities are available and these are summarised below:

- A number of Strategic Open Spaces have been identified and the Council needs to continue to maintain these to a high standard, but at the same time develop and enhance these sites. This is especially important in Ryde where there are limited opportunities to create new open spaces to satisfy current deficiencies
- There are a few opportunities to develop green corridors and green links within the town and to the outer countryside. The coastal route to Seaview towards Puckpool Park is important and well used connecting open spaces along this route and should be developed further with a view to discourage increased use of Ryde Sands. A green corridor to the west of Ryde is an important green link and has the potential to be developed further linking in with the sea front. A route exists from Oakfield to the south and follows the railway line inland. However, it is considered worthwhile investigating extending this link through the town to connect with the sea front. The logistics of this however may not be feasible due to limitations and restrictions of the existing railway line. The benefits however would be substantial. Opportunities also exist in increasing access to the outer countryside, in particular Whitefield Woods. The NE woodlands centred on Whitefield Woods could be extended beyond to include former meadows and ancient woodlands around. They would be ideal for meadow recreation, public access and woodland management – linked with saw mills/wood craft industry and the steam railway west to Havenstreet

- There are also a number of open spaces that are currently displaying a prime use or typology where multifunctionality is limited or non existent. School playing fields, outdoor sports facilities, local amenity green space and neighbourhood parks should be improved by enhancing local biodiversity and giving "nature on the doorstep". There are limited if any opportunities to create new green space within the built up area of Ryde Therefore increasing opportunities within existing green spaces by increasing and developing multifunctionality is seen as desirable
- The rights of way network appears to be less comprehensive in the Ryde area therefore limiting any opportunities to widen the network. Priorities should therefore be to continue to look at improving the network, creating the missing links as well as seeking opportunities to increase the network locally
- Large areas of Ryde also demonstrate some of the most deprived areas across the Island based on current health statistics and the IMD. As with other areas on the Island, quality of open space is generally very good and accessibility, when all main typologies are combined, shows good access to some kind of open space for most people. However, obesity levels continue to be high. As previously suggested, health initiatives need to be developed that encourage wider usage of the green infrastructure network by wider promotion of its availability and by increasing multifunctionality, accessibility through improved links and partnership working with a wider range of stakeholders.


Ryde Green Infrastructure
Concept Plan
July 2010
LEGEND
Existing corridors to be retained and promoted
Existing links to be developed
Strategic open space
Notes:
1. Enhance and develop strategic open spaces within Ryde and Binstead. Improve multi-functionality, retain and enhance existing corridors.
2. Develop new links to outer countryside, in particular to Whitefield Woods.
3. Strengthen links East to West, especially coastal route and to Puckpool Park.
4. Projects to be developed which limit access to Ryde Sands and Wootton Creek SSSI
5. Potential to develop railway corridor as biodiversity corridor with links to Whitefield Woods

Island-Wide Green Infrastructure

The importance of the 3 key regeneration areas has been discussed and the importance of green infrastructure planning in the overall planning process. However in considering these areas, we need to look at how green infrastructure functions can be delivered across the Island as a whole and how these regeneration areas sit within the whole framework. This can be thought of as GI Architecture and should be presented as a combination of areas which are criss-crossed by a network of corridors, stepping stones and sites, identified according to their place in the ANGSt hierarchy.

Significantly the quantity and distribution of green infrastructure and different types of green infrastructure is driven by various factors and operates at a range of scales. Scale is an important consideration when attempting to understand the existing green infrastructure network and planning the way forward as part of a GI Strategy. For the purpose of this study, we consider the following should make up the GI Architecture for the Island – Key Regeneration Areas, Corridors, Stepping Stones and Sites.

We have discussed the importance of the key regeneration areas and the issues, needs and opportunities. However for the rest of the Island we need to also consider similarly.

Corridors, Stepping Stones and Sites

Issues

Corridors are multifunctional linear features which contribute to the delivery of a number of themes. As we know, they are an established component of green infrastructure. In terms of biodiversity, corridors represent continuity of habitat and act as conduits for the movement for plants and animals; in relation to recreation they are used as local and long distance routes; and for flood alleviation, river corridors can provide the ability to retain heavy flows of water during storm and flash floods. However, many elements of our local biodiversity do not require a continuum of habitat in order to survive, but can move between habitat patches, or "stepping stones". The important aspect of stepping stones is their proximity to each other – for instance a cluster of ponds is better than one pond. The Town and Country Planning Association (TCPA) state:

"Connectivity may not always mean a direct physical connection between sites, although a physically joined-up network should dominate. Simple proximity can be enough to functionally integrate an individual green space into a wider network. For example, some species can move between unconnected sites if the distances involved are not great. Private gardens can also be useful 'stepping stones' or informal wildlife corridors between sites. Separate but closely co-located green spaces can still operate collectively in mitigating the effects of climate change."

For the purpose of identifying GI Architecture, amongst the key regeneration areas and along the corridors it is important to identify key sites which represent sub-regionally significant components of the wider network. These have been identified as ANGSt sites which are equal to or above 20ha in size. At the same time smaller sites are just as significant as these have been identified within the PPG17 study and recommended a creation of a Strategic and Local Network based on parks, gardens, countryside sites, green corridors and outdoor sports facilities.

The study highlighted in particular a number of important countryside sites that could be central to the GI network. These are:

- The Duver
- Hersey Nature Reserve
- Shide Quarry
- Parkhurst Forest Park
- Medina Riverside Park
- Combley Great Wood
- St. Catherine's Down
- Newtown NNR
- Brighstone Forest
- Mottistone Common
- Grammars Common
- Tennyson Down
- Needles and West High Down
- Headon Warren
- Fort Victoria Country Park
- Golden Hill Fort Country Park
- Yar Estuary
- St. Boniface Down
- Luccombe Chine
- Bleak Down
- Arreton Down
- St. George's Down
- Chillerton Down
- Pyle Shute
- Southdown
- Blackwater Hollow

These need to be investigated further in line with the Local Biodiversity Opportunity Areas, as well as the Strategic and Local Network sites identified within the PPG17 Study and also taking into account sites of high sensitivity.

The TCPA have produced guidance in relation to Eco-town standards and requirements in relation to Green Infrastructure. The Isle of Wight continually strives to be an exemplar in relation to environmental matters through becoming an EcoIsland. Many of the principals of Eco-Towns and GI are relevant to creating a GI network for the Island, enabling it in their endeavours to be an EcoIsland. There are 10 Principles which need to be considered in relation to GI and Eco-towns and these principles should be considered in the development of a GI Strategy. These are:

1. Green infrastructure should be a primary consideration in planning, developing and maintaining an eco-town

2. Green infrastructure should be provided as a varied, widely distributed, strategically planned and interconnected network

3. Green infrastructure should be factored into land values and decisions on housing densities and urban structure. This should ideally be done before land or development options are agreed, and certainly before masterplanning begins

4. Green infrastructure should be accessible to local people and provide alternative means of transport

5. Green infrastructure should be designed to reflect and enhance the area's locally distinctive character, including local landscapes and habitats. It should also support specific local priorities and strategies for environmental management – for example energy efficiency, food production and sustainable urban drainage

6. Green infrastructure should be supported by a GI strategy

7. Green infrastructure should be multi-functional

8. Green infrastructure should be implemented through co-ordinated planning, delivery and management that cuts across local authority departments and boundaries and across different sectors

9. Green infrastructure should be able to achieve physical and functional connectivity between sites at all levels and right across a town, city or sub-region

10. Green infrastructure should be implemented primarily through focused GI strategies and the spatial planning system of Regional Spatial Strategies and Local Development Frameworks (LDFs), and should be formally adopted within these planning policy documents

11. Green infrastructure should be established permanently, with financial support for continued maintenance and adaptation.

Standards have been discussed previously and we have assessed quantities of provision, using PPG17 provision standards, as well as ANGSt and we have highlighted a number of small deficiencies. The range of GI Assets across the Island is considerable and we are aware of the issues on more sensitive sites in relation to quality.

However, eco-towns, as exemplar settlements, must not only draw on demonstrated good practice in the design and deployment of green infrastructure elsewhere in the UK (and abroad), but must seek to exceed the standards set by those towns and cities. The amount of GI that an eco-town should provide, along with its character and distribution, ultimately depends on the individual nature of the location and its specific circumstances and needs. As GI is intended to have a wide range of functions, and is a key component in defining an 'eco-town', there must be a sufficiently large area of land and water provided so that these functions can be fulfilled. As a general rule – and including private gardens – 40 per cent of the total land in an eco-town, and the same percentage of any individual development site, should be earmarked for GI. Whether this is achievable in relation to the Isle of Wight in its vision in becoming an EcoIsland is questionable. The towns are dense and compact and restricted by many barriers to creation of further open spaces, and we have not included private gardens in our assessment of GI.

Needs

The GI strategy therefore needs to identify which of these corridors, stepping stones and opportunity sites need to be managed in a way where they can become green infrastructure hubs or opportunity areas that are large and robust enough to be regularly used by different visitors. Deficiencies in spatial assets have been calculated but calculating deficiencies in linkages between existing and future potential assets is more complex. By their very nature, corridors are long narrow strips of land or water courses between fragmented disparate patches. These corridors and features need to be integrated into the whole landscape to be functional. Taking this into consideration, we have proposed an Island wide Green Infrastructure Conceptual Plan that takes into account:

- The 3 key regeneration areas
- Corridors (physical and Biodiversity)
- Areas of sensitivity
- Areas of opportunity

Opportunities

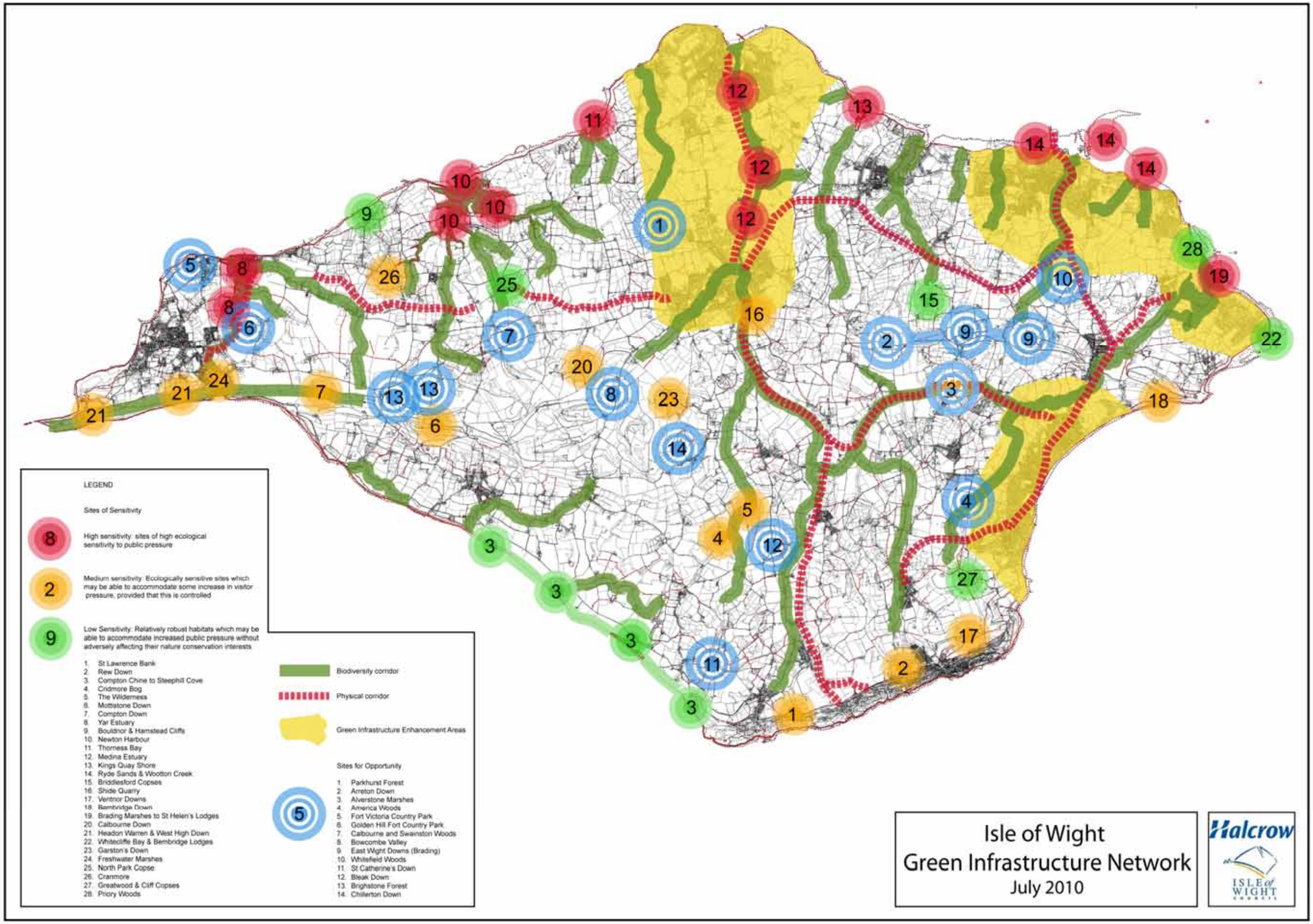
There are many opportunities which present themselves in relation to the Island wide Green Infrastructure as a whole. In particular, the focus should be in creating projects which develop hubs, opportunities, GI linkages and a network which will satisfy Habitat Regulations whilst ensuring accessibility, quality and quantity are all enhanced. Each of these must be considered in relation to the key priorities and how they combine to the overall GI Network. The development of a number of projects that can therefore be prioritised and delivered through the GI Strategy is key to this.

Suitable Alternative Natural Green Space (SANGS)

The Study has identified a small number of deficiencies across the Island, in particular, accessible doorstep natural green space in the towns as well as the area in and around Cowes and East Cowes. A number of opportunity sites have been identified across the Island which are already natural green spaces such as existing woodlands, Downs and Country Parks. However there are also opportunities for creating suitable alternative natural green spaces and these have been alluded to already. For example:-

- Increasing of the multifunctionality of existing green spaces where a single typology exists, e.g. outdoor sports facilities, local amenity green space
- Creating new GI in the area between Cowes/East Cowes and Newport on land that has a lower BMV Land assessment value
- Enhancing existing physical corridors e.g. cycleways, transportation routes, former railway lines and increasing their biodiversity value

The Strategy needs to investigate further potential sites and opportunities in areas of greatest need.


LEGEND
Sites of Sensitivity
High sensitivity: sites of high ecological sensitivity to public pressure
Medium sensitivity: Ecologically sensitive sites which may be able to accommodate some increase in visitor pressure, provided that this is controlled
Low Sensitivity: Relatively robust habitats which may be able to accommodate increased public pressure without adversely affecting their nature conservation interests
1. St Lawrence Bank
2. Rew Down
3. Compton Chine to Steephill Cove
4. Cridmore Bog
5. The Wilderness
6. Mottistone Down
7. Compton Down
8. Yar Estuary
9. Bouldnor & Hamstead Cliffs
10. Newton Harbour
11. Thorness Bay
12. Medina Estuary
13. Kings Quay Shore
14. Ryde Sands & Wootton Creek
15. Briddlesford Copses
16. Shide Quarry
17. Ventnor Downs
18. Bembridge Down
19. Brading Marshes to St Helen's Lodges
20. Calbourne Down
21. Headon Warren & West High Down
22. Whitecliffe Bay & Bembridge Lodges
23. Garston's Down
24. Freshwater Marshes
25. North Park Copse
26. Cranmore
27. Greatwood & Cliff Copses
28. Priory Woods
Biodiversity corridor
Physical corridor
Green Infrastructure Enhancement Areas
Sites for Opportunity
1. Parkhurst Forest
2. Arreton Down
3. Alverstone Marshes
4. America Woods
5. Fort Victoria Country Park
6. Golden Hill Fort Country Park
7. Calbourne and Swainston Woods
8. Bowcombe Valley
9. East Wight Downs (Brading)
10. Whitefield Woods
11. St Catherine's Down
12. Bleak Down
13. Brighstone Forest
14. Chillerton Down
Isle of Wight
Green Infrastructure Network
July 2010
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10. The Next Step

This study has mapped out current GI across the Isle of Wight, considering all aspects of GI assets, connectivity, designations, regeneration areas, as well as social issues which currently affect the Islands population. We suggested that the current network is high quality based on the PPG17 Local needs assessment and that there could be issues in relation to connectivity and insufficient infrastructure. Having considered the information available, the emphasis should be on 'developing networks' and to 'conserve green infrastructure', see adjacent figure.

The development of a Green Infrastructure Strategy should set out how green infrastructure in the Isle of Wight can be made to function as effectively as possible to deliver a wide range of ecosystem services in the form of a carefully structured robust network of interconnected and multi functional green spaces. The Green Infrastructure Strategy for the Island should:

- Set up a framework for strategic initiatives in the Isle of Wight to provide a high quality of life for the people who live, work and visit the Isle of Wight
- Seek to maximise multifunctional use of open space and natural green spaces for a range of benefits including biodiversity, climate change, economic investment and activity, health, landscape, recreation and well-being
- Aim to promote connectivity of all types of green space at local, district and Island-wide scales, particularly in relation to the key regeneration areas
- Provide a key mechanism of the Islands proposals for mitigation in relation to the Habitats Regulations

With this in mind, the Strategy should provide:

- The rationale for the Isle of Wight to continue to invest in green infrastructure planning and management, working with a range of partners and stakeholders across the Island
- A review of the evidence collected as part of this GI Study
- GI Themes and Objectives
- Projects to be delivered
- Implementation – governance and policy

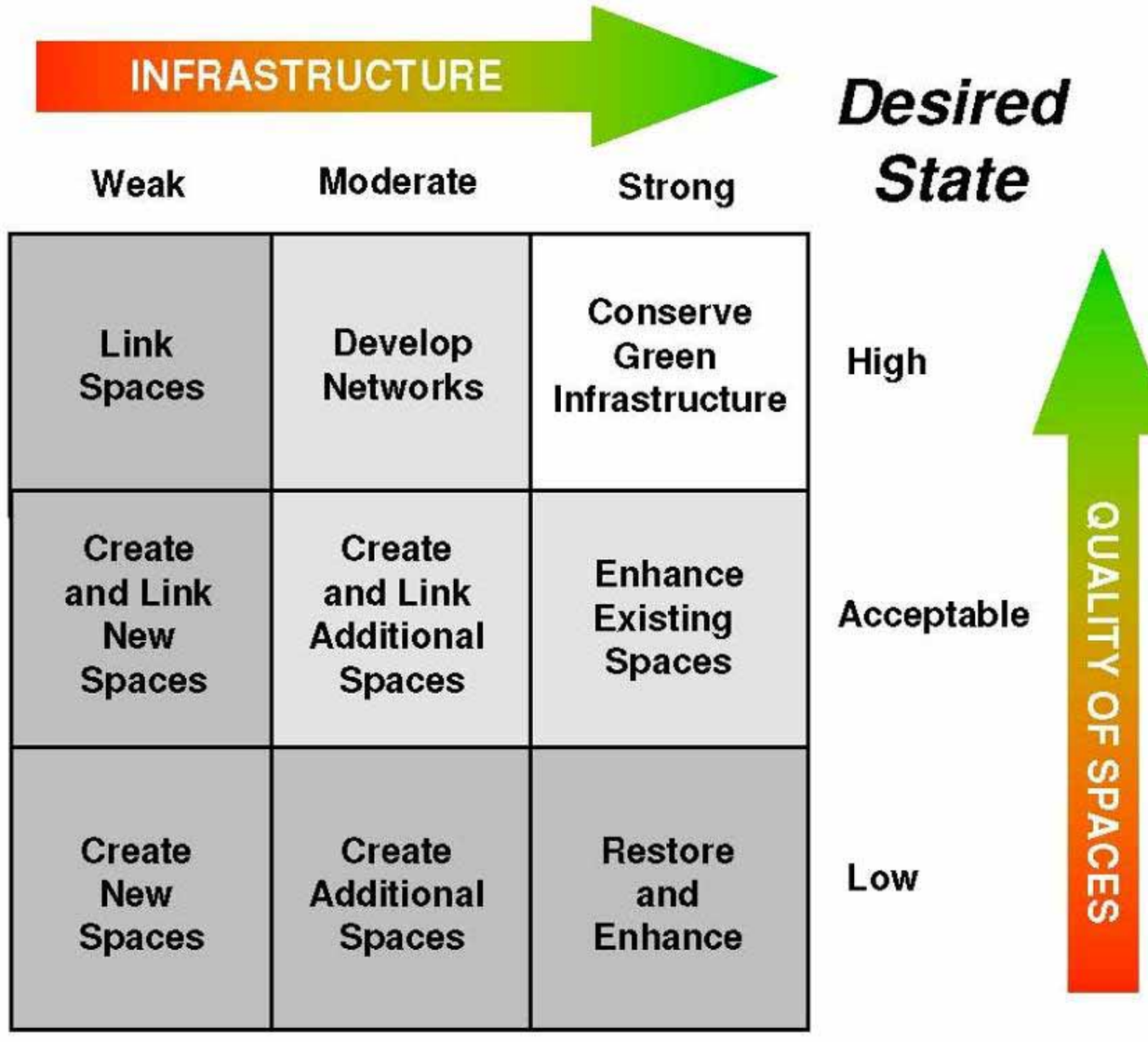

Figure 10-1: GI Matrix

Appendix A - Qualitative Assessment of Designated Sites Methodology

This document sets out the approach that has been taken for the qualitative assessment of sites which have not been assessed as part of the PPG17 Open Space Audit. This methodology was agreed at the Green Infrastructure Project Steering Group meeting of 15th July 2010.

We have included all designated sites on the Island from locally designated sites up to European designated sites– some overlap and are both LNR and SSSI status.

We looked at each site, taking into consideration the status/level of designation (e.g. international, national, regional or local designation), and the predominant habitat of the site.

We then considered a quality score based on a 'traffic light system'. The traffic light system is categorised as follow:

Red – **High sensitivity -** Sites of high ecological sensitivity to public pressure. In order to conserve and enhance the nature conservation interests of these sites, increased public access needs to be managed with great care and will, in some instances, be inappropriate.

Amber – **Medium sensitivity -** Ecologically sensitive sites which may be able to accommodate some increase in visitor pressure provided that this is in a controlled measure.

Green – **Low sensitivity -** Theses are relatively robust habitats which may be able to accommodate increased public pressure without adversely affecting their nature conservation interests. (*NB This score is also attributed to the remainder of the GI resource as a separate scoring to the PPG17 Audit scores on Quality and Value*).

The resilience of habitats to public pressure is generally well understood and so habitats have been assigned sensitivity scores as follows:

- Woodlands - **Low sensitivity**
- Maritime cliffs – **Low sensitivity**
- Arable land (plants) – **Low sensitivity**
- Grassland sites (downland, meadows, heathland) – **Medium sensitivity**
- Wetland habitats – **Medium sensitivity**
- Intertidal rocky shores – **Medium sensitivity**
- Estuaries and all associated habitats – **High sensitivity**
- High tide roosts – **High sensitivity**

The principal habitats present within a designated site have been used to assign a sensitivity score to the site. This approach has been used for both SSSIs and SINCs, in order to capture the full extent of the habitat types. Where sites incorporate more than one habitat type, the scoring allocated to that site reflects the significant presence of the most sensitive habitat. International designated sites (SAC, SPA, and Ramsar) have been assigned scores relating to the sensitivity of the habitats or species they support.

Assessment of European sites:

The following approach has been taken to assessing the sensitivity of European sites to public pressure:

Solent & Southampton Waters SAC

The site comprises estuaries and associated habitats and intertidal habitats which are all considered sensitive to public pressure and through designation, receive a high level of protection. Collectively, the whole of the site has been flagged as **high sensitivity**. There may be localised opportunities to develop and enhance public enjoyment of these areas but these decisions will need to be considered carefully in the light of detailed information to ensure that they do not compromise the integrity of the designated site.

Solent & Southampton SPA

The site comprises estuaries and associated habitats and intertidal habitats which are designated for the passage and overwintering waterfowl which they support. These bird populations are sensitive to public pressure and collectively, the whole of the site has been flagged as **high sensitivity**. There may be localised opportunities to develop and enhance public enjoyment of these areas but these decisions will need to be considered carefully in the light of detailed information to ensure that they do not compromise the integrity of the designated site.

Solent & Isle of Wight lagoons SAC

Brackish lagoons are considered to be highly sensitive to public pressure; consequently the whole of this site has been flagged as **high sensitivity**.

Solent & Southampton Waters Ramsar site

The features of the Ramsar site are reflected within the SAC and SPA designation above. Consequently, the whole of this site has been flagged as **high sensitivity**.

Briddlesford Copses SAC

This site has been designated for its important population of Bechstein's bats. These are tree-dwelling, woodland bats and woodland as a habitat has been flagged as **low sensitivity** to disturbance and capable of accommodating public pressure. Since the site has been designated, Bechstein's bat has been shown to be widespread as a breeding species in ancient woodlands on the Island. There is no evidence to suggest that visitor pressure compromises Bechstein's bat populations. Consequently, the site has been flagged as **low sensitivity** to public pressure.

Isle of Wight Downs SAC

The site has been designated for its early gentian populations, chalk grasslands and vegetated sea cliffs. These are all considered to be sensitive to public pressure. However, the Isle of Wight downs are already subject to considerable public pressure along the rights of way network which avoids the sensitive areas and has not to date resulted in adverse impacts upon the features of interest. Consequently, the whole of this site has been flagged as **medium sensitivity**.

South Wight Maritime SAC

The site has been designated for its vegetated sea cliffs and reefs. Vegetated sea cliffs are generally inaccessible but have a well developed coastal footpath network along the top of the cliffs. This does not generally compromise the interest features of the SAC. There are no identified cliff top vegetation communities at viewpoints which are susceptible to excessive trampling. The vegetated sea cliffs have been flagged as **low sensitivity**.

The intertidal rocky shores are well used by the public and very resilient to trampling. However, activities associated with over-use have the potential to compromise their interest features. Consequently, the intertidal component of this SAC has been flagged as **medium sensitivity**.

Assessment of Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs):

Name	Designation	Size	NE Quality Score	Principal Habitats	Red/ Amber /Green
St Lawrence Bank	SSSI	0.14ha	F	Grassland	Amber
Rew Down	SSSI	23.65ha	UR	Grassland	Amber
Compton Chine to Steephill Cove	SSSI	628ha	UR	Maritime cliffs	Green
The Wilderness	SSSI	12.37ha	UD/UR	Wetlands	Amber
Cridmore Bog	SSSI	15.05ha	R/UD	Wetlands	Amber
Mottistone Down	SSSI	32.82ha	UR	Grassland	Amber
Compton Down	SSSI	199.44ha	F/UR	Grassland	Amber
Garstons Down	SSSI	21.29ha	UR	Grassland	Amber
Freshwater Marshes	SSSI	23.24ha	UR	Wetlands	Amber
Yar Estuary	SSSI	132.04ha	F	Estuaries	Red
North Park Copse	SSSI	9.97ha	F	Woodlands	Green
Bouldnor and Hamstead Cliffs	SSSI	97.39ha	F	Maritime cliffs	Green
Cranmore	SSSI	12.42ha	F/UR	Grassland	Amber
Newtown Harbour	SSSI	615.8ha	F	Estuaries	Red
Parkhurst Forest	SSSI	182.56ha	UR	Woodlands	Green
Thorness Bay	SSSI	86.35ha	F	Estuaries	Red
Medina Estuary	SSSI	100.75ha	F	Estuaries	Red
Kings Quay Shore	SSSI	90.55ha	F/UR	Estuaries	Red
Ryde Sands and Wootton Creek	SSSI	419.9ha	F/UR/UD	Estuaries	Red
Briddlesford Copses	SSSI	167.45ha	F/UR	Woodlands	Green
Shide Quarry	SSSI	5.02ha	F	Grassland	Amber
Arreton Down	SSSI	28.88ha	UR	Grassland	Amber
Alverstone Marshes	SSSI	37.05ha	UR/UNC	Wetlands	Amber
America Wood	SSSI	21.42ha	F/UR/UD	Woodlands	Green

Name	Designation	Size	NE Quality Score	Principal Habitats	Red/ Amber /Green
Ventnor Downs	SSSI	161.73ha	UR	Grassland	Amber
Greatwood & Cliff Copses	SSSI	15.89ha	F/UR	Woodlands	Green
Lake allotments	SSSI	0.25ha	F	Arable	Green
Bembridge Down	SSSI	57.51ha	F	Grassland	Amber
Bembridge School & Cliffs	SSSI	11.64ha	F	Maritime cliffs	Green
Brading Marshes to St Helens Ledges	SSSI	488.56ha	F/UR/UD	Estuaries	Red
Priory Woods	SSSI	3.02ha	F	Woodlands	Green
Rowridge Valley	SSSI	39.11ha	UR/UD	Woodlands	Green
Locks Farm Meadow	SSSI	2.06ha	F	Grassland	Amber
Rew Down	LNR	11.61ha		Grasslands	Amber
Sibden Hill and Batts Copse	LNR	5.81ha		Woodland (some amenity grassland)	Green
Alverstone Mead	LNR	15.18ha		Wetlands	Amber
Shide Chalk Pit	LNR	5.02ha		Grassland	Amber
Dodnor Creek	LNR	9.52ha		Estuaries	Red
Afton Marshes	LNR	14.75ha		Wetlands	Amber
Newtown Harbour	NNR	615.8ha		Estuaries	Red
Calbourne Down	SSSI	15.06ha	UR	Grassland	Amber
Headon Warren and West High Down	SSSI	269.42	F	Grasslands	Amber
Laceys Farm Quarry	SSSI			Grassland	Amber
Colwell Bay	SSSI	14.08	F/UD	Maritime cliffs	Green
Eaglehead and Bloodstone Copses	SSSI	10.04ha	F/UR	Woodlands	Green
Bonchurch landslips	SSSI	26.52ha	UR/F	Maritime cliffs	Green
Whitecliff bay and Bembridge Ledges	SSSI	132.02ha	F	Maritime cliffs	Green

Assessment of the Sites of Importance for Nature Conservation (SINCs):

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C001	Fort Victoria	C001A	Fort Victoria	Woodland	Maritime cliffs	Green
C001	Fort Victoria	C001B	Cliff End	Maritime cliffs		Green
C002	Cracknells	C002A		Unimp grassland		Amber
C003	Saltern Wood	C003A		Woodland		Green
C004	Mill Copse	C004A		Woodland		Green
C005	Clavell's Copse	C005A		Woodland		Green
C006	Wilmingham Plantation	C006A	Wilmingham Plantation	Woodland		Green
C006	Wilmingham Plantation	C006B	Black Firs	Woodland		Green
C007	Horseground Copse	C007A		Woodland		Green
C008	Thorley Meadows	C008A		High tide roost		Red
C009	Tapnell Furze	C009A		Woodland		Green
C010	Compton Farm Field	C010A		Unimp grassland		Amber
C011	Hummet Copse	C011A		Woodland		Green
C012	Lee Copse	C012A		Woodland		Green
C013	Bouldnor Copse	C013A		Woodland	Unimp grassland	Green
C014	Gurnard Cliff West	C014A		Maritime cliffs		Green
C015	Mount Farm Wood	C015A		Woodland		Green
C016	Ningwood Common	C016A	Main	Woodland	Heathland	Amber
C016	Ningwood Common	C016B		Unimp grassland		Amber
C017	Atkies Copse	C017A		Woodland		Green
C018	Shalcombe Down	C018A	East pit	Unimp grassland		Amber
C018	Shalcombe Down	C018B	West pit	Unimp grassland		Amber
C019	Brook House Wood	C019A		Woodland		Green
C020	Cook's Copse	C020A		Woodland		Green

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C021	Nunney's Wood	C021A		Woodland		Green
C022	Upper Hamstead Plantation	C022A		Woodland	Heathland	Green
C023	Shalfleet Farm Wood West	C023A	Shalfleet Farm Wood West	Woodland		Green
C023	Shalfleet Farm Wood West	C023B	Diamond Wood	Woodland		Green
C024	Creek Farm Wood	C024A		Woodland		Green
C025	Woodside Copse	C025A		Woodland		Green
C026	Hart's Farm Meadows	C026A		Unimp grassland		Amber
C027	Shishford Copse	C027A		Woodland		Green
C028	Causeway Lake scrubs	C028A		Estuaries		Red
C029	Fleetlands Copse	C029A		Woodland		Green
C030	Woodwax Copse	C030A		Woodland		Green
C031	Yatland Copse	C031A		Woodland		Green
C032	Flatbrooks Copse	C032A		Woodland		Green
C032	Flatbrooks Copse	C032B	Pound Copse	Woodland		Green
C033	Crainges	C033A		Woodland		Green
C034	Caul Bourne	C034A		Wetland		Amber
C035	Westover Copse	C035A		Woodland		Green
C036	Grammar's Common	C036A		Woodland	Heathland	Amber
C037	Sudmoor Dyke	C037A		Coastal	Wetland	Amber
C037	Sudmoor Dyke	C037B		Coastal	Wetland	Amber
C037	Sudmoor Dyke	C037C		Coastal	Wetland	Amber
C037	Sudmoor Dyke	C037D		Wetland		Amber
C038	Chessell Copse	C038A		Woodland		Green
C039	Chilton Chine	C039A		Woodland		Green
C040	Grange Chine	C040A	Grange Chine	Woodland	Wetland	Amber
C041	Row Down	C041A		Unimp grassland		Amber

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C042	Brighstone Forest	C042A	Brighstone Down	Unimp grassland		Amber
C042	Brighstone Forest	C042B	Gallibury Fields	Unimp grassland		Amber
C042	Brighstone Forest	C042C	Brighstone Forest	Heathland		Amber
C042	Brighstone Forest	C042D	Westover Down	Heathland		Amber
C042	Brighstone Forest	C042E	Mottistone Common	Unimp grassland		Amber
C042	Brighstone Forest	C042F	Pay Down	Unimp grassland		Amber
C042	Brighstone Forest	C042G	Brook Hill	Unimp grassland		Amber
C043	Calbourne Pumping station	C043A		Unimp grassland		Amber
C044	Little Down	C044A		Woodland	Unimp grassland	Amber
C045	Pump Copse	C045A		Woodland		Green
C046	Rushcroft Copse	C046A		Woodland		Green
C047	Guyers Heath	C047A		Woodland		Green
C048	Three Gates West	C048A		Woodland		Green
C049	Cats Copse	C049A		Woodland		Green
C050	Hummet Wood	C050A		Woodland		Green
C051	Locks Farm	C051A	Locks Farm	Unimp grassland		Amber
C051	Locks Farm	C051B	Corfheath Firs	Woodland		Green
C052	Burnt Wood	C052A		Woodland	Heathland	Green
C053	Sticelett Copse	C053A		Woodland		Green
C054	Three Gates East	C054A		Woodland		Green
C055	Long Copse	C055A		Woodland		Green
C056	Harelane Plantation	C056A	Harelane Plantation	Woodland		Green
C056	Harelane Plantation	C056B	Lady Wood	Woodland		Green
C056	Harelane Plantation	C056C	Buckets Copse	Woodland		Green
C057	Round Copse	C057A		Woodland		Green
C058	Bulls Wood	C058A		Woodland		Green

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C059	Apes Down Copse	C059A		Woodland		Green
C060	Rodge Brook Scrubs	C060A		Woodland		Green
C061	Bunts Hill Copse	C061A		Woodland		Green
C062	Thorness Wood	C062A		Woodland	Unimp grassland	Amber
C063	Thorley Copse	C063A		Woodland	Wetland	Amber
C064	Rolls Bridge Copse	C064A		Woodland		Green
C066	Whitehouse Copse	C066A		Woodland		Green
C068	Chalkclose Copse	C068A		Woodland		Green
C070	Parkhurst Forest	C070A	Marks Corner	Woodland		Green
C070	Parkhurst Forest	C070B	Hillis Gate	Woodland		Green
C070	Parkhurst Forest	C070C	Crockers Copse	Woodland		Green
C070	Parkhurst Forest	C070D	Noke Common	Woodland		Green
C070	Parkhurst Forest	C070E		Woodland	Wetland	Green
C071	Alvington Manor Chalk pit	C071A		Woodland		Green
C072	Plaish Meadows	C072A		Wetland		Amber
C073	Bowcombe Wood	C073A		Woodland		Green
C074	Idlecombe Farm Down	C074A		Woodland	Unimp grassland	Amber
C075	High Wood	C075A	High Wood	Woodland		Green
C075	High Wood	C075B	Mudless Copse	Woodland		Green
C076	Top Barn Copse	C076A		Woodland		Green
C077	Idlecombe Down	C077A		Woodland	Unimp grassland	Amber
C078	Plaish Copse	C078A		Woodland		Green
C079	Barcham's Copse	C079A		Woodland		Green
C080	Dukem's Copse	C080A		Woodland		Green
C081	Westridge Copse	C081A		Woodland		Green
C082	Lorden Copse	C082A		Woodland		Green

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C083	Limerstone Down	C083A	Fore Down	Unimp grassland		Amber
C083	Limerstone Down	C083B	Limerstone Down	Unimp grassland		Amber
C084	Newbarn Down Gatcombe	C084A	Northcourt Down	Unimp grassland		Amber
C084	Newbarn Down Gatcombe	C084B	Tolt Copse	Woodland		Green
C084	Newbarn Down Gatcombe	C084C	Newbarn Down	Woodland	Unimp grassland	Amber
C084	Newbarn Down Gatcombe	C084D	Chillerton Down	Unimp grassland		Amber
C084	Newbarn Down Gatcombe	C084E	Long Copse, Gatcmbe	Woodland	Unimp grassland	Amber
C085	Wolverton Marsh	C085A		Woodland	Wetland	Amber
C086	Heath Hill	C086A		Heathland		Amber
C087	Dungewood Withybed	C087A		Woodland		Green
C088	Sheard's Copse	C088A		Woodland		Green
C088	Sheard's Copse	C088B		Woodland		Green
C089	Kingston Copse	C089A		Woodland		Green
C090	Sheard's Scarp	C090A		Heathland		Amber
C091	Berry Copse	C091A		Woodland	Unimp grassland	Amber
C092	Billingham Manor Wood	C092A		Woodland		Green
C093	Gotten Copse	C093A		Woodland		Green
C094	St Catherine's Down	C094A		Heathland		Amber
C095	St Catherine's Hill	C095A	Gore Down	Coastal		Amber
C095	St Catherine's Hill	C095B	St Catherine's Hill	Unimp grassland		Amber
C096	Wydcombe Estate	C096A		Woodland		Green
C097	Upper Dolcoppice	C097A		Woodland	Unimp grassland	Amber
C098	High Hat Reservoir	C098A		Unimp grassland		Amber
C099	The Undercliff	C099A	Niton Inner Cliff	Coastal		Green
C099	The Undercliff	C099B	Old Park	Coastal		Green
C099	The Undercliff	C099C	Ventnor West to Steephill Cove	Coastal		Green

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C099	The Undercliff	C099D	Steephill Inner Cliff	Coastal		Green
C099	The Undercliff	C099E	Castle Cove	Coastal		Green
C099	The Undercliff	C099F	Ventnor Shore	Coastal		Green
C099	The Undercliff	C099G	Steephill Cove	Coastal		Green
C099	The Undercliff	C099H	Reeth Bay	Coastal		Green
C099	The Undercliff	C099J	Binnel Bay	Coastal		Green
C099	The Undercliff	C099K	St Lawrence Undercliff Woods	Coastal		Green
C099	The Undercliff	C099L	Orchard Bay to Steephill Cove	Coastal		Green
C099	The Undercliff	C099M	Mirables and Old Park	Coastal		Green
C099	The Undercliff	C099N	Woody Bay	Coastal		Green
C099	The Undercliff	C099P	St Lawrence Inner Cliff	Coastal		Green
C100	Watcombe Bottom	C100A		Unimp grassland		Amber
C101	Rew Copse	C101A		Woodland		Green
C102	Appuldurcombe Down	C102A	Appuldurcombe Down	Unimp grassland		Amber
C102	Appuldurcombe Down	C102B	Godshill Park	Woodland	Wetland	Amber
C102	Appuldurcombe Down	C102C	Beech Copse	Woodland		Green
C103	Sainham Copse	C103A		Woodland		Green
C104	Appuldurcombe Park	C104A		Woodland		Green
C105	Bleak Down	C105A		Heathland	Wetland	Amber
C106	Upper Yar Valley	C106A	Scotland Farm	Woodland	Wetland	Amber
C106	Upper Yar Valley	C106B	Roud	Wetland		Amber
C107	Bleak Down	C107A		Unimp grassland		Amber
C108	Bottom's Copse, Godshill	C108A		Woodland	Wetland	Amber
C109	Head Down	C109A		Heathland		Amber
C110	Ramsdown Copse	C110A		Woodland		Green
C111	Sibdown Farm Copse	C111A		Woodland		Green

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C113	Great Budbridge	C113A	Great Budbridge	Woodland	Wetland	Amber
C113	Great Budbridge	C113B	Kennerley Heath	Wetland		Amber
C113	Great Budbridge	C113C	Munsley Bog	Woodland	Wetland	Amber
C114	Moor Farm	C114A		Wetland		Amber
C115	Redway Farm	C115A		Woodland	Wetland	Amber
C116	Arreton Withybed East	C116A		Woodland		Green
C117	Bunkers Copse	C117A		Woodland		Green
C118	Arreton Withybed West	C118A		Woodland		Green
C119	Gatcombe Withybed	C119A		Woodland	Wetland	Amber
C120	Marvel Copse	C120A		Woodland		Green
C121	River Medina:Shide Blackwater	C121A		Woodland	Wetland	Amber
C122	St George's Down Scarp	C122A		Woodland		Green
C123	St George's Down	C123A		Heathland		Amber
C123	St George's Down	C123B		Heathland		Amber
C124	Standen Copse	C124A		Woodland		Green
C125	Standen Heath	C125A		Woodland	Wetland	Amber
C126	Combley Great Wood	C126A	Little Lynn Common	Woodland	Heathland	Amber
C126	Combley Great Wood	C126B	Combley Great Wood	Woodland		Green
C126	Combley Great Wood	C126C	Combley Great Wood	Woodland		Green
C127	Staplers Heath	C127A	Long Lane Plantation	Woodland		Green
C127	Staplers Heath	C127B	Staplers Copse	Woodland		Green
C127	Staplers Heath	C127C	Staplers Heath	Unimp grassland		Amber
C128	Quarr Old Abbey	C128A				Amber
C129	Woodhouse Copse	C129A	Woodhouse Copse	Woodland		Green
C129	Woodhouse Copse	C129B	Woodhouse Copse	Woodland		Green
C129	Woodhouse Copse	C129C	Brocks Copse	Woodland		Green

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C130	Aldeen's Copse	C130A		Woodland		Green
C131	Wallishill Copse	C131A		Woodland		Green
C132	Osborne Estate	C132A	Osborne Park	Unimp grassland		Amber
C132	Osborne Estate	C132B	Eastern Copse	Woodland		Green
C132	Osborne Estate	C132C	Osborne Golf Course	Woodland	Unimp grassland	Amber
C132	Osborne Estate	C132D	Osborne Woods	Woodland		Green
C133	Puckers Copse	C133A	Elenor's Grove	Woodland		Green
C133	Pucker's Copse	C133B	Pucker's Copse	Woodland		Green
C134	Firestone Copse	C134A		Woodland		Green
C135	Staynes Copse	C135A		Woodland		Green
C136	Kittenocks	C136A		Woodland	Unimp grassland	Amber
C137	Stroud Wood	C137A		Woodland		Green
C138	Ashey Cemetery	C138A		Unimp grassland		Amber
C139	Rowlands Wood	C139A	Rowlands Wood	Woodland		Green
C139	Rowlands Wood	C139B	Kemphill Moor Copse	Woodland		Green
C140	Walkershill Copse	C140A	Walkershill Copse	Woodland		Green
C140	Walkershill Copse	C140B	Hoglease Copse	Woodland		Green
C140	Walkershill Copse	C140C	Ramcroft Copse	Woodland		Green
C140	Walkershill Copse	C140D	Chillingwood Copse	Woodland		Green
C140	Walkershill Copse	C140E	Little Duxmore	Woodland		Green
C140	Walkershill Copse	C140F	Shooting Covert	Woodland		Green
C141	Backet's Plantation	C141A		Woodland		Green
C142	Backet's Copse	C142A		Woodland		Green
C143	Mersley Down North	C143A		Woodland	Unimp grassland	Amber
C144	Mersley Chalk Pit	C144A		Unimp grassland		Amber
C144	Mersley Chalk Pit	C144B		Unimp grassland		Amber

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C145	Fry's Copse	C145A		Woodland		Green
C146	Knighton Down	C146A		Unimp grassland		Amber
C147	Knighton West Wood	C147A		Woodland		Green
C148	Knighton East Wood	C148A		Woodland		Green
C149	Lynch Copse	C149A		Woodland	Wetland	Amber
C150	Ashey Down	C150A	Ashey Chalk Pit	Unimp grassland		Amber
C150	Ashey Down	C150B	Ashey Down	Unimp grassland		Amber
C151	Newchurch Marshes	C151A	Newchurch Marshes north-west	Wetland		Amber
C151	Newchurch Marshes	C151B	Newchurch Marshes north-east	Woodland	Wetland	Amber
C151	Newchurch Marshes	C151C	Newchurch Marshes south-west	Wetland		Amber
C152	Horringford Withybed	C152A		Woodland		Green
C153	Freshwater Bay Cliffs	C153A		Unimp grassland		Amber
C154	Hornhill Copse	C154A		Woodland		Green
C155	Youngwoods Copse	C155A	Brett's Meadow	Woodland	Unimp grassland	Amber
C156	Alverstone Marshes East	C156A	Skinners Hill	Unimp grassland		Amber
C156	Alverstone Marshes East	C156B	Alverstone Marshes East	Woodland	Wetland	Amber
C156	Alverstone Marshes East	C156C	Alverstone Mead	Woodland	Wetland	Amber
C156	Alverstone Marshes East	C156D	Alverstone Lynch	Woodland		Green
C158	Backet's Spinney	C158A		Woodland		Green
C159	Brading Down West	C159A		Unimp grassland		Amber
C160	Kern Down Chalkpit	C160A		Unimp grassland		Amber
C161	Brading Down	C161A		Woodland	Unimp grassland	Amber
C162	Moon's Hill	C162A		Wetland		Amber
C163	Nunwell Park	C163A		Woodland		Green
C164	Broadley Copse	C164A		Woodland		Green
C165	Peakyclose Copse	C165A		Woodland		Green

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C166	Smallbrook Heath	C166A		Woodland		Green
C167	Swanpond Copse	C167A	Swanpond Copse	Woodland		Green
C167	Swanpond Copse	C167B	Angel's Copse	Woodland		Green
C168	Whitefield Woods	C168A	Roke Mead Copse	Woodland		Green
C168	Whitefield Woods	C168B	Bartlett's Green Farm	Unimp grassland		Amber
C168	Whitefield Woods	C168C	Whitefield Woods West	Woodland		Green
C168	Whitefield Woods	C168D	Whitefield Woods East	Woodland		Green
C169	Barnsley Farm	C169A		Woodland	Unimp grassland	Amber
C170	Nettlestone Marsh	C170A		Wetland		Amber
C171	Rosemary Copse	C171A		Woodland		Green
C172	Hill Farm Copse	C172A	Hill Farm Copse	Woodland		Green
C172	Hill Farm Copse	C172B	Lower Rowborough Copse	Woodland		Green
C173	Spring Copse	C173A		Woodland		Green
C174	Eight Acre Copse	C174A		Woodland		Green
C175	Centurion's Copse	C175A	Centurion's Copse	Woodland		Green
C175	Centurion's Copse	C175B	Longlands Copse	Woodland		Green
C177	Bembridge Down	C177A	Bembridge Down	Unimp grassland		Amber
C177	Bembridge Down	C177B	Northland Copse	Woodland		Green
C178	Breaches Copse	C178A		Woodland	Unimp grassland	Amber
C179	Arreton Down North	C179A		Woodland		Green
C180	Apse Castle Wood	C180A		Woodland		Green
C181	Pennyfeathers	C181A		Woodland		Green
C182	Quarr Wood	C182A		Woodland		Green
C182	Quarr Wood	C182B		Woodland		Green
C183	Calbourne Meadows	C183A		Woodland	Unimp grassland	Amber
C184	Compton Grange	C184A		Wetland	Wetland	Amber

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C185	Newbarn Copse	C185A		Woodland		Green
C186	Wroxall Bottom Copse	C186A		Woodland		Green
C187	Fort Warden Fields	C187A		Unimp grassland		Amber
C188	Golden Hill Fort	C188A		Unimp grassland		Amber
C189	Stroud Coppice	C189A		Woodland		Green
C190	Mount Ararat	C190A		Woodland		Green
C191	Shalfleet Mill	C191A		Woodland		Green
C192	Shalfleet Church	C192A		Unimp grassland		Amber
C193	Buddle Brook	C193A		Woodland	Wetland	Amber
C194	Noke Plantation	C194A		Woodland		Green
C195	Ridge Copse	C195A		Woodland		Green
C196	Great Werrar Wood	C196A		Woodland		Green
C197	Stag Copse	C197A		Woodland		Green
C198	Stag Lane Pond	C198A		Wetland		Amber
C199	Little Werrar Wood	C199A		Woodland		Green
C200	Heathfield Farm	C200A		High tide roost		Red
C201	Blackbush Copse	C201A		Woodland		Green
C202	Mount Joy Cemetery	C202A		Unimp grassland		Amber
C203	Carisbrooke Castle	C203A	Kent's Mill	Woodland	Wetland	Amber
C203	Carisbrooke Castle	C203B	Carisbrooke Castle	Unimp grassland	Woodland	Amber
C204	Carisbrooke Waterworks Pond	C204A		Wetland		Amber
C205	River Medina:Shide	C205A		Woodland	Wetland	Amber
C206	Lukely Brook	C206A		Woodland	Wetland	Amber
C206	Lukely Brook	C206B		Woodland	Wetland	Amber
C207	Bohemia Bog	C207A		Wetland		Amber
C208	Woodslade Coppice	C208A		Woodland		Green

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C209	Pondclose Copse	C209A		Woodland		Green
C210	The Keys Wood	C210A		Woodland		Green
C211	Ryde House Grounds	C211A		Woodland	Unimp grassland	Amber
C212	Dame Anthony's Common	C212A		Unimp grassland		Amber
C213	Swanmore Meadows	C213A		Unimp grassland		Amber
C214	Ryde Canoe Lake	C214A		Coastal		Green
C215	Appley Park	C215A		Woodland	Unimp grassland	Green
C217	Cothey Bottom Copse	C217A		Woodland		Green
C218	Lushington Copse	C218A		Woodland		Green
C219	Quarrel's Copse	C219A		Woodland	Unimp grassland	Amber
C220	Fernhill Wood	C220A		Woodland		Green
C221	The Old Mill Pond Wootton	C221A		Estuaries	Woodland	Red
C222	New Copse	C222A		Woodland		Green
C223	Ashlake Copse	C223A		Woodland		Green
C224	Steyne Wood	C224A		Woodland		Green
C224	Steyne Wood	C224B		Woodland		Green
C225	Nodes Point Meadow	C225A		Unimp grassland		Amber
C226	Priory Woods	C226A		Woodland		Green
C227	Longlands Copse	C227A		Woodland		Green
C228	Marshcombe Copse	C228A		Woodland	Wetland	Amber
C229	Morton Marsh	C229A		Wetland	Wetland	Amber
C230	Heathfield Copse	C230A		Woodland		Green
C231	East Cowes Cemetery	C231A		Unimp grassland		Amber
C232	Springhill/Western Wood	C232A	Springhill Wood	Woodland		Green
C232	Springhill/Western Wood	C232B	Western Copse	Woodland		Green
C233	Shrape Muds	C233A		Estuaries		Red

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C234	Princes Esplanade Wood	C234A		Woodland		Green
C235	Gurnard Cliff East	C235A		Woodland		Green
C236	Gurnard Marsh	C236A	Gurnard Marsh	Coastal		Amber
C236	Gurnard Marsh	C236B	Gurnard Meadows	Unimp grassland		Amber
C237	Ruffins Copse	C237A	Ruffins Copse	Woodland		Green
C237	Ruffins Copse	C237B	Blackland Copse	Woodland		Green
C238	Ward Copse	C238A		Woodland		Green
C239	Simmington Copse	C239A		Woodland		Green
C240	Calving Close Copse	C240A		Woodland		Green
C241	Cowes Cemetery&woods	C241A	Northwood Cemetery	Unimp grassland		Amber
C241	Cowes Cemetery&woods	C241B	Shamblers Copse south	Woodland		Green
C241	Cowes Cemetery&woods	C241C	Shamblers Copse north	Woodland		Green
C241	Cowes Cemetery&woods	C241D	Bottom Copse	Woodland		Green
C242	Waterclose Copse	C242A		Woodland		Green
C243	Luccombe Chine	C243A	Yellow Ledge and Horse Ledge	Coastal		Green
C243	Luccombe Chine	C243B	Shanklin Chine	Woodland		Green
C243	Luccombe Chine	C243C	Luccombe Chine	Coastal	Wetland	Amber
C243	Luccombe Chine	C243D	Luccombe Common	Woodland	Unimp grassland	Amber
C244	Wroxall Copse	C244A		Woodland		Green
C245	Ventnor Radio Station	C245A		Heathland	Heathland	Amber
C246	Ventnor Eastern Cliffs	C246A		Coastal		Green
C247	Bonchurch Undercliff	C247A		Coastal		Green
C248	Monk's Bay	C248A		Coastal		Green
C249	Godshill Church	C249A		Unimp grassland		Amber
C250	Perreton Down and Marsh	C250A	Perreton Down	Unimp grassland		Amber
C250	Perreton Down and Marsh	C250B	Perreton Marsh	Woodland	Unimp grassland	Amber

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C251	Lynch Copse	C251A		Woodland		Green
C252	Hungerberry Copse	C252A		Woodland		Green
C253	Sibden Hill	C253A	Sibden Hill	Woodland		Green
C253	Sibden Hill	C253B	Batts Copse	Woodland		Green
C254	Bullen Cross Wood	C254A		Woodland		Green
C255	Ninham/Barton Withybeds	C255A	Barton Withybed	Woodland	Wetland	Amber
C255	Ninham/Barton Withybeds	C255B	Ninham Withybed	Woodland	Wetland	Amber
C256	Old Clover Withybed	C256A		Woodland		Green
C257	Landguard Manor Farm Copse	C257A	Landguard Manor Farm Copse	Woodland		Green
C257	Landguard Manor Farm Copse	C257B	Landguard Manor Farm Meadow	Wetland		Amber
C258	Hilliard's Cemetery	C258A		Unimp grassland		Amber
C259	Lake Cliffs	C259A	Lake Cliffs north	Coastal		Green
C259	Lake Cliffs	C259B	Lake Cliffs middle	Coastal		Green
C259	Lake Cliffs	C259C	Lake Cliffs south	Coastal		Green
C260	Borthwood Copse	C260A		Woodland		Green
C261	Sandown Golf Course	C261A	Sandown Golf Course	Woodland	Heathland	Amber
C261	Sandown Golf Course	C261B	Scotchell's Brook	Woodland	Wetland	Amber
C262	Sandown Levels	C262A		Wetland		Amber
C263	Pope's Farm Marsh	C263A		Wetland		Amber
C264	Brading Churchyard	C264A		Unimp grassland		Amber
C265	Brading Marshes North	C265A		Wetland	Wetland	Amber
C266	Dodnor Creek	C266A		Woodland		Green
C267	Hollow Lane, Chillerton	C267A		Woodland		Green
C268	Whitefield Farm Copse	C268A		Woodland		Green
C270	Rowdown Copse	C270A		Woodland		Green
C271	St Martin's Down	C271A		Unimp grassland		Amber

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
C272	South Down	C272A		Woodland		Green
C273	Werrar Meadow	C273A		High tide roost		Red
C274	Windmill Copse	C274A		Woodland		Green
C275	Fattingpark Copse	C275A		Woodland		Green
C276	Westhill Meadow	C276A		Unimp grassland		Amber
C277	Wroxall Meadow South	C277A		Unimp grassland	Wetland	Amber
C278	Pitts Farm Down	C278A		Unimp grassland		Amber
PC279	Kitbridge Farm	C279A		Wetland		Amber
PC280	Padmore Fields, Whippingham	C280A		Woodland	Wetland	Amber
PC281	Colwell Common	C281A		Unimp grassland		Amber
PC282	Thorley Churchyard	C282A		Unimp grassland		Amber
PC283	Ventnor Cemetery	C283A		Unimp grassland		Amber
PC284	Island Harbour saltmarsh	C284A		Estuaries	Wetland	Red
PC285	St Luke's Cemetery, Bembridge	C285A		Unimp grassland		Amber
PC286	St Paul's Cemetery, Newport	C286A		Unimp grassland		Amber
PC287	Turville's Field, Totland	C287A		Unimp grassland		Amber
PC288	High Grange Marsh	C288A		Wetland		Amber
PC289	Brook Field	C289A		Arable (plants)		Green
PC290	Lacey's Farm Fields	C290A		Unimp grassland		Amber
PC291	Haslett and Cranmoor Withybeds	C291A	Haslett withybed	Woodland		Green
PC291	Haslett and Cranmoor Withybeds	C291B	Cranmoor withybed	Woodland		Green
PC292	Corve Copse	C292A		Woodland		Green
PC293	Wootton Common cemetery	C293A		Unimp grassland		Amber
PC294	St Helens Green West	C294A		Unimp grassland		Amber
PC295	Cheverton Down	C295A		Unimp grassland		Amber
PC296	Ashengrove	C296A		Unimp grassland		Amber

Site Code	Site Name	Sub-Site Code	Sub-Site Name	Principal Habitat	Secondary Habitat	Sensitivity Score
PC297	Clamerkin Farm Fields	C297A		Unimp grassland		Amber
PC298	Pallance Lane	C298A		Woodland		Green
PC298	Pallance Lane	C298B		Woodland		Green
PC299	Niton Radar Station	C299A		Unimp grassland		Amber
PC300	Bembridge School Lawn	C300A		Unimp grassland		Amber
PC301	Westbrook Meadow	C301A		Unimp grassland		Amber

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