The Marches
Local Enterprise Partnership
Herefordshire - Shropshire - Telford & Wrekin

A natural prospectus for the Marches Local Enterprise Partnership

Creating a prosperous environment for Shropshire, Telford & Wrekin and Herefordshire

The Marches is a beautiful and highly varied region, with a business base as rich and diverse as its natural landscape. It is the birthplace of Darwin who revolutionised how we look at the natural world and at its heart is the global birthplace of industry, part of a heritage which has sparked a revolution of a different kind.

The Marches Local Enterprise Partnership vision
"A strong, diverse and enterprising Marches business base, operating in an exceptional and connected environment…"

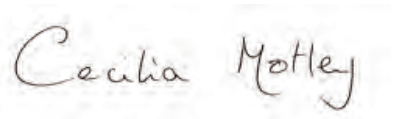
Home to innovative hi-tech enterprises and established land-based industries, here we have entrepreneurs flourishing alongside world players. All of these businesses have invested in the Marches, with most clearly recognising the benefits that working in a beautiful landscape brings to both their business and their staff.

This prospectus celebrates the natural assets of Herefordshire, Shropshire and Telford & Wrekin and gives an insight into how organisations are using our 'natural capital' for the social and economic benefit of those who live and work here and as a platform for growth.

The Marches is a region ripe for investment which appeals from so many perspectives, with regular and rapid transport links into the rest of the Midlands and beyond, high speed communications in all of the key population centres and a place where staff will be delighted to live, work and play.

Case studies in this prospectus highlight enterprise, innovation and investment across a variety of sectors, all of which have one thing in common – a real passion for our natural environment and a belief in the Marches as fantastic home for business, now and for decades to come.

Graham Wynn OBE
Chairman of The Marches Local Enterprise Partnership



Councillor Cecilia Motley
Chair Shropshire, Telford & Wrekin Local Nature Partnership

Rob Garner
Chair of Herefordshire Local Nature Partnership

Background

This prospectus highlights some natural assets of the Marches LEP area. Through case-studies we demonstrate how some businesses are making good returns on investment in natural resources like water and green infrastructure. The case-studies illustrate how intelligent use of natural resources can bring both economic and social benefit to investors which also benefit the area's work force and the diverse local communities that make their homes in the region.

The Marches Local Enterprise Partnership has collaborated with our two Local Nature Partnerships to publish these case-studies. They include investments in the natural environment that increase tourism, clean our air and water (often pre-empting regulatory restrictions), and improve our health and wellbeing. Our key aims for these case-studies are to raise awareness of our 'natural capital' and to inspire additional investment in these natural assets. We hope this will help secure their sustainable management for the benefit of all and make the Marches a better place to live.

This document will be available on the Marches LEP website and will be updated to include additional case-studies as they become available.

Featured case-studies are:

The co-ordination of this document was led by Shropshire Council and the Shropshire Wildlife Trust. We would like to thanks all the contributors to this document.

Water, life of industry

The annual benefits from UK wetlands are worth an estimated £2.5 – £5.7 billion.

A survey of anglers on the Wye River found that 'scenery' was the most common influence affecting where anglers fished, just ahead of quality/abundance of catch. On average, the anglers surveyed were willing to pay £37.7 per year for river habitat improvements that significantly improved the quality and quantity of trout and salmon in the river.

SUSTAINABLE DRAINAGE AT RICOH

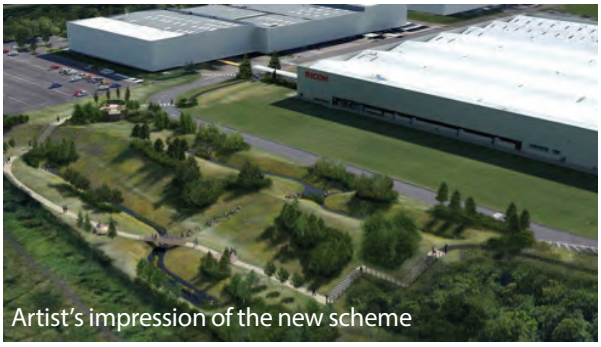
Ricoh is a Japanese multinational imaging and electronics company with production and warehousing units in Telford.

A series of pools and wetlands are being created which will act as a sustainable drainage scheme (SUDS) and a pollution prevention control measure to meet the forthcoming Water Framework Directive (WFD) requirements.

- This removes the risk of the site being shut down due to any potential pollution incidents into the local water course. Site closure would cost in the region of £1m per day.
- Surface water discharge rates will be reduced by £30k per year.
- Future legislative compliance with WFD will be achieved
- The scheme will cost in the region of £500k to install
- This is a new initiative requiring initial investment to evidence the benefits.

Other benefits

- A variety of biodiverse habitats
- Greater productivity and fewer sick days for staff who use the area for work breaks
- Demonstrable evidence of business excellence measures and Corporate Social Responsibility
- Creation of an exemplar in retro-fitted SUDS that can be used as a demonstrator by other organisations, including businesses involved in the 'Business Environment Support Scheme for Telford' (BESST)
- Much improved carbon storage



Artist's impression of the new scheme

For further information, please contact **Andy Whyle**, Environment Officer, Ricoh, via email **andy.whyle@ricoh-rpl.com**, or telephone **01952 212614**

RAINWATER HARVESTING TO REDUCE WATER ABSTRACTION

Freshfield Fruit Ltd is a strawberry production site based in Hereford. The site employs 16 full time employees and up to 120 seasonal employees with all production areas covered in poly tunnels to protect the crop. A constant supply of water is critical for their 'out of soil' production technique.

- In 2010 a rainwater harvesting system was installed by Agri Management Solutions Ltd to capture the rainwater falling on the poly tunnels and store it in an onsite reservoir. This water is then used to irrigate the crop.
- Percentage of required water harvested from site:
  - 45% in 2012
  - 26% in 2013
  - 24% in 2014
- The cost of the project came to £91,886.

Other Benefits

- Business risk is decreased by reducing reliance on water abstraction from local rivers. Abstraction licenses are currently being reviewed with the possibility of restrictions being put on river abstraction volumes.
- The works provide a clear demonstration of corporate sustainable responsibility.
- Problems with site access and condition of the ground following heavy rainfall are reduced as much of the water is intercepted.
- Where the reservoirs have capacity, this interception also reduces peak flows of flash floods.
- Aquatic and wetland habitat has been created to enhance wildlife.

For further information, please contact **Peter Gwynne**, Director, Agri Management Solutions Ltd, via email **peter@amsltd.uk.net**, or telephone **01432 850219**

CATCHMENT MANAGEMENT PARTNERSHIPS

Catchment Management Partnerships deliver activity that ensures Rivers of the Marches recover to good ecological status and meet water quality standards under the EU Water Framework and EU Drinking Water Directives. These partnerships complement existing regulatory functions and also bring on board businesses and NGOs who have an interest in clean rivers and issues of flooding or drought. Shropshire Wildlife Trust (SWT) facilitates delivery in the Middle Severn catchment (central and north Shropshire) with co-hosts Severn Rivers Trust (SRT) leading on the Teme catchment. DEFRA has confirmed its policy commitment to the Catchment Based Approach (CaBA) to delivering the UK's obligations under the Water Framework Directive (EU2000).

- Current project activity includes a wide range of advisory, education and practical works across Shropshire and Telford & Wrekin. These deal with diffuse and point source pollution, river re-naturalising, flood management, protected species work and new ways of working, such as payment for ecosystem services.
- Over the past three financial years over £1.5m has been directly invested through Catchment Management Partnerships
- Overall return on investment is difficult to quantify but costs of flooding and disruption to water supply and flood impact in the agricultural sector are enormous.

FINANCIAL COST OF FLOODS AND POLLUTION

- Significant economic development in the Clun and Wye catchments have been held back until water quality improvements are achieved.
- A pollution incident in 2012 in Coalbrookdale closed the River Severn water extraction point south of Telford for over 24 hours. Supplies to Telford and nearby towns were put at risk.
- Re-seeding and crop loss on a single farm due to flood water inundation can cost upwards of £10,000 annually. Estimated annual total costs across Shropshire of the impact of floods on food production is in the £100,000s. The UK cost of the 2007 floods to agricultural production was estimated at £50m. The vast majority of this cost is borne by the farming community.

For further information please contact **Pete Lambert**, Shropshire Wildlife Trust, via email **petel@shropshirewildlifetrust.org.uk**, or telephone **01743 284280**

LOVE YOUR RIVER TELFORD PROJECT

PROJECT DESCRIPTION

- A community driven, broad partnership project with many cross-sectorial benefits that improves water quality, biodiversity, and community well-being while reducing flood risk for domestic and business properties near Telford.
- £171k of DEFRA Water Framework Directive funding is being invested in the project.

MOTIVATION

- All 6 water bodies in Telford are failing to meet required European Directive standards either partially or completely due to urban pollution issues from the town.
- Telford had 4 government organisations, 4 non-government organisations, 1 water company, 1 university, 16 community groups and an industry led environmental group with 140 members, all working to try and improve water quality, biodiversity and flooding in Telford.
- By bringing all of these bodies together along with all sections of the local community to work collaboratively it enabled us to work towards our joint aspirations of:
  - Improving the environment
  - An enthused, motivated and joined up community
  - A more efficient approach
  - A model that could be used in other towns with similar issues
  - Improved inter-organisational relationships and a better understanding of remits
  - A return on investment

RETURN ON INVESTMENT

- Although difficult to accurately calculate, the project has resulted in a significant return on investment.
- The project has:
  - Reduced costs, potentially by > £30k for Government organisations and NGOs alike through, proactively seeking issues before they escalate and asking local communities to help with monitoring. Working efficiently together reduces the overlap in incident attendance further increasing the above savings.
  - Similar proactive work has potentially saved the water company well in excess of £500k. Further savings made by reducing the number of reportable pollution incident penalties.
  - Through pollution prevention campaigns and working with BESST we have potentially saved Telford's business community around £230k in pollution recharges alone, through reducing business risks to the environment.
  - Reduced the environmental risk from Telford, the main conurbation above downstream water abstractions on the River Severn. A major incident has the potential to cost many £Ms to the country.
  - Improved the environment with the benefits that brings the whole community through health, wellbeing and education.

CHALLENGES / BARRIERS

The main challenge was to understand all the partners aspirations and attempting to include all of them in the project specification and outcomes.

NEXT STEPS

The model created through this project is already being transferred to one other urban setting with significant interest from other towns and cities from across the country. External funding is being sought to continue to improve both the environment in the town and the transferable model.

For further information please contact **Guy Pluckwell**,
the Environment Agency's Project Manager for the Love Your River Telford Project,
via email **guy.pluckwell@environment-agency.gov.uk**

Tourism & the visitor economy

Tourism is the fastest growing sector in the UK, bigger than the advertising industry, agriculture and even the car industry, and forecast to be worth £257bn to the UK by 2025. The visitor economy encompasses the wider activity and spending of core leisure tourism and hospitality, heritage, culture, convention business and discretionary retail.

In the context of the Marches LEP area, the leisure visitor offer is based largely on heritage and countryside. Strong drivers for countryside visits and rural activities can be found within the 'golden triangle' of Shrewsbury, Ironbridge Gorge World Heritage Site and Ludlow. Other key drivers include the three Areas of Outstanding Natural Beauty that are found within the Marches – The Shropshire Hills AONB, The Malverns AONB and The Wye Valley AONB. Herefordshire is also home to the world-class Hereford Cathedral and the Hay Festival. Convention business is largely Telford area based but can also be located in countryside settings and is allied with sport and leisure opportunities such as golf and spa breaks. Such activities bring in revenue and provide employment, as well as encouraging high levels of repeat tourism. Visits across the area are driven by the short breaks and day trip markets, plus broader educational visits all supporting the wider economy.

The 'natural heritage' offer is strong across the Marches with key contributors to the rural product, although perhaps less visibly articulated than in other UK areas. The following list highlights some specific examples of product offerings: Butterfly Conservation; Canal & River Trust; English Heritage; Forestry Commission; HF Walking Holidays; several walking festivals and 'Walkers are Welcome' towns; Historic Houses Association; Meres and Mosses Landscape Partnership Scheme; National Trust; Natural England; Newport-Shrewsbury Canal Trust; private landowners including farmers; Ramblers; RSPB; Severn Gorge Countryside Trust; Shropshire Hills AONB; Shropshire Wildlife Trust; Smallwoods Association; Wheely Wonderful and other commercial walking/cycling operators; the Woodland Trust; and the Youth Hostels Association.

MARKETS, VALUE AND VOLUME

The Shropshire & Telford Economic Impact Assessment (EIA) for tourism 2011 showed:

- A total of 15.24 million visitors to whole county directly spent £661million on tourism goods and services, £160m per annum in Telford & Wrekin and £501m in Shropshire.
- The indirect value to the wider visitor economy would significantly increase this figure: Deloittes estimate the GVA multiplier to be 2.8, meaning that for every £1000 directly generated, a further £1800 is supported in the wider economy.
- A value to the local Shropshire economy could be in the region of £1bn per annum with an additional £416m estimated for tourism in Herefordshire in 2009.

Visit England's Countryside Study shows that public attitudes to the countryside were reflected in three types: dramatic countryside / scenery; market towns and surroundings; rural countryside. Arkenford Research published in 2012 indicated that between 80-90% of all visitors to Shropshire indicated the appeal of the natural environment as a reason for their visit.

WALKING WITH OFFA

Walking with Offa was a project led by the Shropshire Hills AONB partnership which extended beyond the Marches LEP area. It aimed to increase the economic return from tourism in the Shropshire Hills by creating and promoting walking routes with an emphasis on local pubs being the start and end point for local walks. Total project cost was £25,000 with the majority being provided by Natural England.

PROJECT RESULTS

- Consensus from local businesses is that the project has had a significantly positive impact. Whilst specific figures are not available, over 40% of 100 businesses surveyed considered that visits from walkers contributed between £5,000 and £50,000 to their business per annum.
- 12 new circular walks were created supporting pubs, cafés and villages.
- Guided walks, ending up in a local pub or café for lunch, also encouraged people to get out walking locally. These were cost neutral to run (£1,150) and generated £621 for the pubs involved.
- The sale of 754 leaflets (and 121 promotional mugs) was sufficient to cover production costs £8,500
- 4 'Days Out' in the key market towns encouraged walking and longer visits
- Podcasts describing the project and four of the walks were downloaded 1,844 times, whilst online the walks leaflet was downloaded 16,192 times
- A 5p levy on a new beer produced by Hobsons Brewery raised £4,159 over 18 months. These funds were used to promote the project and on creation of further walks. £500 was contributed to Hobsons Brewery for the development and promotion of the beer.

CHALLENGES

- The businesses that had the best return on investment for the walks were those who took an active interest in being involved and promoted the route themselves.
- Printed leaflets go out of date quickly as pubs change hands and facilities change. Downloadable leaflets are more suitable, as well as minimising impact on the environment.
- Distribution of leaflets, booklets and mugs is an issue and adds more complications, while rate of return for merchandising relies on high volumes of sales. Analysis could usefully be undertaken of the market for souvenirs as well as the best outlets for people to find out about the Walks.

For further information, please contact **Clare Fildes**,
Shropshire Outdoor Partnerships Development Team Leader,
via email **clare.fildes@shropshire.gov.uk**, or telephone **01743 255067**,
or visit **www.shropshirehillsaonb.co.uk/things-to-do/walking/walking-with-offa**


M&S

MARKS AND SPENCER AT OSWESTRY: THE LIVING WALL

PROJECT DESCRIPTION

- Using lessons learned from three 'sustainable learning stores' a range of features have been applied to four existing Simply Food stores including the Oswestry branch.
- Green living walls were one such feature applied to all four stores.
- Exact costs for the Oswestry wall are not available. Costs for similar walls are in the region of £380 per m2 with an ongoing maintenance cost to be considered for all healthy living walls.

MOTIVATION

- The works were part of the 'Plan A' sustainability initiative.
- The target was to reduce energy use by 40% at Marks and Spencer stores. LED lighting, waste heat re-use and rainwater harvesting were some of the tools used to achieve this target.
- In addition to energy reduction the green wall will:
  - Boost local biodiversity – many green walls use flowering plants benefitting pollinators
  - Improve the look of the stores
  - Improved air quality in the vicinity
  - Reduce noise pollution
  - Communicate the business's green credentials
- Figures on direct return on investment are not yet known and many benefits, such as public perception, are likely to be intangible and difficult to measure.

CHALLENGES / BARRIERS

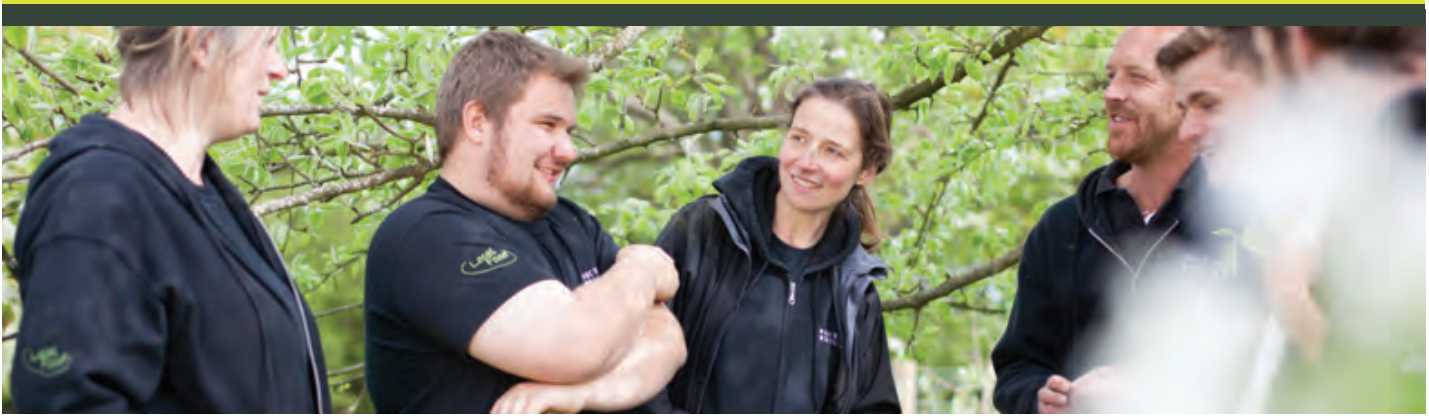
The Oswestry living wall is a straightforward design with easy access, however when specifying living walls anywhere – accessibility for maintenance and access to a water source are important, most challenges can be overcome, however cherry pickers, platforms and even absailing specialists for really high walls all need to be considered.

NEXT STEPS

Marks and Spencer embrace the benefits of living walls and will continue to specify these across their stores.

For further information please contact **Anna Roochove**, Scotscape Landscaping Ltd, via email **annar@scotscape.net**, or telephone **0208 254 5000**, or visit **www.scotscapelivingwalls.net** Scotscape specialise in the design installation and maintenance of living walls across the UK.

ORCHARD ORIGINS



Orchard Origins is a Community Interest Company (CIC) owned by Herefordshire Wildlife Trust and originally established with £240,000 support from the Big Lottery Fund's Local Food scheme.

In partnership with Herefordshire Mind the orchards are being used as a venue and resource for people recovering from and managing mental ill-health. By promoting the concept of wellbeing, rather than addressing illness, Orchard Origins is open to people of all backgrounds and helps to de-stigmatise mental health. The orchard also generates some revenue from the produce of the fruit trees.

RETURN ON INVESTMENT

Traditional Orchards are approximately only as third as productive as modern intensive orchards but they have been shown to be highly valued by local communities and visitors alike. One study[1] suggests an aggregate economic, social and economic value of a low-intensity, publicly accessible orchard to be £4776 per hectare per year. Orchard Origins seeks to further this value through the social therapeutic activity of involvement in management to benefit wildlife.

NEXT STEPS

The project will seek to work with groups of people identified as having low levels of wellbeing and self-esteem and an increased rate of mental ill-health. This includes military veterans and offenders. The groups pruning services have been commissioned by householders and owners of commercial orchards alike, while the juice and cider facility now offers a juice-making service which, it is hoped, will give rise to supported opportunities for people seeking to retrain and/or enter the labour market.

[1] ROBERTSON, H., MARSHALL, D., SLINGSBY, E. & NEWMAN, G. 2012. Economic, biodiversity, resource protection and social values of orchards: A study of six orchards by the Herefordshire Orchards Community Evaluation Project. Natural England Commissioned Reports, Number 090

For further details please contact: **Laurence Green**, Manager, Orchard Origins, via email **l.green@herefordshirewt.co.uk**, or telephone **01432 356872**, or visit **www.herefordshirewt.org/orchard_origins**/

The Natural Capital of the Marches

Natural capital can be defined as 'the parts of the natural environment that produce value to people. Natural capital underpins all other types of capital – manufactured, human and social – and is the foundation on which our economy, society and prosperity is built'. (Natural Capital Committee, 2014).

The Natural Capital Committee (NCC), which reports to the Department for Business, Innovation & Skills (BIS), has stated that much of this capital is being eroded, with significant impacts to the economy. The Office of National Statistics estimates that the monetary estimate of selected components of UK natural capital was £1,573 billion in 2011, 4.1% lower than in 2007. But there are notable cases where this capital is being enhanced.

Table 1. Benefits from natural capital at high or very high risk with issues and some current and potential actions which seek to address the issues

Natural Capital Resource	Issues	Current and potential actions
Clean Water	All 6 water bodies in Telford, and over half of those in Shropshire and Herefordshire are failing to meet required European Directive standards mostly as a result of diffuse pollution from both urban and agricultural sources. The UK risks fines from Europe if Water Framework Directive targets are not met. Poor water quality is holding back development in the Clun and Wye catchments primarily due to high water quality requirements for the areas designated as Special Area of Conservation (SAC). The ability of the LEP to deliver its economic strategy is being compromised. Figures from the Clun catchment indicate that development worth over £58m is being held back resulting in the loss, or delay, of Community Infrastructure Levy contributions worth £1.7m. Several businesses are at risk of temporary closure and fines if accidental spills occur near water courses.	A wide range of activities are being coordinated by the River Clun Partnership and several projects are underway including a £360,000 project funded by the WREN Biodiversity Action Fund. Farmers, local government and domestic properties can all take action to reduce nutrient and silt pollutants. Nutrient Management Plans for both catchments have been written. The LNPs may have a role in approving locally determined Nature Improvement Areas which will help provide concerted action. Severn Trent Water has invested a total of £2.1m in Phosphate removal from Sewage Treatment Works at Telford (Rushmoor) on the river Tern and at Market Drayton. In a case study in this document Ricoh describe their planned Sustainable Drainage System which would remove any water pollution risks and pay for itself in 15 years through ongoing savings of surface water run-off rates alone. See Case Study in this document.

Natural Capital Resource	Issues	Current and potential actions
Wildlife	The rate of loss of native plants from Shropshire, Telford & Wrekin is approximately one every two years. The last six species lost were all wetland or aquatic plants. On average 2% of Local Wildlife Sites are destroyed every year. There is evidence that indicates widespread declines in pollinator numbers and diversity across the UK. Some farms that grow insect pollinated crops now use the services of bee keepers and their hives to improve crop yields. It is not known whether this is filling a gap left by declining wild pollinators. Under the new 'Countryside Stewardship' the coverage of farmland under environmental stewardship schemes is expected to fall from 80% to 30 or 40%. The reduced funding under 'Countryside Stewardship' will need to be better targeted which in turn relies on better provision of ecological data. Funding for data provision by Defra has also been cut by 30% so external sources of funding need to be located.	Landscape scale projects can help address many of the key issues of loss of wildlife in the wider countryside, including pollinators. But only where this leads to long term changes to land management in priority areas. It should be remembered that many wild bee species are far more effective as pollinators than honey bees so the emphasis should really be on boosting wild pollinators. The Marches area has benefitted from 4 Heritage Lottery funded 'Landscape Partnership Schemes' totalling over £4.5m. The Meres and Mosses Nature Improvement Area has also received £568,470 to supplement the lottery funding. Former aggregate extraction sites and some types of waste deposition sites can offer significant potential for biodiversity. Over 30% of the area of 38 quarries surveyed in 2006 was habitat of national importance – compared to less than 5% of the wider countryside. There are significant opportunities for additional work with the aggregates extraction industry.

Natural Capital Resource	Issues	Current and potential actions
Carbon storage	Carbon storage is important for England's contribution to an equable climate. There is potential for greater carbon storage through improving the condition of moorland / mosses, heaths, woodlands and farmed soils.	The Meres and Mosses hold vast stores of carbon that are likely to exceed the above ground carbon in biomass. Large deposits of fen peat are also present in floodplains but this is being lost through soil erosion and decomposition on drying after drainage. Land management such as re-creation of wetlands, can reduce downstream flooding, improve water quality, enhance biodiversity and increase carbon sequestration. Soils under semi-natural habitats store 33% more carbon than improved grassland and 63% more than arable land. Greater management of existing woodlands in addition to the creation of new woodland will increase carbon sequestration. Grassland is also a significant carbon store under threat from conversion to arable farming systems.
Hazard protection	Hazard protection can be significantly improved by changing the way in which land is managed. Better management would reduce soil erosion and make the most of natural processes to manage flood risk through actions such as tree planting and the reinstatement of wetlands.	Sustainable drainage schemes and run-off attenuation features are gradually being introduced over The Marches. These will have benefits for reduced flood risk, water quality and biodiversity. Significant additional investment is required to have an impact over entire catchments. Green infrastructure in towns (including street trees, open green space, green walls and green roofs) can provide significant urban cooling, both indoors and outdoors. Planning can play a large part in ensuring adequate green infrastructure is incorporated into developments. The Marches LEP can also play a part where funding is provided for infrastructure projects.

Natural Capital Resource	Issues	Current and potential actions
Recreation	Tourism contributed an estimated £1billion to The Marches economy per annum. Arkenford Research published in 2012 indicated that between 80-90% of all visitors to Shropshire indicated the appeal of the natural environment as a reason for their visit. Tourists and businesses are attracted to Shropshire by the high quality landscape, our cultural heritage and the biodiversity. There is little or no investment to maintain or enhance such assets by those in the tourism industry who benefit from them despite ongoing losses of hedgerows, a wide range of wildflowers, and iconic birds like Curlew and Lapwing. Levels of physical inactivity are increasing. This costs the UK an estimated £7.5 billion a year.	Potential actions for the Marches area includes: ■ A clear, integrated vision including the tourism action plans for the unitary areas. ■ A 'countryside axis' for the visitor economy to agree joint activity and needs such as data sharing, PR, photo banks, research & intelligence, skills and business support. ■ Proper destination management to maximise, not hinder, rural tourism. For example: ensuring that the road from Hereford to Ludlow isn't closed for resurfacing on the day the Ludlow Food Festival opens. ■ A clear marketing campaign and brand utilizing high quality environment as an asset. ■ A well-recognised brand identity created around a top quality agricultural industry producing fine locally produced food. The Walking for Health initiative has seen great success in making use of the natural environment to address health issues.

Natural Capital Resource	Issues	Current and potential actions
Clean Air	Air quality has improved over recent decades but there are still very high costs associated with it. Negative health impacts related to poor urban air quality are estimated at £9-20 billion per annum, so this remains a priority for action. Across the Marches area in 2012 the approximate number of early deaths due to one type of air pollution alone (Particulate Matter 2.5nm) was 259. This compares with approximately 239 being killed or seriously injured on the roads. This air pollution is highest in urban areas – primarily as a result of diesel engines. Levels of nitrogen based air pollution, like ammonia, in the Meres and Mosses are exceeding the levels that the meres and mosses European Protected Sites can cope with. These sites include our greatest stores of carbon and some of the best sites for biodiversity. Significant sources of nitrogen based air pollution include agriculture, cars and industry.	Seven Air Quality Management Areas are listed for the Marches area; all listed for excessive nitrogen dioxide levels however other pollutants remain problematic. This has impacts for the health of both residents and visitors. Targeted use of green infrastructure (GI) like street trees, green / living walls and green roofs can reduce levels of nitrogen dioxide, particulates and other pollutants to within recommended limits. Emissions of ammonia from poultry units have been significantly reduced in recent years due to better design of the units and changes to feed types. It is hoped that further research on design and feed can continue to reduce emissions. Given the propensity for many plants, lichens and fungi to absorb nitrogen, research into using natural features to reduce emissions could provide cheap and effective alternatives.

Useful reading & references

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Key to acronyms used in the prospectus

CaBa	Catchment Based Approach
CSR	Corporate Social Responsibility
GI	Green Infrastructure
LEP	Local Enterprise Partnership
LNP	Local Nature Partnership
NGO	Non Governmental Organisation
SAC	Special Area of Conservation
SRA	Severn Rivers Trust
SUDS	Sustainable Drainage Scheme
SWT	Shropshire Wildlife Trust
WFD	Water Framework Directive

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