

# Wakefield Green Infrastructure Plan

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working for you

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## Executive Summary

### A vision of green infrastructure in Wakefield

“Wakefield’s green infrastructure will create places that are attractive to live, learn, work and invest in and where our diverse towns and villages work together to promote the well being of the whole district”

The Council regards protecting, enhancing and creating new green infrastructure as a crucial element in its spatial planning strategy. Not only should this asset create significant economic, social and environment value, it should also reduce the long term costs to the district of responding to climate change.

The Council has commissioned this Green Infrastructure Plan to complement the Leeds City Region Green Infrastructure Strategy and demonstrate this value and to deliver on this mission at district level. The plan will sit alongside a series of other strategies at the district (including the Sustainable Community Strategy, Local Development Framework and Green Corridor initiative) and city region levels that will drive sustainable economic growth in the coming years.

### What is green infrastructure?

Green infrastructure is a combination of natural environmental assets, the functionality of which shapes the places we live, work, play and enjoy. Those assets include:

- Amenity open space
- Large urban parks and gardens
- Registered commons and village greens
- Natural and semi-natural habitat for wildlife including heaths and woodland
- Country parks
- Historic parks and gardens and historic landscapes
- and in agri-environmental and agricultural management
- Local Nature Reserves, Sites of Special Scientific Interest and Scheduled Ancient Monuments
- Locally designated heritage sites and local wildlife sites
- Rivers, waterways and water bodies, including ponds, reservoirs and canals
- Public rights of way, cycleways, bridle paths, Trans Pennine Trail and other recreational routes.

### Why invest in green infrastructure?

Many recent reports – from the internationally acclaimed Stern Review on Climate Change to national guidance by the Commission for the Built Environment and the Marmot Report on health and health inequalities – have researched and set out the many benefits of investing in green infrastructure and the evidence will continue to develop in coming years.

Whilst the local planning system will continue to support investment in green infrastructure over the coming years, the Council’s level of ambition for green infrastructure, and the tightening of public funding, requires additional funding approaches be developed. It will therefore need to diversify the investment funds used for green infrastructure capital and revenue expenditure, in order to ensure that sufficient investment is available without an over-reliance on any one funding source.

The returns from investing in green infrastructure can be calculated in economic, social and environmental terms. Those investing to derive economic returns will look to green infrastructure to lower environmental risks through flood risk mitigation for example. Those investing to secure social returns will expect green infrastructure to improve the health and well-being of local communities. Those investing to deliver environmental returns will want green infrastructure to improve local biodiversity, air and water quality.

In Wakefield, green infrastructure projects have been part of wider development and regeneration programmes over many years. The renaissance programme has led to major public realm improvements in the city centre and will continue to shape the new developments planned in coming years. The Council and others have also invested in industrial land reclamation, woodland creation, countryside access and habitat restoration projects, funded and delivered by a wide range of public, private and independent agencies.

### Wakefield's green infrastructure assets

The district has a population of 322,319 (2008 ONS mid year estimate). There are an estimated 1.6m people living within commuting distance to the district. Mainly due to an in-migration from Leeds, the growth rate of Wakefield has been increasing since 2005. According to projections, Wakefield will grow by a further 12% between 2007 and 2027.

The district benefits from natural assets that its future green infrastructure can add value to. Most of these assets are well known and cherished by local communities and visitors alike. Others are more subtle but their value is no less important.

The landscape character of the district changes from the east to the west with a wide variety of landscape elements across the area. Settlements sit within the more rounded Coal Measures of the Pennine foothills in the west and the Magnesian Limestone in the east, the Rivers Calder, Went and Aire and the low and sharp escarpment of the Magnesian Limestone ridge are significant features in the district's landscape.

### What is driving future green infrastructure investment?

In order to realise these opportunities, we need to know what factors will be driving the demand for green infrastructure investment in coming years so that we can secure and target our resources to best effect. The drivers are mostly shaped by public policy, nationally and locally, which in turn influences investment by the private and independent sectors, and they are:

- sustainable economic growth and regeneration
- climate change
- health and well-being
- biodiversity

Each of these presents increasing challenges that are driving the demand for green infrastructure solutions. In the case of economic growth for example, this demand is already being addressed with significant increases in investment and public funds to provide green infrastructure. In the case of health and well being, there has been an increasing focus on lifestyle related ill-health with a drive for interventions to support people to make healthier lifestyle choices to improve

overall health and well being (including mental health) and reduce health inequalities. In others, like climate change and eco-system services for example, the issues are relatively new, with investment only now beginning to increase to fund green infrastructure.

For the next few years, the council and its key partners believe that, despite the economic challenges, the planned economic growth and regeneration of the district will continue to create the greatest demand for, and therefore supply of, investment in green infrastructure. This does not mean that the others drivers are less important nor that opportunities to win investment to address will not be pursued. It does, however, enable the plan to focus its efforts.

### The spatial vision for Wakefield

The overall spatial vision set out in the Council's Local Development Framework Core Strategy states:

By 2026 Wakefield District will be a more attractive, prosperous and sustainable place with improved quality of life. The district will make a significant contribution to the prosperity and diversity of the region and will benefit from the expansion of the sub-regional economy by taking advantage of its accessibility to centres within the Leeds City Region and to the national transport network.

The spatial vision for green infrastructure in Wakefield takes the Local Development Framework spatial vision and articulates it in a way that emphasises the potential role that green infrastructure will play in realising the vision. Key elements of the spatial vision are:

- Compact urban centres with a diverse and distinctively urban quality of life that integrates environmental, cultural and historic assets and 'active travel links' between urban centres, employment areas, settlements, green spaces and the immediate countryside;
- A distinctively rural landscape in the southern and eastern parts of the district, offering opportunities for sustainable farming, access and recreation;
- Accessible river landscapes on the Rivers Calder, Aire and Went and their tributaries, maximising the opportunity for flood alleviation and biodiversity in rural areas, together with culture in urban areas, shaping the district's sense of place;

- A wooded landscape, stretching around the city of Wakefield, into the Five Towns and the southeast, featuring multifunctional woodlands as the backbone of a landscape that offers accessibility, recreation, biodiversity, health and well-being, climate change and economic benefits to the community, integrating existing green infrastructure assets.

### The Plan

The goal of the plan is to promote the contribution that green infrastructure investment can make to the future development of Wakefield and place it at the heart of the district's spatial planning, economic development and climate change actions.

Although Wakefield has a natural environment with many attractive and valuable assets, it will not be enough to deliver the quality of place expected by local communities. Our understanding of the drivers of future green investment shows that the district's growth and regeneration plans will demand more of what it already has and will require new assets to be created as well. And in both cases, green infrastructure will need to be multi-functional and productive if it is to create lasting value for local communities.

The result is a plan that is both ambitious and innovative, especially at a time of considerable economic uncertainty. Its main initiatives focus on delivering green infrastructure investment to promote sustainable housing and economic growth as these will continue to drive local priorities for years to come. Every proposed action will deliver on this objective. But, whilst this objective is of primary importance, all the proposed actions will also create significant opportunities to realise climate change, healthy lifestyle and biodiversity benefits on a large scale.

The plan requires a new way of thinking about green infrastructure. For Wakefield's Local Development Framework to succeed into the long term, green infrastructure must be seen as an essential means of creating economic, social and environmental value. In doing so, it will add considerable substance to economic development, health and well-being and climate change plans that may otherwise remain disparate.

### Strategic objectives

Four strategic objectives have been selected to ensure that the plan delivers Wakefield's vision for green infrastructure. They are complementary in respect of actions although each will depend on other actions outside the scope of this plan to deliver sustained success.

The relative importance of these objectives will change over time; the plan reflects these differences in its chosen initiatives and in defining the spatial and delivery frameworks within which investment will be secured in future.

**OBJ 1:** To promote the renaissance of the City of Wakefield, the Five Towns and the South East by:

- Increasing the attractiveness of new housing and employment land for investment
- Promoting a high quality design in all new development
- Ensuring open spaces are protected, maintained and enhanced
- Enhancing the appearance of the public transport hubs and services to promote walking and cycling for journeys to work

**OBJ2:** To adapt to and mitigate climate change by:

- Enabling the district to be more resilient to flooding and higher urban temperatures
- Reducing the district's greenhouse gas emissions
- **OBJ3:** To improve overall health and well-being and to reduce health inequalities by:
  - Increasing the quality and accessibility of natural green spaces, walkways and cycleways in both new and existing developments
  - Increasing the use of natural green spaces, walkways and cycleways by local people
  - Promote sustainable transport by increasing the opportunities for and uptake of active travel, such as walking and cycling, in both new and existing developments
  - Targeting green infrastructure according to local

needs and priorities so that we deliver the right green infrastructure in the right places.

**OBJ4:** To improve biodiversity by:

- Increasing the area of high biodiversity value
- Protecting and conserving important natural environment assets

#### Strategic Initiatives

There are three types of initiative proposed with the aim of maximising the impact of green infrastructure in Wakefield:

<b>Investment Programmes</b>	Green Places Green Working Growing Food Locally
<b>Strategic projects</b>	Fresh Aire Wakefield Forest <ul style="list-style-type: none"> <li>▪ Five Towns Forest</li> <li>▪ Nine Lakes</li> <li>▪ South West Wakefield Woodlands</li> <li>▪ Green Corridor Forest</li> <li>▪ Balne Lane Fields</li> </ul>
<b>Opportunity Areas</b>	Wakefield East Newmarket Westgate-Wrenthorpe Valley Corridor Westfield Lane, South Elmsall Castleford Knottingley-Pontefract-Ferrybridge Normanton and Altofts Featherstone

Investment Programmes are intended to create new investment opportunities, focusing on achieving a cumulative impact from delivering similar types of green infrastructure project. The programmes have been chosen and shaped to provide a strategic focus for public and private investment and activity without seeking to predict exactly when, where and how green infrastructure planning and delivery will happen into the long term.

Strategic projects are site specific or clusters of green infrastructure actions that will create an impact at district scale. They have been identified as being of significant importance as they address particular needs that would be difficult to address through other mechanisms or because they will have a large impact, with significant benefits for people, wildlife or the environment more generally.

The Opportunity Areas are intended to complement Investment Programmes and Strategic Projects by identifying locations within the district where significant change is planned, primarily as a result of housing and economic development, and for which there is a timely opportunity for green infrastructure to shape that change through positive master planning and development management.

## **Delivering the Plan**

Delivering the plan will depend upon a number of factors: securing investment, using the local planning system to manage development effectively, working with effective partnerships and ensuring the plan remains a key part of the Wakefield policy agenda.

Investing in green infrastructure in the district will remain an important public sector activity. The Council owns and manages some country parks, urban parks, woodland and open spaces within the district. The Environment Agency owns and manages significant lengths of waterways and adjoining land. The Forestry Commission owns and manages some local woodlands and Natural England invests in supporting nature conservation.

Whilst the local planning system will continue to support investment in green infrastructure over the coming years, the Council's level of ambition for green infrastructure, and the tightening of public funding, requires additional funding approaches be developed. It will therefore need to diversify the investment funds used for green infrastructure capital and revenue expenditure, in order to ensure that sufficient investment is available without an over-reliance on any one funding source.

Outside the public sector, the private and third sectors will become increasingly important sources of future green infrastructure investment. For example, a large proportion of the district's woodland, farmland and open land is in private ownership. Landowners and their tenants will need to become more aware of the value of their green infrastructure assets and be encouraged, where appropriate, to bring forward proposals to improve the value of those assets to contribute to this plan.

The Council will continue to invest in green infrastructure using its own capital and revenue resources to maintain assets in its ownership to as high a standard as the availability of resources allows. In most cases, this plan will only require minor re-alignments and/or re-prioritisation of budgets for investing in public open spaces, street trees etc. The plan may also require changes to the ways in which the Council manages its assets in order to achieve greater multi-functional benefits, e.g. urban parks.

The Council will continue to negotiate financial contributions from developers to on-site and off-site green infrastructure provision and ongoing management.



It acknowledges that this source of funding will be more difficult to secure in the short to medium term given the decline in local residual land values for housing and economic development.

The Homes & Communities Agency has indicated a willingness to regard some complementary investment in environmental improvement as a key feature in its housing and regeneration programmes. The Council will seek to secure funding from the Agency for this purpose from the Leeds City Region Investment Plan as part of the New Growth Point and Green Corridor Programmes.

The Leeds City Region Green Infrastructure Strategy has identified three new potential sources of investment in green infrastructure that may best be secured and managed at the city region level, working with national and regional funding agencies and the private and third sectors. The expectation is that, once these investment funds have been secured, local projects can look to win funding from them (to match locally sourced funding). Given none currently exist it should be presumed that all will only be available from the medium term.

The promotion and management of green infrastructure through the planning system will be through the Wakefield Local Development Framework and in particular its:

- Core Strategy Development Plan Document (adopted April 2009)
- Development Policies Development Plan Document (adopted April 2009)
- Central Wakefield Area Action Plan (adopted June 2009)
- Site Specific Proposals Development Plan Document (in preparation)
- Leisure, Recreation & Open Spaces Development Plan Document (not yet started)

The Council will also use its development management processes to ensure the policies and proposals contained within these documents are implemented by development proposals.

The aims and objectives of this green infrastructure plan have been shaped by the policy direction in the Core Strategy. The initiatives proposed in this plan are

therefore entirely consistent with the Core Strategy, though future revisions of the Core Strategy and other development plan documents will enable a stronger relationship to be made with the Green Infrastructure Plan. In particular, a green infrastructure policy and proposed green infrastructure site allocations (e.g. new public open space) will be set out in the forthcoming Leisure, Recreation and Open Space development plan document

The effective implementation of planning policy through the development management process is also crucial to the success of this plan.

The delivery of the plan will be lead by the Council in collaboration with its partners. The Council will coordinate a green infrastructure panel comprised of key stakeholders in this green infrastructure plan to promote green infrastructure and to provide an overview of the plan and its successful delivery.

To support the Board, a Wakefield Green Infrastructure Steering Group will be formed of officers of the council and of other key agencies. The group will meet frequently enough to monitor delivery progress and will be serviced by a council officer to be designated as the 'Green Infrastructure Plan Manager'. It is expected that this role will be part of the wider duties of an existing officer rather than be an additional resource requirement.

An annual delivery plan will be prepared by the Steering Group for approval by the Panel that will create a time and investment frame for the initiatives. The success of the plan depends on local partnerships to deliver green infrastructure action on the ground. Given the opportunities to achieve multi-functional green infrastructure benefits, it is likely most local actions will need to bring together a range of local agencies into partnerships to plan and design schemes, to win resources, to deliver the project; and then to secure its ongoing management.

A Vision of Green Infrastructure in Wakefield







“Wakefield’s green infrastructure will create places that are attractive to live, learn, work and invest in and where our diverse towns and villages work together to promote the well being of the whole district”

The Council regards protecting, enhancing and creating new green infrastructure as a crucial element in its spatial planning strategy. Not only should this asset create significant economic, social and environment value, it should also reduce the long term costs to the district of responding to climate change.

Though designated a metropolitan area, the majority of the Wakefield district is within the Green Belt. The urban areas of the district present a wide range of challenges but also significant opportunities. Wakefield Council aims to meet these opportunities and challenges with an ambitious programme of investment and actions that include seeing the local environment as a valuable asset.

The Council has commissioned this Green Infrastructure Plan to complement the Leeds City Region Green Infrastructure Strategy and demonstrate this value and to deliver on this mission at district level. The plan will sit alongside a series of other strategies at the district (including the Sustainable Community Strategy, Local Development Framework and Green Corridor initiative) and city region levels that will drive sustainable economic growth in the coming years.

The plan is a background document to the Local Development Framework and will inform emerging policies in the forthcoming Site Specific Proposals and Leisure, Recreation and Open Space Development Plan Documents. The timeframe for the plan is therefore to 2026 to fit with the Framework.

The plan has been prepared by the Council and its environmental partners over 2009/10 with the consultant support of LDA Design. The process included visioning and planning workshops with a wide range of stakeholders in the District and the collation of relevant baseline information to inform the plan. The details of this information are contained in a separate Technical Report that accompanies the plan document.

## 1.1. What is green infrastructure?

Green infrastructure is a combination of natural environmental assets, the functionality of which shapes the places we live, work, play and enjoy. Those assets include:

- Amenity open space
- Large urban parks and gardens
- Registered commons and village greens
- Natural and semi-natural habitat for wildlife including heaths and woodland
- Country parks
- Historic parks and gardens and historic landscapes
- Land in agri-environmental and agricultural management
- Local Nature Reserves, Sites of Special Scientific Interest and Scheduled Ancient Monuments
- Locally designated heritage sites and local wildlife sites
- Rivers, waterways and waterbodies, including ponds, reservoirs and canals
- Public rights of way, cycleways, bridlepaths, Trans Pennine Trail and other recreational routes.

Together, these assets form an environmental system, the performance of which will increasingly determine the future success of our cities, towns and villages. Green infrastructure offers a wider range of economic, social and environmental benefits than other infrastructures that support our lives. Where these benefits coincide, green infrastructure has the potential to transform the prosperity, health and biodiversity of a local community. Green infrastructure assets need not connect with one another to create this value, although networking of these assets can produce added value.

## 1.2. Why invest in green infrastructure?

Many recent reports – from the internationally acclaimed Stern Review on Climate Change to national guidance by the Commission for the Built Environment and the Marmot Report on health and health inequalities – have researched and set out the many benefits of investing in green infrastructure and the evidence will continue to develop in coming years.

Essentially, there are five reasons that make a compelling case for Wakefield to invest in green infrastructure:

- The higher environmental performance demanded of new development, driven by climate change and other legislation, requires investment in green infrastructure to shape and manage scarce environmental resources – sound investment now will lower the burden on future generations to address their economic and environmental problems that we can solve and are more affordable now
- Our expectations of the quality of the places we live, work, play and enjoy are rising and we demand more from our local environment – we want to be able to walk and cycle on safe, convenient routes, we want to play in local parks and we want to enjoy our local countryside and rivers – increasing investment now in maintaining and creating these assets will make us healthier and happier
- Businesses need locations that offer competitive advantages over others and make decisions that affect the lives of all our communities – sustained investment in green infrastructure now will lower long term development costs and create attractive environments that will raise land values, stimulate further economic investment, improve access to employment opportunities and create healthier working environments
- The natural environment has significant productive potential for energy, food and drink – investing in green infrastructure will create new economic value and reduce our dependency on imported goods and services
- The environmental benefits of improving biodiversity and maintaining our cherished spaces and

landscapes are less obvious to us but incredibly important to the planet – continuing to invest in protecting and enhancing our green infrastructure assets will enable our wildlife and precious habitats and landscapes to thrive

Whilst the local planning system will continue to support investment in green infrastructure over the coming years, the Council's level of ambition for green infrastructure, and the tightening of public funding, requires additional funding approaches be developed. It will therefore need to diversify the investment funds used for green infrastructure capital and revenue expenditure, in order to ensure that sufficient investment is available without an over-reliance on any one funding source.

The returns from investing in green infrastructure can be calculated in economic, social and environmental terms. Those investing to derive economic returns will look to green infrastructure to lower environmental risks through flood risk mitigation for example. Those investing to secure social returns will expect green infrastructure to improve the health and well-being of local communities. Those investing to deliver environmental returns will want green infrastructure to improve local biodiversity, air and water quality.

In Wakefield, green infrastructure projects have been part of wider development and regeneration programmes over many years. The renaissance programme has led to major public realm improvements in the city centre and will continue to shape the new developments planned in coming years. The Council and others have also invested in industrial land reclamation, woodland creation, countryside access and habitat restoration projects, funded and delivered by a wide range of public, private and independent agencies.

And now, the Wakefield Growth Point and Green Corridor programmes are planning investment in green infrastructure in order to create high quality living and working environments that deliver excellent environmental performance.

### 1.3. Purpose of the green infrastructure plan

The plan has been prepared by Wakefield Council, represented through various departments, in partnership with Natural England, the Environment Agency and a wide range of other consultees. Background research and the interrogation of Geographic Information System data provided the evidence base, presented in the Technical Report of this plan, containing detailed baseline evidence and policy analysis. This Consultation Draft has been published by the Council as one of the final stages in the process of preparing the plan, presenting an updated and refined version of the Draft Plan of May 2010. The plan brings together and updates elements of the draft Vision and Baseline Reports, published in March 2010. A stakeholder consultation event and communication with individual steering group members and stakeholders were deployed to refine the plan.

The overall aim of the plan is to develop a spatial vision for establishing a strategic green infrastructure framework that is necessary to provide the foundations for sustainable communities across the Wakefield district.

The plan is intended to provide the spatial context and evidence base for shaping future development in the district (and for formulating green infrastructure policy within the Wakefield Local Development Framework for this purpose) and creating a framework to attract green infrastructure investment and actions that will complement other similar documents at the community level.

The Wakefield District Growth Point Programme has been identified as having a key role in accommodating the growth required to address the strategic challenges facing the Leeds City Region including increasing housing supply; making home ownership more affordable; tackling transport and other infrastructure issues; addressing issues concerning skills and the labour market; and tackling deprivation and the need for urban renewal. The Leeds City Region Green Infrastructure Strategy acknowledges that the natural environment is a fundamental driver and shaper of

growth and that without it the city region's ambitious plans for investing in new homes, jobs, skills and transport will struggle to deliver quality.

The Green Infrastructure Plan is also intended to be used as a source of information to guide landowners, planners and developers in formulating land use plans and proposals which maximise environmental benefits and deliver a net gain in green infrastructure. Crucially, the plan is intended to provide a framework for investment and action - in identifying opportunity areas which are of strategic importance and offer maximum value in terms of creating multi-functional green infrastructure.













The district has a population of 322,319 (2008 ONS mid year estimate). There are an estimated 1.6m people living within commuting distance to the district. Mainly due to an in-migration from Leeds, the growth rate of Wakefield has been increasing since 2005. According to projections, Wakefield will grow by a further 12% between 2007-2027.

The district benefits from natural assets that its future green infrastructure can add value to. Most of these assets are well known and cherished by local communities and visitors alike. Others are more subtle but their value is no less important.

The landscape character of the district changes from the east to the west with a wide variety of landscape elements across the area, as shown in plan 5 of the Technical Baseline Report. Settlements sit within the more rounded Coal Measures of the Pennine foothills in the west and the Magnesian Limestone in the east, the Rivers Calder, Went and Aire and the low and sharp escarpment of the Magnesian Limestone ridge are significant features in the district's landscape.

The north of the district is largely urban in character, with Wakefield as the dominating city and the main cultural hub of the district. Wakefield is the main urban centre in the district as well as the county city of the West Riding of Yorkshire, getting its charter in the middle ages and featuring a population of 76,000. The city developed from a market town on the River Calder, based on the wool, textile and coal industries as well as engineering. Its prestigious architecture, cultural offer and administrative services make the city the clear centre of the district. Castleford is a distinctive market town with a number of urban renewal schemes underway. Regeneration activities focus on a relatively high interest of private sector retail, commercial and residential developers. Pontefract is a historic market town with a medieval layout that has the potential to be a tourism destination in its own right. A high quality public realm, historic buildings and the castle in the town centre add to its character together with the market place and buttercross, Town Hall, Pontefract Park and Racecourse, and Liquorice Festival as important attractions.

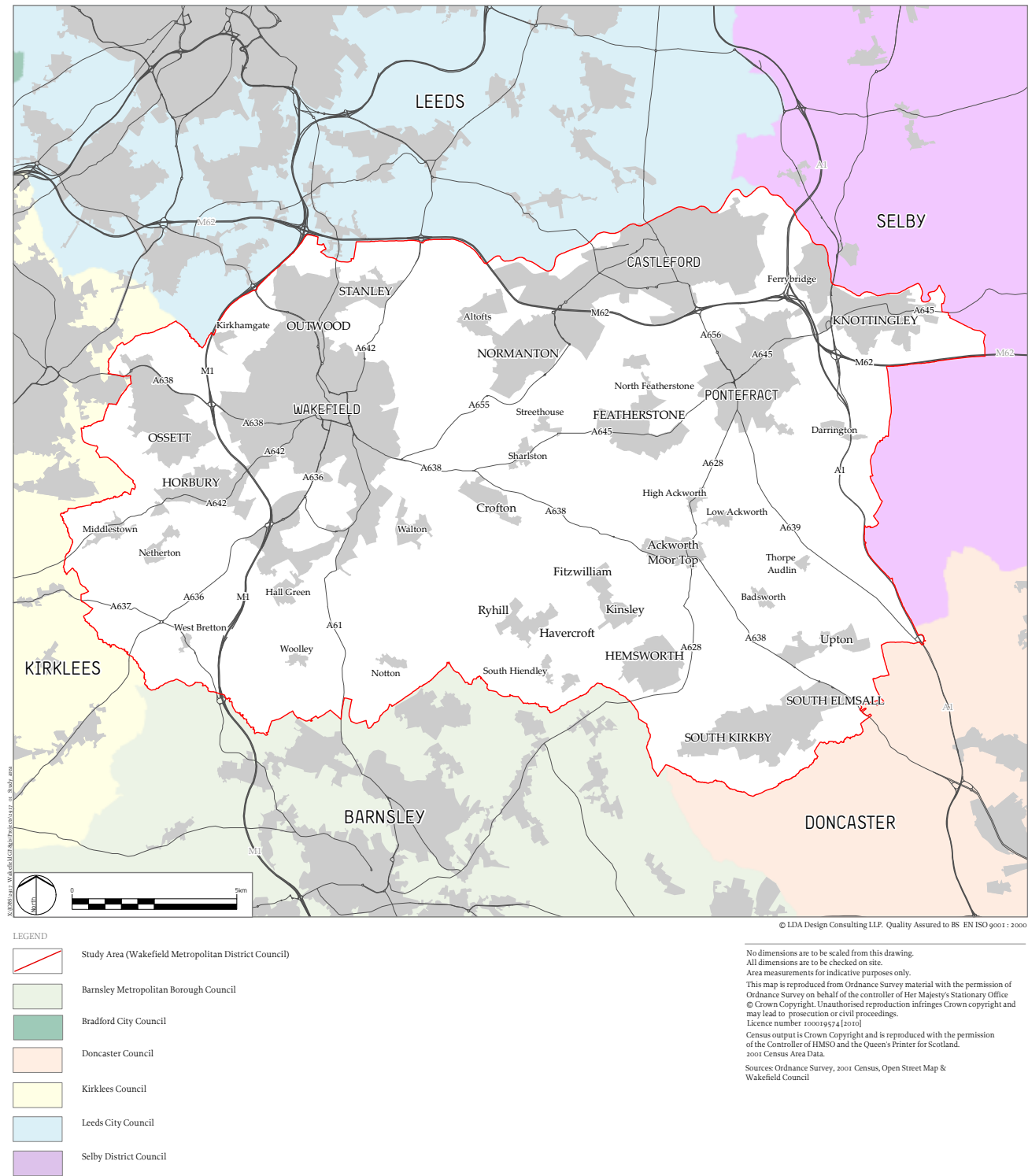
Green infrastructure assets are scarce in many of the built up areas of the district. Wakefield City features a well designed public realm, the renaissance of the waterfront and Thorne's Park as valuable green infrastructure assets near the centre, while it also benefits from country parks and river landscapes closeby. The urban settlements of the Five Towns also contain very few formal urban parks. Queen's Park in Castleford as well as Harewood Park and Willow Park in Pontefract form some of the examples in the Five Towns where accessible natural areas and the surrounding landscape 'on the doorstep' present great potential.

The south western and south eastern parts of the district are rural in character in predominantly agricultural use, whereas large estates within parklands and country parks are the main green infrastructure assets in the areas around the city of Wakefield. The country parks of Pugnays, Newmillerdam and Anglers all form examples of high quality green infrastructure assets in close proximity to the city that complement the offer of urban parks. Areas of woodland in the south of the district are of high biodiversity value and are also valuable assets.

Some of the green infrastructure assets are physically linked to historic sites such as Nostell Priory, Pontefract Castle, Bretton Hall, Friarwood Valley Gardens, Sandal Castle and Walton Hall. In the past, the Outwood Project for example interpreted the now fragmented manorial forest of Wakefield, including hedgerow and tree planting, but also included theatre performances translating its past. Bretton Country Park with the Yorkshire Sculpture Park, the waterfront with the Hepworth Gallery and the National Coal Mining Museum are examples of cultural assets of national importance where significant opportunities should be seized for green infrastructure to provide better links between the individual assets.

The creation of new green infrastructure assets includes the creation of Frickley Country Park and Fryston Country Trail, which boost the recreational offer, particularly for their adjacent settlements of South Kirkby/ South Elmsall and Castleford respectively. In many cases the accessibility and integration with the surrounding settlements remain important factors for the successful use of these facilities.

Fig.1 - Study Area



Settlements in the south east in particular grew significantly in their size due to coal mining activities, shaping towns, villages and landscape. With obvious references to its industrial past, the urban and rural landscapes form a functional and visual symbiosis where, historically, natural resources have been exploited for industrial development in the area. Great achievements have been made in reclaiming former colliery sites for new uses, which has created further opportunities to shape the natural and built environment in the area, making it more attractive and sustainable. Some of the former colliery and coal related sites are now being reclaimed for woodlands, which form assets for recreation and biodiversity as well as the landscape character of the district.

Over the last two decades, the district has experienced a major restructuring of the employment market with distribution and service industries now forming the most important areas of employment and replacing the traditional industries of mining, manufacturing and engineering. Although the adaptation and diversification has been successful, not all areas of the district have benefited equally.

Twelve pockets around the district are being identified as 'priority neighbourhoods' to provide a focus on communities which experience higher levels of unemployment, ill-health and deprivation than other parts of the district. Wakefield Council has designated these priority neighbourhoods to facilitate an area based approach to delivering targeted green infrastructure interventions. Green Infrastructure interventions in these areas are likely to provide a great benefit as their positive impact on health and the attraction of employees are particularly important as they can help to reduce inequalities in the district.





## SECTION 3.0

### What is driving future green infrastructure investment?









In order to realise these opportunities, we need to know what factors will be driving the demand for green infrastructure investment in coming years so that we can secure and target our resources to best effect. The drivers are mostly shaped by public policy, nationally and locally, which in turn influences investment by the private and independent sectors, and they are:

- sustainable economic growth and regeneration
- climate change
- health and well-being
- biodiversity

Each of these presents increasing challenges that are driving the demand for green infrastructure solutions. In the case of economic growth for example, this demand is already being addressed with significant increases in investment and public funds to provide green infrastructure. In the case of health and well being, there has been an increasing focus on lifestyle related ill-health with a drive for interventions to support people to make healthier lifestyle choices to improve overall health and well being (including mental health) and reduce health inequalities. In others, like climate change and eco-system services for example, the issues are relatively new, with investment only now beginning to increase to fund green infrastructure.

At the national level, the inclusion of green infrastructure in government planning, climate change and health policy statements in recent years has raised its profile as an infrastructure of economic and social as well as environmental importance. For example, a variety of planning policy statements identify green infrastructure as an integral part of spatial policy formulation. Most recently, statements on the natural and healthy environment and on climate change have established green infrastructure as a core principle in achieving sustainable development and tackling climate change. Similarly, policies on improving the nation's health now identify the importance of accessible green space as a vital component for healthy lifestyles and promoting walking and cycling.

In regional terms, green infrastructure is gaining in its profile through policy at the Leeds City Region level. There are also a number of biodiversity, forestry, health and climate change strategies at the Yorkshire and Humber scale that now promote the benefits of planning for green infrastructure as a vital element in the region improving its economic, social and environmental performance.

In the Leeds City Region, emerging economic development, regeneration, transport, skills and innovation strategies establish a new and ambitious direction towards a low carbon economy. The City Region's 2009 Forerunner Programme establishes four core priorities for its activities and programmes:

- housing and regeneration - accelerating strategic growth, promoting eco-living, delivering strategic urban renewal and supporting a rural economic renaissance
- innovation – delivering an Innovation Capital Prospectus and Investment Plan for the city region and Pilot Revenue Schemes for Accelerating Sustainable Recovery
- transport - promoting investments in our transport networks to strengthen the city region's economic competitiveness and to contribute to achieving the nation's carbon reduction targets
- skills and worklessness – ensuring provision reflects the current and future needs of local employers, key economic drivers and the city region economy

Both the Leeds City Region Green Infrastructure Strategy and this plan will help to direct effort and investment into the improvement of existing green infrastructure and its connections and identify future opportunities arising from growth.

More locally, the Wakefield District Community Strategy 'Developing Knowledge Communities' is clear about its goals of "... promoting greater ownership and pride in the places where we live which provides the basis for a good quality of life" and "... making the district cleaner, greener and safer and its people healthier and better skilled". Investing in green infrastructure is acknowledged in the strategy as playing a part in realising this vision with a priority "... to have cleaner and greener public spaces that are valued and used by local communities". The strategy will track local community satisfaction with the quality of their local area and green spaces (in both of which Wakefield is below the England average) as a key measure of successful outcomes.

### 3.1. Sustainable economic growth and regeneration

Wakefield district will become an increasingly important economic driver of the Leeds City Region economy by being one of their main housing and economic growth points over the next twenty years. This level of growth will place increasing pressure on the existing urban infrastructure, including green infrastructure assets, which will require upgrading and extending to serve the new households, businesses and employees.

In places, especially those priority areas of regeneration, the advance delivery of new infrastructure will play a key role in promoting development opportunities. The role of green infrastructure in helping to attract greater levels of investment and improving the economic performance of the local economy (in terms of workforce productivity, tourism development, and overall 'place' branding) is increasingly recognised. As the Council places greater emphasis on achieving a step change in business and skills performance as in its Economic Regeneration Strategy, so the need to create a quality of place, a quality of life, and environmental remediation and enhancement increases.

The Wakefield Growth Point will therefore create a new demand for green infrastructure investment, primarily made by those promoting development proposals but also with likely public funding support. And whilst the recent downturn in economic performance makes the Council's goal more challenging, it believes that delivering a low carbon economy and quality economic development will help drive future prosperity.

The Council will bring forward green and other infrastructure projects to unlock barriers to housing growth and regeneration, accelerate delivery of its growth point and participate in innovative, Leeds City Region-wide models of finance and delivery for housing and regeneration. It will focus new development and regeneration to support priority economic growth locations, strategic transport corridors and adopt high design and sustainability standards. The new Leeds City Region Investment Plan and the Council's own Local Investment Plan with the Homes & Communities Agency combined with the Regional Growth Fund will set out how public funding will be made over the next few years to realise these investment opportunities.

Similarly, the Leeds City Region's transport strategy provides a strategic framework for the development of the new West Yorkshire Local Transport Plan 3. The key benefit of green infrastructure in this respect is in improving access by protecting, enhancing and creating attractive, safe and convenient walking and cycling routes, especially in places like Wakefield with high population concentrations, where wider health and well-being issues will be tackled at the same time. Routes that use green infrastructure to enhance or create links between communities and key employment and retail locations need only be short in length to be effective in persuading commuters to change their commuting behaviours.

The Green Infrastructure Plan will also strengthen the district's Rural Strategy which has been consulted on in 2010.

## 3.2. Climate change

As the full consequences of adapting to, and mitigating, climate change become clearer, so the benefits of green infrastructure are emerging as central to increasing the resilience of regional economies.

The Stern Report of 2008 makes clear the economic case for tackling climate change, both in terms of using solutions to generate new economic and social wealth and of avoiding the financial consequences of failure. Locally, the Yorkshire & Humber Climate Change Action Plan contains a stark assessment of the impact of climate change on this region, with parts of Wakefield district's dense urban areas and communities subject to flood risk and likely to be particularly vulnerable.

Measures for flood mitigation will have to take into account areas of land along the major rivers and within new developments to lower the risk of flooding, while opportunities for additional roles of these spaces as accessible greenspaces and wildlife habitats should be seized. Together with sustainable drainage systems, these will become increasingly more important as additional surfaces are being sealed as parts of new developments in the district.

UK climate change projections provided by DEFRA indicate that in Wakefield, as in the region, summer and winter mean temperatures are likely to rise by 1.3 c and winter rainfall will increase by 5% with summer rainfall decreasing by the same amount.

The Council expects that future development will be as sustainable as possible. The design and layout of buildings can make a significant contribution to reducing greenhouse gas emissions and utilising resources efficiently through the use or production of renewable energy, waste recycling, reducing use of water and moving towards zero carbon development. New development should also use sustainable drainage techniques to reduce the risk of flooding.

The demand for green infrastructure investment to tackle climate change will also come from public agencies like the Environment Agency using green infrastructure to manage watercourses and address flooding problems. Green infrastructure projects to lock up carbon such as woodland, peat bog or biomass are likely to increase as companies seek a means of minimising or offsetting their carbon emissions by investing in projects in their local area.

It is anticipated that these demands will increase substantially in coming years as public policy instruments, such as carbon trading, building regulations and planning policies for example, become more stringent as the impacts of climate change become more damaging. Green infrastructure projects that offer direct and local climate change related benefits are likely to be targeted for public and private sector investment.

## 3.3. Health and well-being

The importance of publically accessible open space has long been recognised in local planning policies, often using open space standards to require the provision of new open space and commuted sums from developers. For some local authorities, this form of green infrastructure investment will have been a crucial source of funding over the last few years.

It is likely that the demand for green infrastructure investment will increase to meet health and well-being objectives. Natural England cite growing medical evidence, which shows that access to the natural environment improves health and well-being, prevents disease and helps people recover from illness. Green infrastructure can help tackle obesity, coronary heart disease and mental health problems and as such form our 'Natural Health Service'.

Although recent decades have seen major improvements in general health in Wakefield, lifestyle related ill health is a growing problem. There has been an increasing focus on interventions to support people to make healthier lifestyle choices to improve overall health and well-being, including mental health, and reduce health inequalities. The Council's long term vision for Wakefield is a place where people look after themselves so that they are safe and healthy with one of the aims of the Community Strategy being to influence people to lead healthier lifestyles.

The 2009 Health Profile for Wakefield (Association of Public Health Observatories) provides the following snapshot of health for this area. Over the last ten years, all age all cause mortality, early deaths from heart disease and stroke and from cancer have fallen, but remain above the England averages. Life expectancy, deaths from smoking, early deaths from heart disease and stroke and from cancer are all worse than the English average. There are health inequalities in Wakefield by gender and deprivation. Both men and



women living in less deprived areas are more likely to live longer than those living in deprived areas.

The Marmot Review<sup>1</sup> makes an explicit link between the provision of green infrastructure assets and the health of local communities and it highlights the role that green infrastructure can potentially play in addressing health inequalities among communities. The report recognises that ‘Much of what we recommend for reducing health inequalities – active travel (for example walking or cycling), public transport, energy-efficient houses, availability of green space, healthy eating, reduced carbon-based pollution – will also benefit the sustainability agenda’, and most of these aspects naturally form part of green infrastructure. Crucially, the policy recommendations of the Marmot Report include improvements in the availability of good quality greenspace across the social gradient and improving the food environment in local areas.

There is clear evidence of the adverse effects of outdoor air pollution, especially for cardio-respiratory mortality and morbidity. Poorer communities tend to experience higher concentrations of pollution and have a higher prevalence of cardio-respiratory and other diseases. Creating a physical environment in which people can live healthier lives with a greater sense of well-being is a hugely significant factor in reducing health inequalities. Living close to areas of green space can improve health, regardless of social class. Numerous studies point to the direct benefits of green space to both physical and mental health and well-being.

Green space and green infrastructure improve mental and physical health and have been shown to reduce health inequalities. Green infrastructure networks reduce urban temperatures and improve drainage, reducing the risks to health associated with heat waves and flooding. Well designed and maintained green spaces can encourage social interaction, exercise, play, and contact with nature. Well designed, car free and pleasant streets encourage feelings of well-being, chance interactions and active travel; good quality and good access to public spaces contributes to pride in the community, integration and social cohesion. Over 95 per cent of people believe it is very or fairly important to have green spaces near to where they live and this value placed on green space is consistent across the social gradient.

### 3.4. Biodiversity

Biodiversity matters for a variety of reasons. Firstly, habitats and species provide the source for an enormous range of products and services that we consume and use, such as growing timber or the pollination of crops by bees. In addition, a well planned and managed natural environment is a key component in shaping the character and quality of places in which both people and businesses will want to invest their futures. Living things interact together to provide clean water, air and soils as well as contributing to flood amelioration, all of which help in making our planet habitable.

More generally, biodiverse areas enrich our lives and are a source of inspiration. We gain enjoyment and inspiration from wildlife and contact with the natural environment. Visual contact with nature and active recreational use of natural green spaces contribute to people’s psychological well-being and physical health. The natural world is a valuable resource for the whole community, from schoolchildren to scientists, providing opportunities for learning, artistic expression, research, exploration and play. Research by Wakefield Council among its citizens showed that ‘natural environments’ and ‘the opportunity for contact with nature’ are the two most valued aspects of green spaces.

Despite the rise of environmental awareness and the popularity of nature conservation programmes over the past few decades, studies demonstrate the dramatic and worrying loss of biodiversity and deterioration of terrestrial and aquatic ecosystems. With the scale of growth planned in Wakefield, the loss of some areas of biodiversity value will be inevitable, so ensuring no overall net loss in this value is a key challenge. Habitat networks and landscape scale biodiversity conservation are recognised as important in protecting biodiversity; the traditional approach to designating individual protected areas has been recognised as insufficient to halt the loss of biodiversity, especially as the need for species to adapt to climate change becomes more apparent.

Public policy at the international, national and regional levels has long regarded declining biodiversity as a major environmental challenge. Investment in green infrastructure to improve biodiversity specifically has generally been made by environmental organisations

using members' charitable and public funds. Often, such opportunities will be realised on the back of projects designed to achieve another complementary objective, for example as part of new or enhanced public parks.

The demand for green infrastructure investment to secure biodiversity gain may increase in the future, if new habitat banking or biodiversity offsetting mechanisms are introduced into the UK. DEFRA and Natural England are currently considering how such mechanisms may operate. If introduced, they may create new sources of funds, and a demand for offsetting projects, especially in areas facing biodiversity losses as a result of economic growth.

In addition, the opportunities to achieve biodiversity and ecosystem services gains through green infrastructure investment made primarily to achieve other benefits – the concept of multi-functionality – will increase as the other three drivers above become increasingly important. This is especially the case in Wakefield, where this driver is less likely to be prominent alongside others in public investment decisions.

However, the district's recently revised Biodiversity Action Plan focuses on action to conserve and enhance a series of Priority Habitats and Priority Species across the district. For example, the Yorkshire Wildlife Trust's 'Living Landscapes' programme, backed by the Yorkshire & Humber Biodiversity Opportunities Map, has been successful in winning resources for biodiversity action along the River Went corridor through Heritage Lottery funding.

Also, the Forestry Commission's Target Areas for Biodiversity highlight the potential to retain and improve biodiversity in the south west of the district, where ancient woodlands have been identified for their current and potential biodiversity value, while the Yorkshire Wildlife Trust aims to get progress underway in this area under the 'South West Wakefield Living Landscape'.

### 3.5. Assessing the drivers together

Each of the four drivers described here will play a part in creating demand for green infrastructure in the future through their relative influence will change over time with economic and political cycles at national and local levels.

For the next few years, the council and its key partners believe that, despite the economic challenges, the planned economic growth and regeneration of the district will continue to create the greatest demand for, and therefore supply of, investment in green infrastructure. This does not mean that the others drivers are less important nor that opportunities to win investment to address will not be pursued. It does, however, enable the plan to focus its efforts.



Fig.2 - Emphasis on drivers in the Wakefield district





## SECTION 4.0

### Strategic objectives









#### 4.1. The spatial vision for Wakefield

The overall spatial vision set out in the Council's Local Development Framework Core Strategy states:

By 2026 Wakefield District will be a more attractive, prosperous and sustainable place with improved quality of life. The district will make a significant contribution to the prosperity and diversity of the region and will benefit from the expansion of the sub-regional economy by taking advantage of its accessibility to centres within the Leeds City Region and to the national transport network.

The demand for new development generated by continuing economic growth will be accommodated in a sustainable way, by ensuring that the benefits are spread throughout the district, particularly to areas which experience high levels of deprivation (the Councils 'priority neighbourhoods', as shown in plan 18 of the Technical Baseline Report) in a manner which protects and enhances the environment. More sustainable patterns of living will be achieved through the creation of balanced communities, where individual settlements have a range of housing, jobs and services to meet local needs, appropriate to their size and function, and where other jobs and higher level services can be accessed conveniently by sustainable means of transport.

Wakefield, Castleford and Pontefract will continue to be the main centres of the district where most homes, jobs and services are located. The other urban areas of the district will become more attractive and viable, being the focus of local shopping, employment and service provision. Investment and new activities will be located in the city and town centres where they will contribute to urban renaissance and other regeneration initiatives. In villages and the smaller settlements new development will be limited to that which enhances or maintains their sustainability in order to ensure that growth is distributed in a way that supports social networks, assists people to benefit from key services, minimises environmental impacts and encourages smaller scale economic growth. The Site Specific Proposals Development Plan Document will provide details of allocated sites.

The quality of the district's rich historic and natural heritage, its diverse wildlife and habitats and the

character of its landscape and open spaces will be protected and enhanced and the Green Belt will be maintained. Opportunities will be taken to create new habitats and landscape features. Improved standards of design and management will improve the quality of the built and natural environment.

The Council will work with the Wakefield District Partnership, Wakefield Together, other agencies and groups, citizens and businesses to bring about the desired changes and will seek to direct new development, infrastructure and services towards fulfilling the vision. The district will continue to make a significant contribution to the prosperity and diversity of the Leeds City Region and the wider Yorkshire & Humber Region. Close links with neighbouring areas will be strengthened and the district will benefit from the expansion of the sub-regional economy by taking advantage of its accessibility to other centres within the Leeds City Region and to the national transport network. Education and training will be essential to achieving the vision, underpinning future economic development and enterprise, reducing inequalities and improving the quality of life, as set out in the Economic Regeneration Strategy.

Action and investment will be focused on making Wakefield a distinctive, vibrant city at the heart of the district's economy, with a distinctive retail offer, modern office accommodation, a range of quality residential opportunities and a mix of excellent leisure and cultural facilities. Key regeneration schemes will be completed over the next few years, include the Wakefield Waterfront development, Wakefield Westgate (Merchant Gate) proposals and the Marsh Way (Trinity Walk) redevelopment.

Urban renaissance initiatives will be progressed in the 'Five Towns' (Castleford, Pontefract, Normanton, Knottingley and Featherstone) to transform these urban areas, providing new housing, economic opportunities, good quality transport links and a high quality environment. Subject to resource availability, masterplans for Featherstone and Pontefract will be implemented, Castleford's town centre strategy will be refreshed and new plans will be prepared for Knottingley and Normanton. Castleford and Pontefract town centres will provide a range of shopping, service,



health and transport opportunities which meet the needs of those living in the area. Glasshoughton (Castleford) will continue to provide sub-regional leisure and niche shopping opportunities which complement and enhance the town centres.

In the South East of the district new development and investment will be focused in Hemsworth to enhance its role as a market town, and in South Elmsall/ South Kirkby, to ensure they become viable, and sustainable centres for local jobs and services. The Green Corridor partnership will deliver concerted action to tackle housing market issues in parts of the area and improve the housing environment.

The Council and its partners will work together to ensure that new housing is focused on aiding the delivery of sufficient housing to meet identified needs and strategic requirements including the need for affordable housing. Action by Wakefield and District Housing, the Council and private owners will help improve the existing housing stock, mainly through refurbishment but in some places through selective demolition and rebuilding.

The Council will work with Metro, bus and rail operators and developers to improve public transport services to enable speedier, more convenient travel throughout the district and the wider sub-region, allowing people in rural areas and smaller communities to take advantage of the range of jobs and services available in larger centres. Investment in key highway schemes and new traffic management measures will help to relieve congestion particularly in city and town centres and on the strategic highway network.

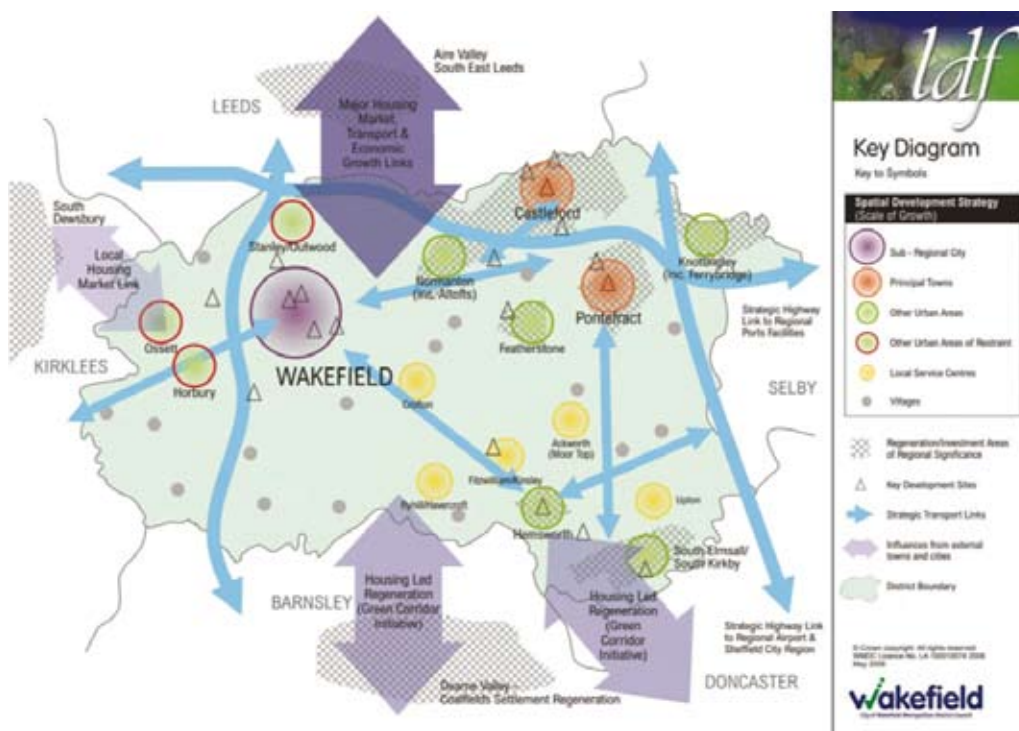


Fig. 3 - The Core Strategy Key Diagram

## 4.2. The spatial vision for green infrastructure in Wakefield

The spatial vision for green infrastructure in Wakefield takes the Local Development Framework spatial vision and articulates it in a way that emphasises the potential role that green infrastructure will play in realising the vision.

It builds on the urban and rural character of the district, while integrating major opportunities to shape its environment and economy. Building on its physical identity, the spatial vision aims to create a high quality urban and rural environment that supports a sustainable way of life for its communities.

The green infrastructure spatial vision perceives Wakefield as a district with diverse and distinctive settlements with a clear distinction between the settlements and the countryside within which they sit. Linked, self contained and well defined communities within historic settlements and new developments, relate to their environmental context and form a symbiosis with accessible countryside that complements the offer of urban green infrastructure assets.

Key elements of the spatial vision are described below and illustrated by Figure 4:

- Compact urban centres with a diverse and distinctively urban quality of life that integrates environmental, cultural and historic assets and 'active travel links' between urban centres, employment areas, settlements, green spaces and the immediate countryside;
- A distinctively rural landscape in the southern and eastern parts of the district, offering opportunities for sustainable farming, access and recreation;
- Accessible river landscapes on the Rivers Calder, Aire and Went and their tributaries, maximising the opportunity for flood alleviation and biodiversity in rural areas, together with culture in urban areas, shaping the district's sense of place;
- A wooded landscape, stretching around the city of Wakefield, into the Five Towns and the southeast, featuring multifunctional woodlands as the backbone of a landscape that offers accessibility, recreation, biodiversity, health and well-being, climate change and economic benefits to the community, integrating existing green infrastructure assets.

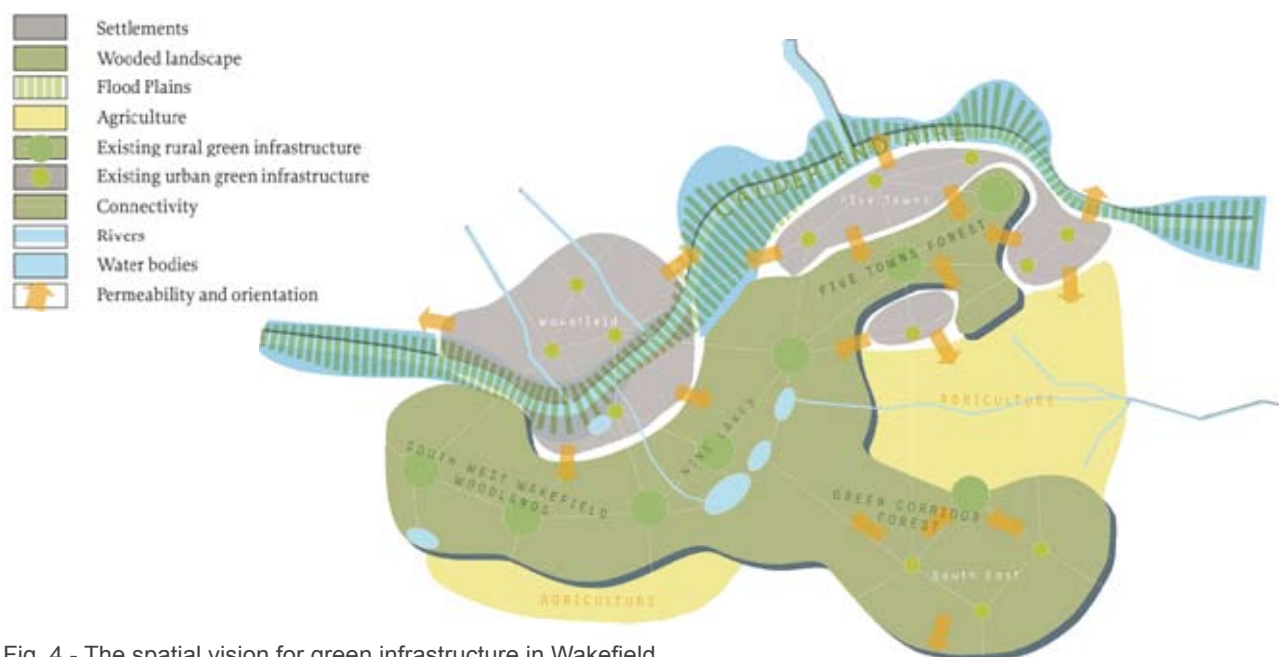


Fig. 4 - The spatial vision for green infrastructure in Wakefield

### 4.3. The plan

The goal of the plan is to promote the contribution that green infrastructure investment can make to the future development of Wakefield and place it at the heart of the district's spatial planning, economic development and climate change actions.

The plan builds on the strengths of the district's existing green infrastructure assets, partnerships and projects and using these as the basis for future investment. It seeks to build on and maintain the momentum of existing projects and initiatives whilst identifying opportunities to expand their scope, to increase awareness of them and to win new investment for them. To do so, it focuses on those investment opportunities where planning and designing green infrastructure will add the most value.

Although Wakefield has a natural environment with many attractive and valuable assets, it will not be enough to deliver the quality of place expected by local communities. Our understanding of the drivers of future green investment shows that the district's growth and regeneration plans will demand more of what it already has and will require new assets to be created as well. And in both cases, green infrastructure will need to be multi-functional and productive if it is to create lasting value for local communities.

The plan has therefore chosen green infrastructure objectives and initiatives that respond positively to future drivers of investment and that align with strategic priorities in Wakefield. The objectives relate closely to the Wakefield Together objectives and those of the adopted Wakefield Core Strategy. The initiatives have been identified to have the greatest impact on meeting those objectives.

It is also important that the plan is aligned with the aims and objectives of other key green infrastructure players in Wakefield. These organisations – Natural England, the Environment Agency, the Forestry Commission, the White Rose Forest Partnership and Groundwork among many others – will continue to invest in maintaining and improving green infrastructure in the district so care has been taken to ensure the initiatives chosen match their investment priorities.

The result is a plan that is both ambitious and innovative, especially at a time of considerable economic

uncertainty. Its main initiatives focus on delivering green infrastructure investment to promote sustainable housing and economic growth as these will continue to drive local priorities for years to come. Every proposed action will deliver on this objective. But, whilst this objective is of primary importance, all the proposed actions will also create significant opportunities to realise climate change, healthy lifestyle and biodiversity benefits on a large scale.

The plan requires a new way of thinking about green infrastructure. For Wakefield's Local Development Framework to succeed into the long term, green infrastructure must be seen as an essential means of creating economic, social and environmental value. In doing so, it will add considerable substance to economic development, health and well-being and climate change plans that may otherwise remain disparate.

It also needs to find new ways of making existing investment go further and of finding new sources of funds as the availability of traditional public sector resources becomes increasingly constrained. However, the breadth and depth of actions proposed are considered appropriate and achievable and will keep step with the district's other plans.

To be successful, the plan will evolve over time as circumstances change. As such the choice of strategic initiatives proposed in this section has been made to reflect the situation in 2010. As circumstances change and projects are delivered, so new projects and programmes will emerge. However, what is not likely to change is the role that green infrastructure will play in the success of the district. As such the four strategic objectives set out below should continue to shape green infrastructure investment in Wakefield for many years to come.



#### 4.4. Strategic objectives

Four strategic objectives have been selected to ensure that the plan delivers Wakefield's vision for green infrastructure. They are complementary in respect of actions although each will depend on other actions outside the scope of this plan to deliver sustained success.

The relative importance of these objectives will change over time; the plan reflects these differences in its chosen initiatives and in defining the spatial and delivery frameworks within which investment will be secured in future.

**OBJ 1:** To promote the renaissance of the City of Wakefield, the Five Towns and the South East by:

- Increasing the attractiveness of new housing and employment land for investment
- Promoting a high quality design in all new development
- Ensuring open spaces are protected, maintained and enhanced
- Enhancing the appearance of the public transport hubs and services to promote walking and cycling for journeys to work

**OBJ2:** To adapt to and mitigate climate change by:

- Enabling the district to be more resilient to flooding and higher urban temperatures
- Reducing the district's greenhouse gas emissions

**OBJ3:** To improve overall health and well-being and to reduce health inequalities by:

- Increasing the quality and accessibility of natural green spaces, walkways and cycleways in both new and existing developments
- Increasing the use of natural green spaces, walkways and cycleways by local people
- Promote sustainable transport by increasing the opportunities for and uptake of active travel, such as walking and cycling, in both new and existing developments

- Targeting green infrastructure according to local needs and priorities so that we deliver the right green infrastructure in the right places.

**OBJ4:** To improve biodiversity by:

- Increasing the area of high biodiversity value
- Protecting and conserving important natural environment assets



## SECTION 5.0

### Strategic initiatives









The Council is working with its neighbours in the Leeds City Region to pursue common green infrastructure goals. The plan is closely aligned with the recently adopted Leeds City Region Green Infrastructure Strategy in terms of its choice of initiatives, to enable Wakefield to be well-positioned to secure investment routed through the city region level.

There are three types of initiative proposed with the aim of maximising the impact of green infrastructure in Wakefield:

<b>Investment Programmes</b> - to create new investment opportunities for green infrastructure action across the city region with a focus on specific, common types of local intervention	Green Places Green Working Growing Food Locally
<b>Strategic projects</b> - to promote as significant exemplar green infrastructure actions with an city region impact	Fresh Aire Wakefield Forest <ul style="list-style-type: none"> <li>▪ Five Towns Forest</li> <li>▪ Nine Lakes</li> <li>▪ South West Wakefield Woodlands</li> <li>▪ Green Corridor Forest</li> <li>▪ Balne Lane Fields</li> </ul>
<b>Opportunity Areas</b> - to shape and secure high quality green infrastructure investment through the Local development Framework and the delivery of masterplans	Wakefield East Newmarket Westgate-Wrenthorpe Valley Corridor Westfield Lane, South Elmsall Castleford Knottingley-Pontefract-Ferrybridge Normanton and Altofts Featherstone

The core of these strategic initiatives has been identified through the steering group workshop, which took place at the start of April 2010, an overview of which is included in the accompanying Technical Report.

## 5.1. Investment programmes

Investment Programmes are intended to create new investment opportunities, focusing on achieving a cumulative impact from delivering similar types of green infrastructure project. The programmes have been chosen and shaped to provide a strategic focus for public and private investment and activity without seeking to predict exactly when, where and how green infrastructure planning and delivery will happen into the long term.

The projects that come forward for funding under each programme in due course will be taken forward on a local level by one or more lead agencies. These will take responsibility for the preparation of an investment prospectus and will seek investment from target sources.

Two of the three investment programmes have been identified through the Leeds City Region Green Infrastructure Strategy and have been identified in this plan as they have special relevance to Wakefield.

### 5.1.1. 'Green Places'

#### What is it?

Well designed and maintained green spaces can encourage social interaction, exercise, play and contact with nature. Well designed, car free and pleasant streets encourage feelings of well-being, chance social interaction and active travel, while contributing to pride in the community, integration and social cohesion.

This programme offers the potential for enhancing open spaces in our towns and cities to become more attractive to the local community and to encourage wider access to green spaces within the urban areas, while addressing climate change issues at the same time. The urban green spaces, parks, street trees and waterways will become increasingly important and as pressures on greenspace increases with new developments taking place, the programme supports the accessibility and functionality of urban green spaces and addresses the adverse impact of rising urban temperatures and flood risk in urban areas through a number of measures.

Replacement of impervious surfaces with permeable and vegetated surfaces will reduce the rate of surface water runoff and have a notable effect on hydrological processes by providing shading, evaporative cooling and rainwater interception, storage and infiltration. Sustainable drainage system with swales and retention ponds will store water at peak times, and will help alleviate flood events during those periods.

As there are distinctly different types of settlements in the district, the programme will comprise of two different components: one growth related; the other related to neighbourhood renewal in the old mining communities.

Due to the planned growth in and around the urban and densely populated areas of Wakefield and the Five Towns, these places will see the focus on the integration of new green spaces into developments, improvements to existing parks as well as a better integration of existing green infrastructure assets into the urban context. The greening of streetscapes, existing and new, can help to increase the legibility and amenity of the urban environment, provide shade, encourage access to parks and create benefits for the microclimate.



The district benefits from a high number of urban parks spread across both large and small settlements. The historic distribution has diluted management effort and investment to the point where the main parks central to the Growth area- Thornes and Pontefract parks are not fully serving the needs of Wakefield or the Five Towns. Investment is needed for the district's 'Top Destination Greenspaces' to fulfil the role they must play for projected enlarged populations.

Urban greening in the old mining communities in the south east of the district is likely to be focused on greening and smaller scale improvements to the immediate living environment linked with regenerated colliery sites and country parks at Frickley, Fitzwilliam, South Kirkby and Upton. Environmental enhancement within urban areas, as described in the Green Corridor Strategy, and improved green links into the countryside around the settlements via the South Elmsall/ South Kirkby/ Upton Ringway ('SESKU Ringway'), will form part of the programme as well as improvements to existing parks.

#### **What will we do?**

- Better integration of existing and proposed urban parks into their context with enhanced pedestrian and cycle links and reduced "psychological barriers" where this is possible (e.g. Thornes Park in Wakefield, which is separated from the city centre by a ring road)
- Improvements to the major parks in the district
- Greening of streets leading towards parks and into green infrastructure assets close to towns and in areas that are subject to a shortfall of urban greenspace
- Identify where new development could integrate and help to supply green infrastructure with benefits for existing and new communities
- Promote links to green infrastructure assets in close proximity to towns to make the best of them, e.g. improved signage
- Where appropriate and feasible, sustainable drainage systems, green roofs and planting to be retro-fitted into existing developments
- Create offers for different demographic groups with particular needs, e.g. setting up programmes that address different interests and increase the communities' ownership

#### **How will we do it?**

An audit of existing green spaces, recreational and amenity land will be carried out to support the Council's forthcoming Green Space Strategy. The pressures that these spaces are currently under can also be reviewed within the audit. We will identify which areas are likely to experience additional pressure through future developments and will identify the potential for some spaces to fulfil additional functions within the community. This will particularly target the Opportunity Area locations to determine the extent to which the existing open spaces are suited to meeting the needs of local communities. Engagement with local communities and partner organisations whilst developing strategies through the LDF and planning management processes will ensure that green infrastructure, amenity and recreational spaces fulfil the needs of the local community.

Where tree planting in the public realm and street scene is precluded, the Council will examine how to encourage private land owners to plant trees and manage their development to maturity, particularly in locations where trees will make a valuable contribution to the public realm and street scene such as in front gardens, and where space in the public realm and street scene is limited.

The investment programme also aims to create and enhance green links from the urban areas into the immediate countryside, which supports the aim of ‘making the best of what is available already’ which was raised in the consultation. Urban areas in the district are tightly populated and greenspace in urban centres is scarce. The greening of urban streets and the provision of footpaths and cycleways linking to surrounding green infrastructure makes assets more accessible, increasing their use and decreasing some of the pressure on the more central urban green spaces. Active travel links particularly between residential, retail areas and town centres present the opportunity to integrate sustainable modes of travel into the local community’s everyday life, ensuring their maximum impact. Also, opportunities for restoring river and wetland habitats and developing green walls and roofs will be sought.

Accessibility of the surrounding countryside is particularly important in relation to the Five Towns, the South East Rural regeneration areas and also in Wakefield City, where the rivers and canals form obvious routes and significant Green Infrastructure assets are close enough to walk to. Sandal Castle and Pugneys Country Park in particular for Wakefield City, but also Frickley Country Park, SESKU Ringway and Fryston Country Trails in the east and south east of the district are significant.

The programme relates to the Leeds City Region ‘Urban Green Adaptation’ green infrastructure investment programme, through which this programme is likely to attract higher level funding and which provides a sub-regional context with counterparts in other local authorities.

#### **Lead Partner**

- Wakefield Council

#### **Key Delivery Partners**

- Natural England
- Environment Agency
- Forestry Commission
- Groundwork Wakefield
- Town and parish councils
- Yorkshire Wildlife Trust
- Homes and Communities Agency
- Sustrans

#### **Core Outcomes**

- Increasing the functionality and accessibility of urban green spaces, as defined by the Green Space Strategy
- Upgraded Top Destination Greenspaces in the district with increased visitor numbers
- Reduction in urban heat island effect
- Increased quality of living environment
- Provision of increased shading in urban areas
- Improvements in health and well-being and reductions in health inequalities
- Increased use of green spaces in and around towns to relieve some of the pressures that urban greenspace suffers
- Decreased water run-off through Sustainable Drainage Systems, resulting in a decreased risk of flooding
- Increased uptake of active travel

### 5.1.2. 'Green Working'

#### What is it?

Green infrastructure offers the potential to create a local environment that attracts high quality knowledge based industries, which is a core aim of the Council's Community and Economic Regeneration Strategies.

Many employers recognise that they have a direct interest in creating an environment that helps people make healthy choices because of corporate social responsibility and because a healthier, more engaged workforce makes good business sense as a motivated, healthy workforce is more likely to perform well and employers and employees benefit through improved morale, reduced absenteeism, increased retention and improved productivity. The provision of active travel routes and the integration of green spaces within employment sites can deliver a multitude of social, economic and environmental benefits, which favour employer and employee alike.

Investment in green infrastructure has been shown to positively influence the image of employment sites and the district as a whole, increasing site sustainability and promoting active travel to work, all of which potentially increase inward investment. To capture these benefits successfully, green infrastructure must be integrated with a series of co-ordinated actions and focused in the locations where it can make a real difference. The programme will concentrate its action on proposed strategic employment sites and at transport hubs in the district.

The programme will therefore deliver green infrastructure actions to support the remediation and redevelopment of brownfield sites and the promotion and enhancement of strategic employment sites where the costs of site preparation and the perception of local environmental quality will be a factor in commercial investment decisions.

Previous examples in the district show that environmental improvements on industrial and business parks can make a difference in uptake. Improvements to Lanthwaite Grange Business Park increased the amenity and security of the site, increasing its occupancy and making it a more attractive place to work.

Where potential sites are in close proximity to green links or transport interchanges improvements to these will support the idea of greener ways of travelling, creating an impact on the commuting patterns in the district and potentially contributing to better health.

As we identified economic growth and development to be the main driver for green infrastructure in the district, this programme will be of particular significance with health and well-being being an additional driver through the development of local food production, sustainable tourism, active travel and greener leisure activities.

#### What will we do?

- Identify sites that have been put forward for employment and would benefit from a unique selling point
- Identify sites where green infrastructure can influence the layout and structure of future employment sites and maximise their potential in terms of maximising environmental assets and sustainable travel
- Identify existing industrial and business parks in the district whose security and amenity would benefit from green infrastructure interventions
- Development of a 'green branding'
- Encouraging green roofs, sustainable building technologies, Sustainable drainage techniques and the use of sustainable forms of energy
- Early greening in preparation for the development of future employment
- Identify land reclamation sites that would benefit from green infrastructure investment to better integrate them or form a temporary use
- Encourage the provision of green spaces within employment sites
- Integrate active travel routes between employment sites and local communities to improve access to employment opportunities along with take up of active travel. Active travel routes between settlements and tourist attractions and between attractions themselves will help develop the sustainable tourism sector.



- Development of local food production and the procurement of food from local suppliers will support the growth of this economic sector

#### **How will we do it?**

We will prepare a schedule of relevant sites, existing and proposed, whose layout, management or sustainability credentials would benefit from the integration of green infrastructure opportunities. We will establish how increased and specifically targeted marketing could increase the uptake through businesses, influencing the strategic location of knowledge based businesses in particular areas. Engagement with local land owners will inform this process.

In these locations, we will ensure that any emerging planning policy documents and regeneration/spatial strategies and masterplans that are prepared to promote development, and determine subsequent planning applications, properly take into account the green infrastructure potential to deliver high quality schemes.

The preparation of the schedule will also consider the location of existing and proposed public transport hubs and key public transport services to which the Local Transport Plan forms a potential source of funding. Green infrastructure interventions will help to increase the attractiveness of public transport hubs to potential users. This would be achieved through small scale low cost strategic interventions that aim to create easy changes between different modes of travel and thereby encourage active travel in the district. Work with the new Local Enterprise Partnership (when formed), Metro, neighbouring local authorities and other partners will form the basis for implementing this programme.

The programme will invest in all these green infrastructure actions and provide local planning authorities with greater leverage to use planning conditions and S106 agreements to negotiate high standards of green infrastructure works and ongoing management.

The investment programme is well-aligned with the programme of 'Greening our Economic Potential' in the Leeds City Region Green Infrastructure Strategy, which aims to create 'more inward investment, uplift in land values, greener commuting and as a mechanism for inspiring and motivating developers', and this programme offers the opportunity to promote sub-regional efforts on a local level.

Further resources will have to be identified to deliver green ways of working, possibly through the European Regional Development Fund (Priority 6), the Homes and Communities Agency, Welcome to Yorkshire for sustainable tourism measures, the Rural Development Programme for England, the Regional Growth Fund and the private sector.

#### **Lead Partner**

- Wakefield Council
- First

#### **Key Delivery Partners**

- Local Enterprise Partnership
- Metro Passenger Transport Executive
- Natural England
- Groundwork Wakefield
- White Rose Forest
- Homes and Communities Agency

#### **Core Outcomes**

- Speedier take up of strategic employment sites by higher value-added businesses
- Improved access to employment opportunities
- Increased sustainability of employment sites through better exploitation of sustainable forms of energy
- Improved transport interchanges that create one of the prerequisites for sustainable movement patterns
- Improved provision and connectivity of active travel routes between employment sites and local communities
- Improved access to employment opportunities
- Access to open space within employment sites
- Provision of healthier working environments
- Improvements in health and well-being and reduced health inequalities
- Increased vitality of local food production and sustainable tourism employment sectors

### 5.1.3. 'Growing Food Locally'

#### What is it?

Allotment gardens, community gardens and orchards all form a valuable part of green infrastructure within and close to settlements and present the opportunity to create benefits for the health and well-being of local communities and addressing climate change issues.

The investment programme will help to unlock community and land resources that will enable the population to grow food locally and in the most sustainable way possible, while improving the environment on the neighbourhood level. This will support increased levels of self-sufficiency within communities and will help to increase levels of independence from finite energy resources and providing a way of adapting to climate change. In addition to improvements to the physical environment, individuals and communities across the district will also benefit from the multitude of health and well-being outcomes associated with gardening and a healthy diet.

Currently, there are disparities in the provision and uptake of allotment gardens in the district. Whilst in some areas there are notable discrepancies between supply and demand (i.e. demand exceeds supply), the quality of the provision in other areas (i.e. disrepair & lack of facilities) curbs the demand for and uptake of plots locally. Overall, the intention is to ensure that the right type, quantity and quality of provision are delivered to local communities.

Although the theme of growing food has traditionally been focused on allotments, the investment programme aims to widen this approach and aims to increase the production of local food through both formal and informal actions, some of which might be organised through the Council and other stakeholders (i.e. the provision of allotments), while others might only be instigated through the provision of a platform for interested people to start their own initiatives.

Despite variations in local demand, trends suggest that the demand for land to grow food is increasing throughout the district, indicating a growing interest and enthusiasm of the local population, which should be fostered and harnessed as a valuable resource.

#### What will we do?

- Undertake an audit of sites within the district to establish municipal capacity for 'Growing Food Locally'.
- Evaluate what is working on both a local and national level.
- Undertake a 'Growing Food Locally' Action Plan.
- Ensure that the supply, type and quality of plots and wider projects for growing food meet current and future demands
- Facilitate and support the development of platforms for local initiatives.

#### How will we do it?

The plan aims to increase the amount of food that is grown in the district while maximising the impact on wider priorities for the district. Overall, the plan aims to address the two main issues of meeting local needs in terms of providing the right type, quantity and quality of land and facilities to grow food and interventions that will encourage people to get involved.

The programme will include the preparation of a 'Growing Food Locally Action Plan' for the district, which looks at the theme of growing food in a wider context and provides a coordinated approach of how to bring together the numerous projects with their various objectives to create a symbiotic impact. As a basis for this Plan, a capacity audit should be the first step to provide greater clarity as to where current land for growing food is located. Waiting lists for allotment gardens and consultation with stakeholder groups will then highlight where the supply of land for growing purposes is particularly limited.

New sites for growing food can potentially be delivered through negotiation with developers as part of their development proposals and supported by planning policy. Neglected and underused sites can also be delivered through negotiation with developers to secure the capital investment required to bring sites back into use, i.e. for fencing, pathways, roads, toilets, storage facilities and water supply.

In other circumstances, neglected and underused sites could be promoted through local programmes to kick-start and revitalise interest. Preparing overgrown sites

for cultivation could be the initial step of bringing unused plots back into use, potentially drawing on voluntary sector organisations to instigate the regeneration of these sites. In addition, sites could form part of existing parks, in school grounds, grazing paddocks or on areas of redundant land, which have little value for new housing or employment. Within the area of search, interventions will initially be targeted at priority neighbourhoods to improve health and reduce health inequalities.

The designation of additional sites for allotment gardens will be followed by the development of management plans for each of these sites. However, less formal arrangements will be encouraged, such as community gardens and community orchards. Also we will encourage the idea of landshare initiatives through the official communication platforms of the Council and its partners that will allow those interested in growing their own food to take initiative independently. Measures such as half size plots, plot sharing schemes, community plots and produce exchanges will increase the number of people participating and will potentially widen the impact of the programme.

A number of initiatives in the district are working within the scope of this theme already. These are varied and are funded and delivered in partnership by a number of stakeholders across the district. Fundamentally, each initiative focuses on three strands: food production, distribution and healthy eating. Collectively, these three strands form the basis for delivering the overall aims of 'Growing Food Locally'.

The Healthy Schools Team are already engaged with encouraging food growing schemes in schools. The Community Food and Health team work with local communities to raise awareness of the health benefits of eating a balanced diet (their work includes education on healthy eating in schools and growing projects in both schools and communities). The Three Areas Project (TAP) encourages a healthier lifestyle and incorporates projects to increase physical activity, growing and preparing healthy food and strengthening the sense of community among the local population.

There are other examples of work being undertaken within the district with a remit for wider social returns i.e. Groundwork Wakefield deliver 'Growing for the Future' which provides employment for adults with

learning difficulties to develop skills through growing and cultivating plants, flowers, fruit and vegetables which are sold to the public from Thornes Park; BTCV's 'green gym' initiative which focuses on both physical and mental health outcomes for participants, also the Able Project which provides training and learning opportunities to vulnerable young people through a fish farming operation and involvement in horticulture.

#### **Lead Partner**

- Wakefield Council

#### **Delivery Partners**

- NHS Wakefield (Primary Care Trust)
- Town and Parish Councils
- Wakefield & District Housing
- Able Project
- BTCV
- Groundwork Wakefield
- Incredible Edible Wakefield
- Schools
- Community Centres
- Local community groups
- Project Pugwash
- Other local landowners i.e. Duchy of Cornwall
- Developers



### Core Outcomes

- Increased provision of plots/ land allocated for growing food which meets demand
- Higher environmental quality on neighbourhood level with land that is looked after and valued by the local community
- Increased amount of food grown and consumed locally
- Land brought back into use
- Positive health impact, physically and mentally, through the activity of gardening
- Positive health impact through increased awareness and consumption of healthy foods that is likely to occur in the process
- Increased overall participation in local food growing, strengthening community engagement and community cohesion
- Increased knowledge and awareness through an increased understanding of sustainability, health and food and the links between them
- Increased independence from finite energy resources
- Increased take up of healthy/ active lifestyle activities
- Improved health and well-being and reduced health inequalities
- Better choice and opportunity for those who wish to participate in growing their own food locally through increased capacity, opportunity and participation style.



## 5.2. Strategic projects

Strategic projects are site specific or clusters of green infrastructure actions that will create an impact at district scale. They have been identified as being of significant importance as they address particular needs that would be difficult to address through other mechanisms or because they will have a large impact, with significant benefits for people, wildlife or the environment more generally.

### 5.2.1. 'Fresh Aire'

#### What is it?

The Aire river valley system, rising in the Craven district, and including the River Calder, forms the focus of a bold and innovative major Leeds City Region green infrastructure project that aims to place the City Region at the forefront of post industrial city planning in Europe.

A significant stretch of the river valley and its major tributary, the Calder, lie at the heart of the City Region. In the Wakefield district, where the two rivers meet at Castleford, the landscape is dominated in part by built development, transport and energy infrastructure, which are testimony to the area's success and growth since a period of rapid industrialisation in the nineteenth century. Yet the river provides a natural corridor linking countryside to town.

It is in this complex and largely built environment where a significant proportion of the district's population live and where the City of Wakefield, the Five Towns and therefore major industrial and commercial interests are located. It is also where the change to a modern, environmental-led, post-industrial district will be at its most prolonged and intense and where green infrastructure will have a crucial role in shaping a positive future and vibrant new sense of place and identity.

A wide range of existing and proposed projects will address a multitude of green infrastructure objectives, including the creation and enhancement of new and existing natural green spaces, improvements of public access in the river corridor through the development of pedestrian and cycle routes and measures for flood mitigation and attracting economic investment.

For parts of Wakefield, Castleford and Knottingley, the river system is also the source of major constraints to development due to flood risk. As Wakefield is likely to face more extreme climate events, the risk of flooding from the Calder and Aire is likely to increase, making the protection of existing and future communities along these rivers a critical objective. With the centres of Horbury, Wakefield, Castleford and Knottingley located close to the river as well as large areas of floodplains, the project offers the potential for a coordinated approach to river catchment management and enhancement across the district. As the flows of the Calder are influenced through a number of becks with flashy catchments, projects along these will have an impact on the flood risk along the Calder and Aire.

#### What will we do?

Fresh Aire will be a major partnership initiative that will create a city region-scale initiative to shape and help coordinate all activity within the Aire and Calder river valley system. It will bring together issues of environmental conservation, public access, enhancement and land management and will support the City Region's growth and economic development.

In doing so, it will create a truly special greenspace concept, centred on a resilient and successful post-industrial way of living. It will emphasise the mutual dependence that needs to exist between built up areas and environmental assets, set new standards for future growth and development in the City Region and elsewhere in the UK, and provide opportunities to test new ideas and technologies as well as pilot and demonstrate several Investment Programmes.

In the district, this project will become a flagship for environmentally conscious development and regeneration, acting as a demonstrator for high standards of design, construction and environmental management as well as an engine for local environmental research and innovation, particularly in climate change mitigation, adaptation and sustainable construction. It will also demonstrate the benefits of enhanced, cross boundary and multi disciplinary planning and investment.



Delivery of high standards, environmental improvements and other projects are key considerations, and that is why the Fresh Aire project area is not only focused on the rivers but also on Wakefield's Housing Growth Point. It offers a real opportunity to secure funding to help deliver the project's objectives by improving the quality of the environment and the setting of communities.

Outside the built up area, significant open spaces and countryside along the river corridor benefit from attractive landscape features that make it an attractive place for informal recreation. Parts of the river corridor are accessible already, while others will be developed as part of the National Cycle Network, and there is considerable scope to improve accessibility along the river, while exploring the potential of promoting additional recreational activities that evolve around the river.

On a broad scale, the project will lead to the celebration and promotion of green infrastructure in the Wakefield district by creating a sense of place, and identify assets which can be utilised to brand the area and its associated projects. The associated projects may be as large as an urban extension or as small as a community food project. In each case, the project will benefit from the attention that the 'Fresh Aire' brand will generate amongst communities and investors that may generate new funding sources and that may enable greater coordination of effort.

### **How will we do it?**

The project provides an excellent opportunity for the Council to further develop partnership working across local authority boundaries and with the private, voluntary and independent sectors. The strategic planning of the project will be informed by emerging spatial plans or influence later ones within the project area and will add to the clarity of the proposals coming forward in the Wakefield Opportunity Area and, in due course, the other relevant Strategic Projects and Investment Programmes proposed in this plan.

In the Wakefield district the emphasis will be on designing new development to avoid flooding and accommodating flood events through better control of surface water run-off and storage of water adjacent to the river. Development in urban areas within Flood Zones will only take place if adequate mitigation measures can be implemented. Such measures could include the integration of usable open spaces along the

river to manage flows with, for example swales and reed beds and to accommodate flood water.

Measures upstream will include tree planting or more sustainable methods of farming to reduce the runoff from fields, resulting in water absorption for longer periods. The opportunity mapping for woodland to reduce flood risk identifies opportunities for the planting of riparian woodlands along the Calder and Hebble Navigation, close to Horbury, on the Welbeck site as well as the New Market Silkstone Colliery site, which is still to be reclaimed. With projects at Wrenthorpe Park, Oakenshaw Beck and Fenton Dam, the Environment Agency is progressing projects that will address flood risk, while providing access and habitat creation at the same time.

The creation of flood storage and measures for flood alleviation often creates the potential for biodiversity gain. There are significant opportunities for the creation of and improvements to the management of marshlands and wet grasslands, particularly in the Calder Valley flood plain. Scrub at the Stanley Ferry Flash and the Southern Washland sites is managed for its biodiversity value, creating the potential to improving and extending this habitat and associated species.

Through the Living Landscape project, the Yorkshire Wildlife Trust is already looking to establish a coordinated management of the Lower Calder Valley, including the reaches from the M1 south of Wakefield downstream that include the river corridor, three local wildlife sites, Pugneys Country Park and Sandal Castle, potentially involving a numerous agencies into the project.

We will aim to increase the accessibility within the river corridor to better connect the settlements with the countryside and with one another, link in tourist destinations such as Wakefield Waterfront and the Hepworth Gallery, and provide a high value natural and recreational asset. Interventions will focus on riverside paths and towpaths as well as connections and access points close to or within the towns nearby. They will address the overall continuity of the route and associated spurs between Wakefield and the Five Towns, where gaps in the network will be closed to increase its connectivity, while access for mobility impaired people is likely to form another focus. Complementing the network of walking and cycling routes, the river landscape

presents the opportunity for water based activities such as boating and canoeing, possibly in close proximity to the settlements, and to increase the recreational and touristic emphasis within certain parts of the area of search.

The programme will tap into the 'Rivers for Life' programme that was established in the Leeds City Region Green infrastructure Strategy. Due to the nature catchment management, the sub-regional scale of the project will ensure that interventions will also take place beyond the district boundaries in order to maximise the success.

#### **Lead Partner**

- Wakefield Council

#### **Delivery Partners**

- Environment Agency
- Natural England
- Forestry Commission
- British Waterways
- Calder Future
- White Rose Forest
- Town and Parish Councils
- BTCV
- Yorkshire Wildlife Trust
- Mineral operators
- Association of Rivers Trusts - Calder and Colne Rivers Trust
- English Heritage (regarding Sandal Castle)
- Groundwork Wakefield
- Sustrans

#### **Core Outcomes**

- Raising the awareness of developers, landowners and investors of the opportunities, benefits and added value that can be associated with a growth and enhancement of green infrastructure.
- Increasing the resilience of the district's settlements to flooding
- Creating new and improving existing public greenspaces, recreational facilities and access opportunities that add to the health and well being of the people of the region
- Creating opportunities to contribute to local biodiversity gain and to reducing flood risk in the Aire-Calder river valley system – that will give security to residents and allow further flexibility in implementing development safely.
- Encouraging local communities to plan and co-ordinate local green infrastructure projects that will increase their sense of ownership and value of the project.
- Adding to the local tourism offer and thereby adding value to economic development initiatives, creating opportunities for sustainable travel

#### **The Wakefield Forest**

Woodland cover across the district is at 3.7%- lower than for other districts in West Yorkshire and much lower than the national average of 8.4%. More over there is an unequal distribution of woodland, much of which lies within the hilly south west of the district. The flatter, more fertile eastern half of the district is notably bereft of woodlands, with a few exceptions such as Fryston Wood near Castleford.

This situation needs different approaches and strategic initiatives in different parts of the district. Consequently the Wakefield Forest is sub-divided into four geographical areas as set out below. The reclamation of former collieries in the east of the district to woodland has had a particular impact: those at Walton, Upton and Fitzwilliam were designated Local Nature Reserves in 2008 due in part to their proximity to deprived populations.

There are a number of cultural attractions such as the Yorkshire Sculpture Park, National Coal Mining Museum, Sandal Castle, the Hepworth Gallery, Nostell Priory, Pontefract Park and Racecourse and country parks at Pugneys, Anglers, Newmillerdam, Walton, Fitzwilliam, Hemsworth Water Park and Frickley, which would benefit from enhanced links to neighbouring settlements and to one another via the Wakefield Forest projects.

The implementation of the Wakefield Forest will be strongly influenced by the co-operation between the Council and White Rose Forest Partnership. Wakefield Council is an original signatory to the White Rose Forest joint venture agreement along with the other local authorities across West Yorkshire. This partnership has successfully promoted the concept of green infrastructure across the Leeds City Region with the “Growing with the Leeds City Region” partnership strategy and secured funding from Yorkshire Forward for the West Yorkshire Green Infrastructure Programme.

Regional bodies such as the Forestry Commission, Environment Agency and Natural England as well as the leading independent environmental organisations such as the RSPB, Yorkshire Wildlife Trust, Groundwork and the BTCV are also signed up to this partnership. Wakefield Council, as the lead White Rose Forest partner in Wakefield District, will promote its new woodland creation sites as part of the “Trees for Yorkshire” campaign, marketing the projects for private sponsorship and corporate planting events.

### 5.2.2. Wakefield Forest – ‘Five Towns Forest’

The Five Towns Strategic Framework and the Local Development Framework set out the overarching vision of how this growth will be accommodated, emphasising the need for the individual towns to develop their different identities, while creating a landscape that will provide the Five Towns with a single shared image and identity that raises the aspirations of local communities as well as existing and new businesses.

The landscape between the Five Towns forms an underlying and unifying element for the settlements by providing a clear landscape structure into which they are embedded and through which they remain separate and contained. The Five Towns Forest will create a bold landscape that connects the individual towns with the landscape and with one another, forming a link between the settlements, while emphasising each towns’ individual setting. Green infrastructure investment in the Five Towns Forest will mainly be driven by economic growth and health and well-being, while, to a lesser degree, progressing the climate change and biodiversity agenda.

The Five Towns Forest will provide leisure, healthy lifestyle, access, habitats and woodland products, while providing a clearer local identity. It has the potential to increase the profile of the towns, make it more attractive and create a regenerative spin off through encouraging businesses to invest and thereby encouraging opportunities for employment and training. It will also create an improved setting for investment, particularly along the motorway corridor.

Establishing links between the towns forms a crucial part of the proposals and strategic links between the towns and the landscape will be an important part in this, strengthening active forms of travel and recreation.

There is the opportunity in some parts of the project area to create an impact on the biodiversity of the district. Orchard Head and sites of the former Prince of Wales Colliery and Ferrybridge Power Station have been identified in the Biodiversity Action Plan as potential areas for the creation of calcareous grasslands, a priority habitat, which will form one of the landscape elements in the mosaic.



The new Forest will eventually form part of a wider network of woodlands across the district connecting with three other strategic projects – the Nine Lakes, the South West Wakefield Woodlands and the Green Corridor Forest – that in turn will connect with the proposed northern extension to the South Yorkshire Forest in neighbouring Barnsley and the proposed Green Corridor Forest.

#### **What will we do?**

- Strategic new woodland planting in the middle of the Five Towns and in gateway locations, providing a setting for investment
- Extend and manage existing woodland where possible
- Identify opportunities for other land uses to inform the project
- Create access into the woodland and associated open areas
- Create legible links into the towns and their centres through street greening, boulevards and provision of cyclepaths etc
- Improve woodland management of existing woodland with opportunities for Tree Warden schemes, forest schools and outdoor learning as well as ancient woodland restoration
- Create infrastructure and opportunities for outdoor leisure and recreation

#### **How will we do it?**

While woodlands will create the underlying theme for the landscape, there is potential for meadows, parks, wetlands and hedgerows to contribute to a 'mosaic' of landscape elements with different functions and character. While some of these elements will remain extensively managed and rural in character, some smaller pieces of the mosaic might feature more formally designed green spaces, existing and new, in order to add profile to the overall landscape.

The mosaic will build on existing landscape features as much as possible, carving out the inherent landscape qualities of the area. It will enhance existing landscape elements and will put them into their context. Also, it will complement existing elements with new ones with the vegetation reflecting the geology of the area, potentially making reference to former industrial uses.

There is the potential to widen the scope of some of these. The planting at the gateway site at Water Fryston, adjacent to the A1 could potentially include land art to mark the gateway into the district and the Five Towns. Through cooperation with private land owners, the Five Towns Forest and its communities will benefit from improved connectivity. Through targeting inaccessible areas, the availability of grants tied to access improvements will encourage this aim.

#### **Lead Partner**

- Forestry Commission

#### **Delivery Partners**

- Wakefield Council
- White Rose Forest
- Natural England
- Groundwork Wakefield
- Private land owners

### Core outcomes

- Create an improved setting for homes, businesses and recreation
- Increases inward investment into the towns
- Improved recreational offer between the Five Towns through accessible shared resources that encourage an active lifestyle
- An overarching identity for the Five Towns that strengthens the aspirations in the area, forming image and identity
- Mitigation of the impact of the M62, railway lines and overhead power lines that cut through the landscape, and providing a stronger landscape structure
- Increased profile of a number of smaller and larger assets through a bigger scale scheme that is likely to attract more funding
- Restored land that is integrated into the setting, both visually and functionally
- Improved job and training opportunities within the woodfuel and woodland management sector

### 5.2.3. Wakefield Forest - 'Nine Lakes'

#### What is it?

The proposal is to create a leisure landscape in the countryside to the south of Wakefield, Featherstone and the South East Rural Renaissance areas. In an area of around 32 km<sup>2</sup> three major land owners are proposing large scale countryside recreation and leisure facilities including some tourist accommodation located in a setting of woodlands, country parks and lakes, all in the vicinity of historic settlements and estates.

The project looks at integrating a series of existing environmental and historic attractions such as Nostell Priory Estate, Newmillerdam Country Park, Haw Park and Anglers Country Park in a landscape that is shaped by reclaimed open cast mining. Existing assets will be embedded into tourism proposals that is characterised by a series of lakes and reservoirs, surrounded by woodland with additional tourist accommodation proposed to complement the proposals. The illustrative masterplan also identifies the opportunity to create a linear trail through the area.

The project will connect to three other strategic projects – the Five Towns Forest to the north at Featherstone, the Green Corridor Forest in the southeast and the South West Wakefield Woodlands to the west – as well as with the proposed northern extension to the South Yorkshire Forest to the south at Rabbit Ings in Barnsley.

The project also creates the opportunity to integrate the 'Wild Wet Water Voles' project, which is pursued through the Yorkshire Wildlife Trust. The project aims to secure and expand the population of water voles through improved management of water courses and the restoration of habitats. Engagement with land owners and opportunities for community involvement and training form a significant part of this project, which has the potential to contribute to the Nine Lakes project, as improvements to the environment will enhance habitats and biodiversity and can, in turn, form attractive surroundings to visit.

### What will we do?

Ensure that the project addresses a number of aspects that have been identified as important for the district, notably:

- Ensure the Nine Lakes is accessible to Growth Point residents with improved sustainable transport links
- Continuation of recreational trails and paths throughout the project area, linking up with surrounding established paths
- Ensure sustainable forms of woodland management
- Contribution to woodfuel production through woodlands
- Strengthen the platform at Anglers Country Park Interpretation Centre for woodland products and district wood fuel project
- Restoration of (parts of) the Barnsley Canal
- Restoration of woodlands from plantation back to native broadleaf
- Ecological enhancement of Wakefield Local Wildlife Sites and adjoining Wildlife Habitat Network
- Ensure a maximum benefit of the project for surrounding communities through planning conditions and developer contributions, particularly the Council's priority neighbourhoods

### How will we do it?

Although the Nine Lakes offers a great potential to maximise landscape value and promote the tourism offer in the district, the project needs to maximise its benefits for the local population as well as visitors by creating rural businesses and tourist accommodation in the villages and towns within/adjoining the area.

The Nine Lakes needs to create managed woodland that enhances the visual amenity of the area, promotes the production of timber and the absorption of carbon. Links through the area, into the countryside and surrounding villages are crucial. The Dearne Way, Barnsley Boundary Walk, Trans Pennine Trail, the Havercroft Heritage Trail as well as the SESKU Ringway already provide valuable resources within the overall network. Their continuation through the Nine Lakes would fill gaps in the network that form a crucial stepping stone

in increasing continuity and links into neighbouring districts. Managing drainage and floodwater within the Nine Lakes area also offers opportunities to support the management of flood risk and improve water quality.

### Lead Partner

- Wakefield Council, Nostell Priory Estate, UK Coal as land owners
- Forestry Commission

### Delivery Partners

- Environment Agency
- British Waterways
- Natural England

### Core outcomes

- Increasing investment into the region
- Strengthening the platform for knowledge exchange through exhibition and demonstration of woodland related technologies and products
- Enhancing the recreational offer in the district for the community as well as attracting more tourists
- Opportunities for habitat expansion
- Creating opportunities to contribute to local biodiversity gain and to reducing flood risk through the management of tributaries to the Calder
- Creating new job opportunities
- Overall improvements in health and well-being and reduced health inequalities



#### 5.2.4. Wakefield Forest - 'South West Wakefield Woodlands'

##### What is it?

The south west of Wakefield features the highest woodland cover in the district, offering unique opportunities. Between Middlestown, Netherton, Horbury, Bretton and Woolley, the landscape character of the district is shaped through fragmented areas of woodland, a high percentage of which is made up from Ancient and Semi-Natural Woodlands and Ancient Replanted Woodland, representing a high biodiversity and landscape value.

The South West Wakefield Woodland will be a multi functional resource that will respond to all four drivers that have been identified for green infrastructure investment. The mature woodlands in the south west of the district offer a significant potential for the production of timber and woodfuel as a by-product, contributing to the district's economy and creating benefits for regeneration.

The extension of woodlands and improved management practices help to increase the biodiversity and can, in places, establish habitat links between individual sites, while an increase in woodland cover increases the ability of carbon capture in the district at the same time.

Increasing public access will support active recreation in the district whilst also providing educational value for the community. These could be linked to seasonal programmes with smaller scale events that invite the community to use and enjoy the woodlands.

The project will connect with the Nine Lakes strategic project to the east (and in turn to the Five Towns Forest, the Green Corridor Forest and South Yorkshire Forest).

##### What will we do?

- Improve woodland management of existing woodland
- Increase tree planting through the extension of woodlands, creating habitat links and increasing biodiversity
- Increase hedgerow planting to support biodiversity and landscape character
- Encourage timber production

- Strengthen production of woodfuel and links to businesses
- Integrate community projects into the proposals
- Enhance existing public rights of way and create new public rights of way for local communities to access the woodlands
- Improve the offer of education and interpretation through signed trails
- Promote sustainable forms of woodland management
- Improve infrastructure for the management of woodlands
- Creation and management of scrub
- Create infrastructure and opportunities for outdoor leisure and recreation

##### How will we do it?

The main focus of this project will be to encourage the planting and appropriate management of woodlands to maximise its potential for economic and biodiversity benefits. Management plans will set a framework for the individual woodlands that will ensure management practice that embraces sustainability as well as multi-functionality, looking at planting regimes as well as access issues and managing potential conflicts.

The Forestry Commission identified large parts of the project area as target areas for new woodland planting on vulnerable soils, particularly south of Hall Green. This is in line with the Biodiversity Action Plan that stresses the importance to 'maintain and enhance [the] current extent of Ancient and Semi-Natural woodland' in the district. Some existing woodlands have also been identified as woodland target areas for biodiversity, Seckar Wood and Stonycliffe Wood being the most important with a very high biodiversity value. These areas identified by the Forestry Commission and Natural England will form the priority for woodland planting and enhancements. The Yorkshire Wildlife Trust has identified the project area under the umbrella of their 'Living Landscapes' project. Wetland creation along river corridors and the management of grasslands form additional aspects for biodiversity enhancements.

The South West Wakefield Woodlands are likely to attract funding through the English

Woodland Grant Scheme, which is the Forestry Commission's suite of grants designed to develop the co-ordinated delivery of public benefits from England's woodlands. The aims of the scheme are to sustain and increase the public benefits given by existing woodlands and help create new woodlands to deliver additional public benefit. Various grants are available under the scheme and include a range of payments for the management of existing woodlands and the creation of new woodlands.

Improving the access into the project area will be a crucial part of its multi-functionality. Better pedestrian and cycle links from the surrounding settlements will be important to increase community use. Creating trails through the woodlands, some of them with interpretation, will be largely progressed through Wakefield Council with potential support through local voluntary groups and community groups. Viewpoints and other points of interest in the woodlands will be promoted through signage and interpretation. The forestry as well as biodiversity aspects should form equally important parts in the woodland's educational use.

#### **Leading Partner**

- Yorkshire Wildlife Trust
- Natural England

#### **Delivery Partners**

- Wakefield Council
- White Rose Forest
- Forestry Commission
- Groundwork Wakefield ('Outdoor Woodland Learning' programme as one example)
- Cooperation with private land owners (Earnshaws are major local landowner)
- Yorkshire Sculpture Park

#### **Core Outcome**

- Preservation and enhancement of the landscape character
- Improved access and signposting to encourage educational uses
- Diversification of the rural economy in the district and promotion of wood products
- Increased use of woodlands through the community with events, promotion and increased accessibility improving the usability of the resource
- Health benefits through increased outdoor activities
- Woodland creation and habitat network with more functional links
- Woodland restoration and extension to increase biodiversity





### 5.2.5. Wakefield Forest - 'Green Corridor Forest'

#### What is it?

The Green Corridor sits between the Leeds and Sheffield City Regions and a significant area lies within south east Wakefield. The towns and villages grew up around the mining industry and consist of the settlements of Hemsworth, Fitzwilliam and Kinsley, Ryhill, South Hiendley, South Kirkby, South Elmsall, North Elmsall and Upton. The Green Corridor Strategic Framework sets out the vision of "An area with its own identity, green and rural in focus, with a pleasant and well served hierarchy of settlements that offer a choice of housing and a high quality of life".

The landscape in the Green Corridor is essentially rural in character, the former colliery sites have been restored to country parks and agricultural land forming a link between the towns and villages. Green infrastructure investment in the Green Corridor Forest will mainly be driven by economic growth and health and well-being which are key objectives of the Green Corridor Strategic Framework. Environmental quality is also a key objective so biodiversity and climate change are also important elements within the Green Corridor Forest area.

The Green Corridor Forest will provide leisure, access, habitats and woodland products, while providing a clearer local identity. It has the potential to increase the profile of the settlements, make the area more attractive to employers and housing providers.

The project will connect to three other strategic projects – the Five Towns Forest to the north, the Nine Lakes and the South West Wakefield Woodlands to the west – as well as with the proposed northern extension to the South Yorkshire Forest at Rabbit Ings in Barnsley.

Climate change, biodiversity and health and well-being all act as additional drivers for this project.

#### What will we do?

- Promote the interventions as part of increased marketing of the area as a business location
- Create new woodlands for the production of woodfuel, carbon capture and recreational benefits
- Create recreational trails and paths that enable the local community to develop a sense of ownership

- Establish activities that engage the local community
- Create training opportunities to woodfuel related education, possibly linked to the facilities in South Kirkby
- Ensure sustainable forms of woodland management
- Where possible secure ecological enhancement of Wakefield Local Wildlife Sites and adjoining Wildlife Habitat Network
- Ensure a maximum benefit of the project for surrounding communities through planning conditions

#### How will we do it?

The Green Corridor Forest offers a great potential to improve landscape value and to maximise its benefits for the local population as well as visitors by creating investment in the towns and villages and encouraging rural businesses within the area.

The Green Corridor Forest will create managed woodland that enhances the visual amenity of the area, promotes the production of timber and the absorption of carbon. Links through the area, into the countryside and surrounding towns and villages are crucial. The SESKU Ringway, Barnsley Boundary Walk, Trans Pennine Trail, and the Havercroft Heritage Trail already provide valuable resources within the overall network.

Their continuation through the Green Corridor would fill gaps in the network that form a crucial stepping stone in increasing continuity to the Five Towns Forest and Nine Lakes areas including links into neighbouring districts.

Despite past land reclamation works and landscape improvement schemes on former colliery sites in the area, there remains scope to further improve the landscape character through landscape restoration and create an environment that is more attractive for businesses. As part of this, woodland and tree planting will not only create the potential to improve the setting and the quality of life for its communities, it will also provide opportunities for the diversification in the employment sector and will create opportunities for business as well as training.

An increased network of foot and cyclepaths into the countryside and between the individual settlements will help to address the problem of isolation as the area will

be linked into the Nine Lakes Forest and surrounding towns nearby.

#### **Lead Partner**

- Natural England
- Wakefield Council

#### **Key Delivery Partners**

- First
- White Rose Forest
- Forestry Commission
- Groundwork Wakefield
- Private land owners
- Neighbouring Councils in Barnsley and Doncaster

#### **Core Outcomes**

- Create an improved setting for homes, businesses and recreation
- Increases inward investment into the settlements
- Improved recreational offer between the Green Corridor settlements through accessible shared resources that encourage an active lifestyle with associated health benefits
- An overarching identity for the Green Corridor that strengthens the aspirations in the area, forming image and identity
- Restored land that is integrated into the setting, both visually and functionally
- Improved job and training opportunities within the woodfuel and woodland management sector
- Woodland restoration and extension to increase biodiversity
- Increased economic growth and improved health and well being

### **5.2.6. 'Balne Lane Fields'**

#### **What is it?**

Balne Lane Fields are an area of land close to the city centre of Wakefield within 250m of the Westgate redevelopment area, north of Westgate Station. The site comprises of an area of nine hectares, which includes a former landfill site that has been restored to open green space. Balne Beck runs along the western boundary and part of the site is within a flood zone.

Currently the site is covered by grassland with trees and shrubs along the perimeter of the site and towards its southern end. The fields are located in a strategically important location, forming a sizeable link in a chain of greenspaces, leading from the city centre to the densely populated residential areas of Alverthorpe and Wrenthorpe, and providing further links to Alverthorpe Meadows and Wrenthorpe Park Local Nature Reserve within the Wrenthorpe Valley Protected Area of Open Land. They are part of the Opportunity Area of the Westgate-Wrenthorpe Valley Corridor, which is described in the next section of this document.

The field is popular with the local population for informal recreation as people walk their dogs, use it for play activities and as a shortcut to the nearby housing areas. The potential to improve the variety of recreational uses, ecological value and environmental quality together with its links to both local communities and strategic greenspaces make it an important piece of green infrastructure in the City of Wakefield.

The main drivers for this project will be climate change and health and well-being, as parts of the site will be enhanced to integrate measures for flood alleviation and an improved recreational offer. Sustainable growth and development and, to some degree, biodiversity, are additional drivers with the field absorbing some of the additional pressure for green infrastructure that housing growth within Wakefield is likely to create. Improvements to the quality of the landscape by enhancing habitats along Balne Beck will also have a positive impact on biodiversity.

**What will we do?**

- Establish a more structured, layout that will retain large areas as grassland, but will integrate additional recreational functions and ecological enhancements
- Engage with the local community and make their ideas a core objective
- Keep the fields open and avoid any loss of accessibility through fencing
- Integrate an equipped area for play as residential areas close by suffer from deficit
- Integrate community food production on a small scale, e.g. fruit trees
- Improve attractive and safe links into the city centre
- Increase flood water storage in the area
- Improve access points onto the fields
- Integrate areas for tree planting

**How will we do it?**

The project aims to make better use of Balne Lane Fields as a greenspace resource and a resource for community interaction. Engaging with the communities of the surrounding housing areas will be key to improving the field and responding to the needs of the local population will ensure that the fields remains an area primarily for local level recreation with a fairly low profile and informal layout and use. However, opportunities for wider use within the city of Wakefield context should also be considered, for example as part of a network of key open green spaces linked with footpaths and cycle routes between the Wrenthorpe Valley, city centre and River Calder into the surrounding open countryside. Similarly, the site offers an invaluable space on which to develop a sports venue and formal sports facilities (subject to securing planning permission and all other necessary consents) that compliments recreational use, facilitates community involvement, encourages active lifestyles for Wakefield residents, and creates a sporting hub for development and education.

As the field is used by local communities, there is the opportunity to work with established community groups and support new groups to be involved with the maintenance and management of the site and create links between the community and the local authority.

Balne Lane Fields are partially located in a flood zone and presents the opportunity to use part of the site to help reduce the risk of flooding by providing water storage along Balne Beck. This area should be landscaped in a way that adds to the visual amenity of the field and doubles up as flood storage in peak times and water conservation in dry periods. These water attenuation ponds will also provide the opportunity to create new habitat and enhance biodiversity value alongside the benefit of reduced flood risk. Additional tree planting will increase the natural amenity of the Balne Lane Fields, potentially creating a more structured and diverse site. The feasibility of including some fruit trees for community food production should be investigated.

Improvements to access points will increase the accessibility of the site, make it more attractive and feel safer thus encouraging wider community use. This might include the clearing of some vegetation, giving overgrown access points a slightly more formal feel and providing lighting and signage along the edges of the site. Improvements to the links along Love Lane and east of Victoria Avenue will potentially increase the feeling of security and will encourage their use as a link.

As the surrounding neighbourhoods have currently no provision of play facilities, the integration of an equipped play area into the Balne Lane Fields would be of high value for the surrounding communities and would widen the current offer to cater for younger residents as well. This could include a play area with more conventional equipment and/or provide an open and more natural adventure playground that could be integrated for example, into the established wooded area south of Blackthorn Way. The local communities will be consulted to determine what type of facilities and improvements are needed.







The White Rose Forest Partnership established the “Trees for Yorkshire” campaign with a donation facility through their website ([www.whiteroseforest.org.uk](http://www.whiteroseforest.org.uk)), which allows businesses and householders to pay for trees to be planted within a project of their choice and promoting corporate tree planting events on its key sites, such as Balne Lane Fields. The Partnership’s current estimates suggest that a £10 donation would suffice to buy, plant and look after the tree and would include all other associated costs of the scheme.

#### **Lead Partner**

- Wakefield Council

#### **Delivery Partners**

- White Rose Forest
- Local Community Groups
- BTCV
- Groundwork Wakefield
- Wakefield College
- Environment Agency

#### **Core Outcomes**

- Improved provision of greenspace, in close proximity to residential areas and the city centre
- Continuous community involvement to increase ownership and make the fields work for the local residents
- Improved links between residential areas and the city centre
- Improved conditions for active travel and relieve congestion, link through Love Lane, or Marlborough Street
- Formalised use of open land with increased amenity
- Retained open access and enhanced links to the Wrenthorpe Valley Protected Area of Open Land and along Balne Beck to Wakefield city centre
- Provision of an equipped area for play

- Feeling of an informal space
- Provision of multi-functional flood alleviation measures
- Improves accessibility and wider community use
- Increased tree cover an enhanced habitat in an urban area

### 5.3. Opportunity Areas

#### What are they?

The Opportunity Areas are intended to complement Investment Programmes and Strategic Projects by identifying locations within the district where significant change is planned, primarily as a result of housing and economic development, and for which there is a timely opportunity for green infrastructure to shape that change through positive master planning and development management.

In all of the identified opportunity areas, green infrastructure will play an important role in shaping the plans for growth. These locations will deliver a large proportion of the district's housing and employment growth in accordance with the Local Development Framework Core Strategy. The opportunities and constraints for green infrastructure will play an important part in establishing the visions and objectives for each growth area.

#### What will we do?

In each location green infrastructure planning will be undertaken to inform the masterplans and other spatial planning policy documents that will be prepared to guide development. This planning will identify the opportunities and constraints for action and play an important part in establishing the visions and objectives for each growth area. Where appropriate, this guidance will provide evidence for subsequent planning policies, masterplans and development/planning briefs for specific sites.

'Renaissance Master Plans' are being prepared to guide the regeneration of the Five Towns. The plans are prepared having regard to the LDF and other strategic policies and guidance. In these locations, the opportunity area will inform the preparation of the masterplan if timely or may be used to test emerging masterplan proposals from a green infrastructure perspective where they have progressed further.

There are four particular locations where the scale of change and timing are best suited to this initiative, Wakefield East and Newmarket, the Westgate-Wrenthorpe-Corridor, Westfield Lane in South Kirkby and

Castleford:

#### *Wakefield East and Newmarket*

Over the coming years, major urban extensions will be taking place along the eastern fringe of Wakefield. Significant areas of new housing will contribute to the city's and district's growth, while future employment sites close to junction 30 on the M62 and smaller scale extensions to Normanton will create an increased demand for green infrastructure along the Aire and Calder Navigation corridor.

The river and canal will provide the overarching linear landscape element along which individual sites will be developed and green infrastructure interventions will be focussed. The river landscape will form a highly accessible green infrastructure resource between Wakefield and Normanton that will be of recreational as well as ecological value, integrating major greenspace improvements on the Parkhill, Welbeck, and Newmarket Silkstone sites. The potential to enhance the Wakefield Local Wildlife Sites at Halfmoon/Ashfields, the Southern Washlands, Stanley Ferry Flash and Foxholes/Altofts Ings will also be investigated.

The Aire and Calder Navigation and the river meadows, wetlands and washlands create the opportunity to establish links into both Wakefield and Normanton. There are opportunities to maximise environmental resources by creating a high quality eco-development at the proposed stadium and associated businesses park as natural resources can be utilised and the setting is likely to appeal to knowledge sector businesses.

There are also opportunities in the district for woodland planting to mitigate flood risk. Sites for this include Welbeck and the perimeter of New Market Silkstone Colliery site which has also been identified as target area for enhancing biodiversity by creating heathland. Due to its location close to the potential employment sites and the urban extensions of Wakefield, this will form an important part of the area's potential to respond to mitigate the effect of climate change as well as enhancing biodiversity and improving the quality of the landscape in the Calder Valley.



*Westgate-Wrenthorpe Valley Corridor*

The Westgate-Wrenthorpe Valley Corridor links Wakefield city centre and the densely populated residential areas of Alverthorpe and Wrenthorpe along Alverthorpe Beck and Balne Beck through Balne Lane Fields to Alverthorpe Meadows and Wrenthorpe Park Local Nature Reserve.

Green wedges to the south along Love Lane and east of Victoria Avenue provide links from the station to the Balne Lane Fields, which form a valuable community greenspace asset within the corridor. Wrenthorpe Park is a formal public park adjacent to the suburb of Wrenthorpe and Alverthorpe and Wrenthorpe Meadows, which are linked up by a series of paths. The park features parkland, woodland and a number of sports pitches and play areas, which are open to the public. Alverthorpe Meadows and Wrenthorpe Park are a Local Nature Reserve within the Wrenthorpe Valley Protected Area of Open Land. The area is managed as wetlands, wildflower and hay meadows, and still features old hedgerows and medieval ridge and furrow field patterns in parts. Part of Wrenthorpe Park is functional floodplain of Balne Beck and springs also rise in Alverthorpe Meadows. Existing wetlands present the opportunity for wetland restoration and improved biodiversity with limited public access creating opportunities for environmental education together with measures to help alleviate flooding in the city centre.

Alverthorpe Beck and Balne Beck frequently flood and create significant problems along their courses and at their confluence on Westgate. Flood management measures are a crucial component to this project. The creation of attenuation ponds will form an integral part of the landscape within the corridor in order to store water during peak flood times and conserve water in dry periods. Associated measures could include reed beds and swales to slow down the flow of surface water run-off, and opportunities for the restoration and creation of water course and wetland habitats should be seized in the process and integrated into the landscape. Management for Water Voles and other protected or endangered species should be investigated.

There is also the opportunity to introduce a tree planting scheme into the initiative, mainly targeting smaller areas on the Balne Lane Fields and Wrenthorpe Park. Tree sponsorship could form a way of encouraging the local communities or local groups to engage in environmental activities in their local area, while raising funds in the meantime.

The initiative presents the opportunity to create a wider frame for a number of individual green infrastructure assets and to significantly increase their quality, diversity and use. The future development of major housing sites in the city centre, Wrenthorpe, Snowhill and Alverthorpe will create almost 3000 dwellings in Wakefield. The Westgate – Wrenthorpe Valley proposals will be able to absorb some of the growing pressure on green infrastructure in the city, ensuring the new development sites are linked up well into the Balne Beck corridor to maximise its benefit.

*Westfield Lane, South Elmsall*

The Westfield Lane Improvement Area is an ongoing regeneration initiative within the rural coalfield area of South Elmsall. The programme aims to breathe new life into the neighbourhood through the provision of new housing in a safe and attractive environment, promoting access to greenspace, sustainable transport links and community and leisure facilities.

The first two phases of the Westfield Lane project will deliver in the region of 450-500 new homes and present the physical link between the existing neighbourhoods and the newly established Frickley Country Park at the edge of the settlement. Green infrastructure interventions will include the creation of green links within the newly developed areas, including the provision of pedestrian and cycle links and discrete green space, in order to ensure a better integration of Country Park and settlement. Improvements to the public realm will include enhancements to gateways into the countryside.

Due to the close proximity of park and developments, there is significant potential to utilise surface water drainage in the Country Park as a sustainable drainage solution for the new developments to decrease surface water run-off. The park has also created opportunities to promote biodiversity and habitat links to the wider rural hinterland, and provides healthy living opportunities through access to sports and recreational activity.

## Castleford

The Opportunity Area for Castleford consists of a number of existing proposals along the River Aire, all of which have a significant potential to integrate green infrastructure in order to increase their benefits. There will also be major new developments along the river, mostly housing and employment, which will play an important role alongside the town centre regeneration. The creation of new civic and greenspaces, green links, access along waterways and the integration of recreational facilities in Wheldale and Fryston will form the main objectives for this Opportunity Area.

There are proposals for an Area River Growth Development Framework linked to a regeneration delivery plan for the town centre, which will look at development sites, public realm, movement and connectivity.

The new riverside landscapes at the reclaimed Wheldale and Fryston collieries should enjoy links across the River Aire, using the former mineral railway to provide new sustainable transport route that would enable the populace of Castleford to access Fairburn Ings Nature Reserve, Allerton Ings and Allerton Bywater within Leeds district. Green links between the riverside and Queens Park through the Saxon Way area and to Fryston Wood via the former Fryston tip will improve convenient access to greenspaces in the area, potentially extending to Ferrybridge in the future.

With Castleford being a Growth Point in the district, significant housing developments will increase the pressure on existing green infrastructure assets and developments should aim to maximise the potential through existing natural assets and their integration into proposals. Two of the areas that will see housing developments taking place are the Lambson site west of the town centre and the Castleford Ings site to the east.

While the land of the Fryston Colliery site has been fully reclaimed, it is important to link the recreational offer that has been created with potential further enhancements to the site, possibly linking into Fairburn Ings, which form a significant biodiversity and recreational asset to the north of Castleford.

In addition to these four locations highlighted above, the Local Development Framework Core Strategy indicates that significant housing and economic growth areas will be focused in the following locations, each of which is also likely to benefit from a similar approach to improving green infrastructure when greater detail is known:

- Knottingley-Pontefract-Ferrybridge
- Normanton and Altofts
- Featherstone

### How we will do it?

Each location is currently at a different stage in the planning process. For some, the process of gaining planning approval and promoting development is well advanced, masterplanning has been undertaken and proposals have been submitted to secure significant public funding (e.g. Westfield Lane, South Elmsall). In most other cases, either the locations of housing growth are still emerging through the LDF or masterplanning is at a relatively early stage.

Some Opportunity Areas will also include all or parts of the strategic projects and/or investment programmes set out in this plan. Identifying these initiatives in the Opportunity Areas in greater detail at the local level will enable the local planning authorities to ensure they are given proper consideration in future development proposals.

Green infrastructure planning will therefore be undertaken for each Opportunity Area to influence the design process by:

- Establishing aims and objectives for each of the four drivers for how green infrastructure should form part of the future development proposition
- Locating and describing all known existing green infrastructure features on site(s), including proposals for strategic green infrastructure projects and programmes contained in this plan
- Identifying green infrastructure features within the site(s) and their context, using the district green infrastructure plan where available

- Explaining how green infrastructure assets should relate to other infrastructures, e.g. Sustainable drainage techniques and renewable energy
- Proposing and locating key green infrastructure functions on site or offsite, using the opportunity to co-ordinate actions across a range of sites to ensure all sites benefit
- Identifying areas of green infrastructure which should be created or enhanced and areas which may be lost and why
- Set out the criteria of protection that may be afforded to each type of green infrastructure

#### **Lead Partner**

- Wakefield Council
- Developers and landowners

#### **Delivery Partners**

- Homes and Communities Agency
- Town and Parish Councils
- Environment Agency
- Natural England
- BTCV
- Community Groups
- First
- Power station operator

#### **Core Outcomes**

- Raising the awareness of developers, landowners and investors of the opportunities for development and the potential of green infrastructure to shape development proposals
- Creating new publicly accessible open spaces and recreational facilities
- Creating opportunities to contribute to local biodiversity gain
- Increased provision of active travel routes and an increased take up of active travel (walking and cycling) as a preferable mode of travel
- Creating infrastructure and opportunities for outdoor leisure and recreation to support healthier lifestyles
- Improvements in health and well-being and reductions in health inequalities



Strategic Initiative	Delivery Partners	Strategic Objectives			
		Growth	Climate	Health	Biodiv
Investment Programmes					
Green Places	WMDC, NE, EA, FC, GrW, T+PC, YWT, HCA, Sus	✓✓	✓	✓	✓
Green Working	WMDC, First, Metro, NE, GrW, WRF, HCA	✓✓		✓	
Growing Food Locally	WMDC, NHS, T+PC, W+DH, Able, BTCV, GrW, InEd, Schools, ComCen, ComGr, Pugwash, Landowners, Dev	✓	✓	✓✓	
Strategic Projects					
Fresh Aire	WMDC, EA, NE, FC, BW, Calder F, WRF, W+PC, BTCV, YWT, Mineral Op, ART, EH, Gr W, Sus	✓	✓✓		
Five Towns Forest	FC, WMDC, WRF, NE, GrW, Landowners	✓	✓✓	✓	✓
Nine Lakes	WMDC, NPE, UKC, FC, EA, BW, NE	✓✓	✓	✓	✓
Southwest Wakefield Woodlands	YWT, NE, WMDC, WRF, FC, GrW, Landowners, YSP	✓	✓	✓	✓✓
Green Corridor Forest	NE, WMDC, First, WRF, FC, GrW, Landowners, Neighbouring councils	✓	✓✓	✓	✓
Balne Lane Fields	WMDC, ComGr, BTCV, GrW, WColl, WRF, EA	✓	✓✓	✓✓	✓
Opportunity Areas					
Wakefield East and Newmarket	WMDC, HCA, EA, NE, Dev	✓✓	✓	✓	✓
Westgate-Wrenthorpe Valley Corridor	WMDC, HCA, NE, EA, BTCV, ComGr, Dev	✓✓	✓✓	✓✓	✓✓
Westfield Lane, South Elmsall	WMDC	✓✓		✓✓	
Castleford	WMDC, HCA, Dev	✓✓	✓	✓	✓
Knottingley-Pontefract-Ferrybridge	WMDC, HCA, Dev, Power station operator	✓✓	✓	✓	✓
Normanton and Altofts	WMDC, HCA, Dev	✓✓	✓	✓	✓
Featherstone	WMDC, HCA, Dev	✓✓	✓	✓	✓

## SECTION 6.0

### Delivering the plan









## 6.1. Introduction

Delivering the plan will depend upon a number of factors: securing investment, using the local planning system to manage development effectively, working with effective partnerships and ensuring the plan remains a key part of the Wakefield policy agenda. These are outlined in greater detail below.

## 6.2. Investment

Investing in green infrastructure in the district will remain an important public sector activity. The Council owns and manages some country parks, urban parks, woodland and open spaces within the district. The Environment Agency owns and manages significant lengths of waterways and adjoining land. The Forestry Commission owns and manages some local woodlands and Natural England invests in supporting nature conservation.

Limited public funding has been considerably supplemented in more recent years by funding secured through the development of land using planning obligations (i.e. Section 106 Agreements). This has commonly secured on-site provision of public open space and payments to local planning authorities for the creation and management of green infrastructure off site.

Whilst the local planning system will continue to support investment in green infrastructure over the coming years, the Council's level of ambition for green infrastructure, and the tightening of public funding, requires additional funding approaches be developed. It will therefore need to diversify the investment funds used for green infrastructure capital and revenue expenditure, in order to ensure that sufficient investment is available without an over-reliance on any one funding source.

Outside the public sector, the private and third sectors will become increasingly important sources of future green infrastructure investment. For example, a large proportion of the district's woodland, farmland and open land is in private ownership. Landowners and their tenants will need to become more aware of the value of their green infrastructure assets and be encouraged, where appropriate, to bring forward proposals to improve the value of those assets to contribute to this plan.

Local businesses can also play a part in improving the appearance of their premises as well as look to offset their future carbon emissions by sponsoring local climate change-related green infrastructure projects (for example in the 'Green Places' programme using the proposed Leeds City Region fund described later).

The third sector – social enterprises, local residents groups, community partnerships, charities and voluntary organisations – will also have an increasingly valuable role to play. Not only can these organisations galvanise local community action in improving and looking after their local environment, this sector can bring new investment funds into Wakefield from community and other ethical investors.

### 6.2.1. Wakefield Council

The Council will continue to invest in green infrastructure using its own capital and revenue resources to maintain assets in its ownership to as high a standard as the availability of resources allows. In most cases, this plan will only require minor re-alignments and/or re-prioritisation of budgets for investing in public open spaces, street trees etc.. The plan may also require changes to the ways in which the Council manages its assets in order to achieve greater multi-functional benefits, e.g. urban parks.

The Council will need to undertake a review of its current green infrastructure budgets across the relevant departments. It will identify what elements of those budgets, if any, may require changes as a result of adopting different management practises or may be supplemented by other funding or aligned with funding programmes of other public agencies.

It will also seek to maximise the green infrastructure value from its ongoing capital spends for example highways works. Although the green infrastructure component of such works will be a relatively small element of their overall costs, they may offer considerable value to achieving this plan.

### 6.2.2. Developer Contributions (Section 106 Agreements)

The Council will continue to negotiate financial contributions from developers to on-site and off-site green infrastructure provision and ongoing management. It acknowledges that this source of funding will be more difficult to secure in the short to medium term given the decline in local residual land values for housing and economic development.

In assessing whether or not to introduce a local tariff to work alongside future Section 106 Agreements, the Council will consider what benefits may be accrued from the tariff in terms of achieving economies of scale in green infrastructure investment. The proposed New Homes Bonus and Tax Incremental Funding could also be considered as a future source of funding for this plan. And it is possible that the new system of 'Allowable Solutions' payments (made by developers for any off-site means of delivering their obligations of the Code for Sustainable Homes) will enable the Council to invest in those green infrastructure initiatives aimed at carbon storage and/or substitution.

### 6.2.3. National & regional funding sources

The Homes & Communities Agency has indicated a willingness to regard some complementary investment in environmental improvement as a key feature in its housing and regeneration programmes. The Council will seek to secure funding from the Agency for this purpose from the Leeds City Region Investment Plan as part of the New Growth Point and Green Corridor Programmes.

The Forestry Commission (often via the White Rose Forest Partnership for example "Trees for Yorkshire" campaign), Environment Agency and Natural England are all major investors, directly or indirectly, in green infrastructure in the district. The Council will therefore continue to work with these agencies and use this plan to enable a better alignment of collective public funding.

Yorkshire Forward has also been an important source of green infrastructure funding. The Council will continue to seek enterprise-related funding from the Local Enterprise Partnership of which Wakefield will be a partner in future.

### 6.2.4. City Region

The Leeds City Region Green Infrastructure Strategy has identified three new potential sources of investment in green infrastructure that may best be secured and managed at the city region level, working with national and regional funding agencies and the private and third sectors. The expectation is that, once these investment funds have been secured, local projects can look to win funding from them (to match locally sourced funding). Given none currently exist it should be presumed that all will only be available from the medium term.

- 'Advance Green Infrastructure Fund' - this new Fund will be set up in the City Region with the objective of investing in green infrastructure actions in the Green Infrastructure Growth Areas, including Wakefield Opportunity Areas and to lever public and other funds into these projects from national, regional and local sources. The fund will invest in major green infrastructure actions in advance of development in the Growth Areas where there is a reasonable prospect of that investment being recouped from subsequent development schemes via developer contributions. Capital receipts from successful investments will be re-invested in other qualifying development schemes. It will seek to attract national and city region loan funds and may secure private debt finance in the longer term once the programme is established with a track record of delivering future capital receipts from successful schemes.
- 'Corporate Environmental Responsibility Fund' - in order to capture this commitment alongside public sector spending, it is proposed that a city region-wide fund be established to attract payments from corporate organisations in the private and third sectors to invest in the Investment Programmes. In the long term, this fund may become a city region carbon offsetting scheme that meets national standards for such schemes. In the meantime, payments will be sought on a voluntary basis to invest in accredited green infrastructure projects within the Investment Programmes. It is anticipated that corporate organisations will be able to choose either an Investment Programme or a specific green infrastructure project for their investment. The fund

will have a joint city region and local brand identity to enable organisations to invest in their local district if desired. In Wakefield, this source of funding will be targeted at the 'Green Places' investment programme.

- 'Habitat Bank' - it is proposed that a City Region Habitat Bank scheme is established to invest in green infrastructure in the Leeds City Region. Focusing on mitigating for the unavoidable physical loss of biodiversity assets as a result of development (otherwise considered appropriate in planning terms), the Bank will create incentives for mitigation schemes in the locality of the loss to replace the equivalent quality, quantity and type of lost habitat. This may mean that in the Wakefield district, green infrastructure projects that will deliver and sustain certain, certifiable types of environmental benefit may attract funding from the Bank.

Overall, the proposed investment model has three key features:

- consolidating and aligning existing public funding;
- securing private sector funding through the planning system;
- generating new public and private sector funding, especially from national sources obtained through the city regions

## 6.3. Planning

The promotion and management of green infrastructure through the planning system will be through the Wakefield Local Development Framework and in particular its:

- Core Strategy Development Plan Document (adopted April 2009)
- Development Policies Development Plan Document (adopted April 2009)
- Central Wakefield Area Action Plan (adopted June 2009)
- Site Specific Proposals Development Plan Document (in preparation)
- Leisure, Recreation & Open Spaces Development Plan Document (not yet started)

The Council will also use its development management processes to ensure the policies and proposals contained within these documents are implemented by development proposals.

### 6.3.1. Policy formulation

The Council adopted both its Core Strategy and Development Policies development plan documents (DPD) in 2009. Policy CS10 of the Core Strategy seeks to protect and enhance green infrastructure, and the Development Policies document contains a series of policies and proposals to protect elements of green infrastructure such as designated sites for ecological and geological conservation, Wildlife Habitat Networks, woodland and the historic environment.

The aims and objectives of this green infrastructure plan have been shaped by the policy direction in the Core Strategy. The initiatives proposed in this plan are therefore entirely consistent with the Core Strategy, though future revisions of the Core Strategy and other development plan documents will enable a stronger relationship to be made with the Green Infrastructure Plan. In particular, a green infrastructure policy and proposed green infrastructure site allocations (e.g. new public open space) will be set out in the forthcoming Leisure, Recreation and Open Space development plan document.



### 6.3.2. Development management

The effective implementation of planning policy through the development management process is also crucial to the success of this plan. The Council will therefore focus its development management services on achieving the following:

- A positive approach to place shaping – increasing awareness of developers understanding of the benefits of green infrastructure and ensuring green infrastructure is adequately considered in the process of considering development proposals
- Putting planning policy into action – using the Core Strategy and other policy documents to get the right blend of protection, enhancement and creation of green infrastructure assets from development proposals
- Front loading – using masterplans, development briefs and pre-application discussions to express a clear intent for green infrastructure requirements
- A proportionate approach – obtaining enough information about applications from Design & Access Statements to understand the relative importance of green infrastructure alongside other infrastructure and finding ways to make green infrastructure work
- Effective engagement – engaging and considering the comments of green infrastructure specialist agencies on planning applications positively and involving Council members and local communities at the right stage of the process
- Pro-active delivery – understanding how green infrastructure can help resolve complex development issues through creative design solutions
- Monitoring & review – ensuring green infrastructure commitments in planning conditions and obligations are adhered to

To put these elements into practice, the Council will consider joint-working with neighbouring local authorities on proposals that cross boundaries and will develop ways for sharing staff resources offering specialist green infrastructure design advice.

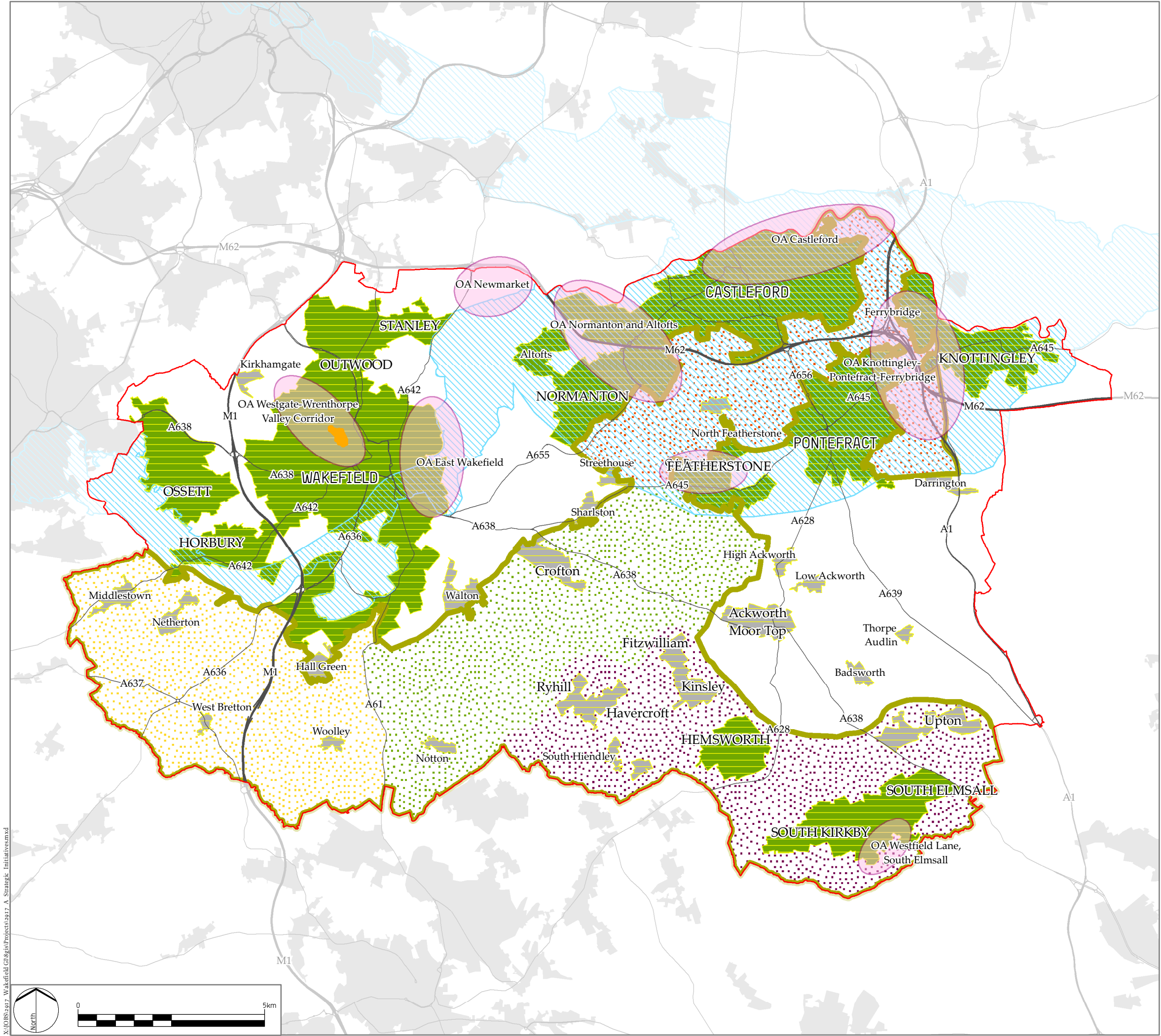
### 6.4. Leadership

The delivery of the plan will be lead by the Council in collaboration with its partners. The Council will coordinate a green infrastructure panel comprised of key stakeholders in this green infrastructure plan to promote green infrastructure and to provide an overview of the plan and its successful delivery.

To support the Board, a Wakefield Green Infrastructure Steering Group will be formed of officers of the council and of other key agencies. The group will meet frequently enough to monitor delivery progress and will be serviced by a council officer to be designated as the 'Green Infrastructure Plan Manager'. It is expected that this role will be part of the wider duties of an existing officer rather than be an additional resource requirement.

An annual delivery plan will be prepared by the Steering Group for approval by the Panel Group that will create a time and investment frame for the initiatives. The success of the plan depends on local partnerships to deliver green infrastructure action on the ground. Given the opportunities to achieve multi-functional green infrastructure benefits, it is likely most local actions will need to bring together a range of local agencies into partnerships to plan and design schemes, to win resources, to deliver the project; and then to secure its ongoing management.

There are many other partnerships planning and delivering green infrastructure at the regional, sub-regional and local levels in the City Region and with either a wide scope (like the White Rose Forest Partnership) or narrow focus of activity. The role these partnerships and agencies may play in delivering this plan is indicated under each initiative in the previous section.



LEGEND

Study Area (Wakefield Metropolitan District Council)

Investment Programmes

'Green Places' - Area of Search

'Green Working' - Area of Search

'Growing Food Locally' - Area of Search

Strategic Projects

'Fresh Aire' - Area of Search

'Wakefield Forest', comprising of the following:

'Five Towns Forest' - Area of Search

'Nine Lakes' - Area of Search

'South West Wakefield Woodlands' - Area of Search

'Green Corridor Forest' - Area of Search

'Balne Lane Fields'

Opportuntiy Areas (OA)

Newmarket, East Wakefield, Westgate-Wrenthorpe Valley Corridor, Westfield Lane South Elmsall, Castleford, Knottingley-Pontefract-Ferrybridge, Normanton and Altofts, Featherstone

D

Five Towns Forest boundary amended

NH

22/10/10

C

Consultation Draft

NH

10/08/2010

B

Final Status

NH

22/07/2010

A

Final Draft

NH

12/07/2010

REV.

DESCRIPTION

APP.

DATE

# LDA DESIGN

PROJECT TITLE  
WAKEFIELD GREEN INFRASTRUCTURE PLAN

DRAWING TITLE  
Plan A:  
Strategic Initiatives

ISSUED BY	Oxford	T	01865 887050
DWG.NO	2917_A		
DATE	27/10/2010	DRAWN	KW
SCALE@A3	1:100,000	CHECKED	KW
STATUS	FINAL	APPROVED	NH

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All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

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2001 Census Area Data.

Sources: Ordnance Survey, 2001 Census, Open Street Map, Wakefield Council, Leeds City Region

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