West of England Nature Partnership
Joining up the dots for nature

Ecosystem Services

Understanding nature's value in the West of England

Contents

With thanks:

The Wildlife Trusts Avon

Essex Wildlife Trust

Natural England

Bath & North East Somerset Council

North Somerset Council

South Gloucestershire Council

UWE Bristol

We are West of England Local Enterprise Partnership

Environment Systems evidence and insight

Bristol City Council

West of England Nature Partnership
Joining up the dots for nature

About this Report

> The natural environment underpins our society and economy. Natural systems are dynamic and complex, and understanding the benefits they provide is crucial for maintaining a healthy society, prosperous economy and flourishing environment.

The West of England Nature Partnership (WENP) is committed to better understanding the contributions natural resources make. To achieve this the partnership is undertaking a comprehensive 'State of Environment Assessment' to take full account of the environment in assessing risks and opportunities, and demonstrating the value of natural capital to society.

This report is a summary of findings from the first phase of the assessment, specifically the development of fourteen ecosystem maps, which illustrate a selection of the region's natural assets – or ecosystem services - and identify where investment could help enhance these assets for the benefit of people, wildlife and the economy.

For further information and more details about how to use the maps and how they have been created please visit www.wenp.org.uk/ecosystems

All of the maps are available to download in pdf form from our website

The GIS files are available for purchase, please contact info@wenp.org.uk for more information.

The maps were produced by data and GIS specialists Environment Systems www.envsys.co.uk and in consultation with our partners.

The maps were created by analysing over 200 datasets, this is the best data available at the time of going to press.

For more information, please contact info@wenp.org.uk

Font cover images by:
Corn bunting - Amy Lewis
Poppy - Jon Hawkins
Bluebells - Tom Marshall

The West of England Nature Partnership

The West of England Nature Partnership (WENP) is the Local Nature Partnership for the West of England region, covering the four Unitary Authority areas of Bath & North East Somerset, Bristol, North Somerset and South Gloucestershire. Working with our partners, we exist to create and coordinate a plan for the restoration of the natural environment and integrate that plan into strategies for spatial planning, economic development and public health.

The West of England at a Glance

Dr Dominic Hogg,
West of England Nature Partnership Chair

It gives me great pleasure to introduce this work, which has been seen as a key deliverable for the partnership for a number of years. The aim has been to provide a snapshot of the state of our natural assets, and to use this information both as a basis for understanding where enhancement in provision is badly needed, and to inform the way in which decisions regarding further development will impact on the state of the environment.

Increasing our understanding of the contributions that the natural environment makes, is fundamental to ensuring we maintain our economic prosperity and our quality of life. This was highlighted in the Natural Capital Committee's three reports written for government, which identified that further investment in natural capital could result in benefit:cost ratios as high as 9:1.

The maps created for the West of England, contained in this report, and available on our website, provide us with the vital evidence required to make decisions about the natural environment. They will help us identify where investment will result in the greatest benefits. The maps also show us what this region has to offer in terms of its rich array of natural assets, and the benefits that these assets provide, for example, in terms of a natural means of protection against flood risk.

This report is the first phase of understanding the State of our Environment – I hope that as a partnership we can continue looking at the data and evidence. I also hope that when we review the state of the environment in future – as we surely must – that we will be able to detect a discernible improvement in the state of the natural environment, consistent with the stated intentions of Government.

I'd like to say a special thanks to our partners for helping deliver this project, in particular the working group, led by Dr Lucy Rogers, (Avon Wildlife Trust), who have put a tremendous amount of work into delivering the first phase of the project, and WENP's manager, Shelly Dewhurst who has brought the project to fruition.

Barbara Davies,
Chief Executive, West of England Local Enterprise Partnership and WENP Board Member

The West of England is a great place to live and work. This region is one of the fastest growing areas outside of London. We are renowned for our innovation, creativity and connectivity, and have a diverse economy, delivering unrivalled business strengths.

The West of England offers a high quality environment with easy access to the surrounding countryside. This significantly contributes to the draw of the area and the fact that nine out of ten people who work here also live here is testament to this.

Our natural environment is also a key economic asset, providing a multitude of services that support our economy and help maintain our high quality of life. As a WENP Board Member, I was delighted to hear the West of England Nature Partnership were committed to demonstrating the value of the environment by mapping ecosystem services and ecological networks for the first time at a West of England scale. Improving our understanding of the environment will enable us to make informed decisions about how the environment is managed, it will help us build in resilience to future pressures and ultimately, help ensure the environment is safeguarded for future generations.

The Ecosystem Approach

The natural environment provides a multitude of services that support humans. These services come in a variety of forms, from the food we eat and the air we breathe, to flood protection and medicine, nature plays an integral part in helping us survive and thrive. These benefits are collectively termed 'ecosystem services' and describe the benefits we directly, or indirectly, derive from nature.

The ecosystem approach seeks to maintain the integrity and function of ecosystem services by taking an integrated approach to the way land, water and living resources are managed. The approach explicitly recognises the fundamental interdependence between economic development, societal wellbeing and environmental protection. By considering these factors in unison the approach aims to support sustainable outcomes.

The UK was the first country to undertake a complete assessment of these services as part of the UK National Ecosystem Assessment (UK-NEA, 2011). The UK-NEA describes ecosystem services as "the benefits provided by ecosystems that contribute to making human life both possible and worth living." The Assessment categorised ecosystem services into four categories, shown belowin Fig 1.

PROVISIONING

products obtained from nature, such as food and timber

REGULATING

services provided by nature that regulate our environment, such as water and air cleaning services

CULTURAL

non material benefits provided by nature which enrich lives such as recreation, learning and tranquillity

SUPPORTING

the underpinning (or supporting) services which enable other services to function, such as soil formation and nutrient recycling

Fig 1: The UK National Ecosystem Service Assessment categorised ecosystem services into four types – provisioning, regulating, cultural and supporting.

The National Ecosystem Service Assessment calls for a shift change in the way the natural environment is valued. It advocates managing systems in a more integrated fashion, taking an ecosystem approach. In the West of England, we aim to take the learning from the UK-NEA and apply an ecosystem approach to local decision making.

The maps contained within this report have been created to provide a better understanding of ecosystem service provision within the West of England. This is the first time this type of mapping has been done across the region and they represent a vital first step for decision makers to understand our local natural systems, how they work, where they are under pressure and what is required to restore them.

Bumble bee pollinating Woolly Thistle

Ecosystem Service Mapping

To determine the level of ecosystem service provision, the following information was overlaid and analysed;

- The type of land cover and infrastructure, for example farmland, woodland or urban;
- The land management systems in place, for example a regularly ploughed arable field, or a semi-natural habitat such as a woodland;
- The underlying soil and geology, for example clay, silt or sand;
- The position or elevation in the landscape, for example on a slope or close to a river.

By assigning values to different factors, it is possible to grade the land on its ability to deliver particular ecosystem services, for example clay soil on flat land with tall vegetation will be able to hold water for much longer than on a steep slope with sandy soil. Therefore, the ecosystem service of water storage is better on clay soil.

What has been included?

The following services have been mapped across the West of England;

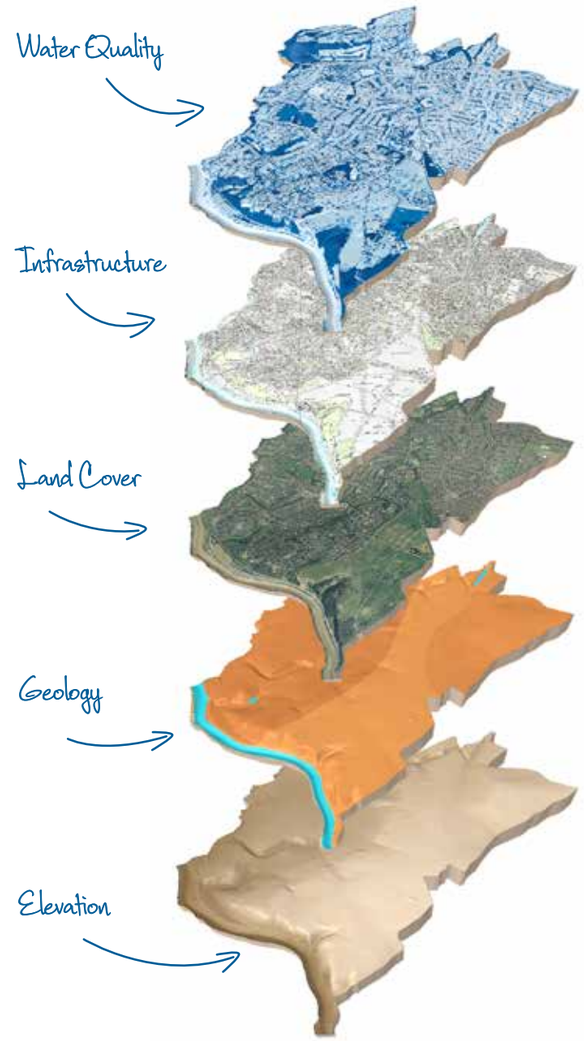
- Woodland, wetland and grassland ecological networks (page 10-14)
- Land that improves water quality (page 18)
- Land that provides natural flood management (page 20)
- Multiple ecosystem service provision (page 22)

The maps enable us to visualise the ecosystem services and networks within the West of England region. The maps have been designed for multiple users. They can be used at a strategic level, to identify cross-boundary, large-scale ecological networks, or at a field scale to better understand the services in a specific field. The maps are available on the WENP website in a number of different formats depending on your requirements;

- Downloadable pdfs - each of the maps are available online.
- Online map – view a selection of maps using our online map portal www.wenp.org.uk/maps
- GIS files – all of the maps are available as as 'ArcGIS' files. These are available for puchase and have been desinged for practitioners who regulalry use ArcGIS.
- Technical report – find out more about how the maps were created, the data used, and how to use them within your organisation'.

Please visit www.wenp.org.uk/ecosystems

Mapping provides a powerful tool to enable us to spatially visualise ecosystem services. By overlaying multiple datasets and indicators, we are able to model and grade ecosystem service provision across the West of England.



Overlay analysis © Environment Systems

The Maps

The maps provide a strategic overview of where the regions' natural assets are and where there exists opportunities to enhance those assets. A total of 14 maps have been produced, including ecological networks, water quality, and water quantity.

Over 200 datasets were acquired and analysed to produce the maps. For every 'stock' map, a complementary 'opportunity' map has been created, to show where the land could be modified to provide additional and enhanced ecosystem services or habitats. The maps have also be amalgamated to identify where multiple ecosystem services are being provided by the environment.

Please note, not all of the maps are included in this report. Visit our website to download the full suite.

Ecological Networks

In 2010, Professor Sir John Lawton conducted an independent review of England's wildlife *(2010, Making Space for Nature: A Review of England's Wildlife Sites and Ecological Networks).* The review concluded that our wildlife sites had become highly fragmented and were not currently capable of responding to the growing challenges of climate change and other pressures and demands placed upon the land.

The Lawton review called for a step change in nature conservation. Lawton advocated an integrated and restorative approach to managing the natural environment by establishing coherent and resilient ecological networks. Ecological networks can be described as the ecological infrastructure required to connect wildlife sites so that wildlife can easily move across the landscape. Although not an ecosystem service per se, ecological networks are essential for enhancing the ecological function and resilience of our natural environment. These networks are essential for food, migration, seed dispersal, pollination and maintaining genetic diversity.

Across the West of England, the woodland, grassland and wetland networks have been extensively mapped, so that we can better understand the networks that exist and the functions they are performing.

The best places to enhance the networks have also been mapped, so that restoration work can be targeted to best effect for the benefit of people and wildlife.

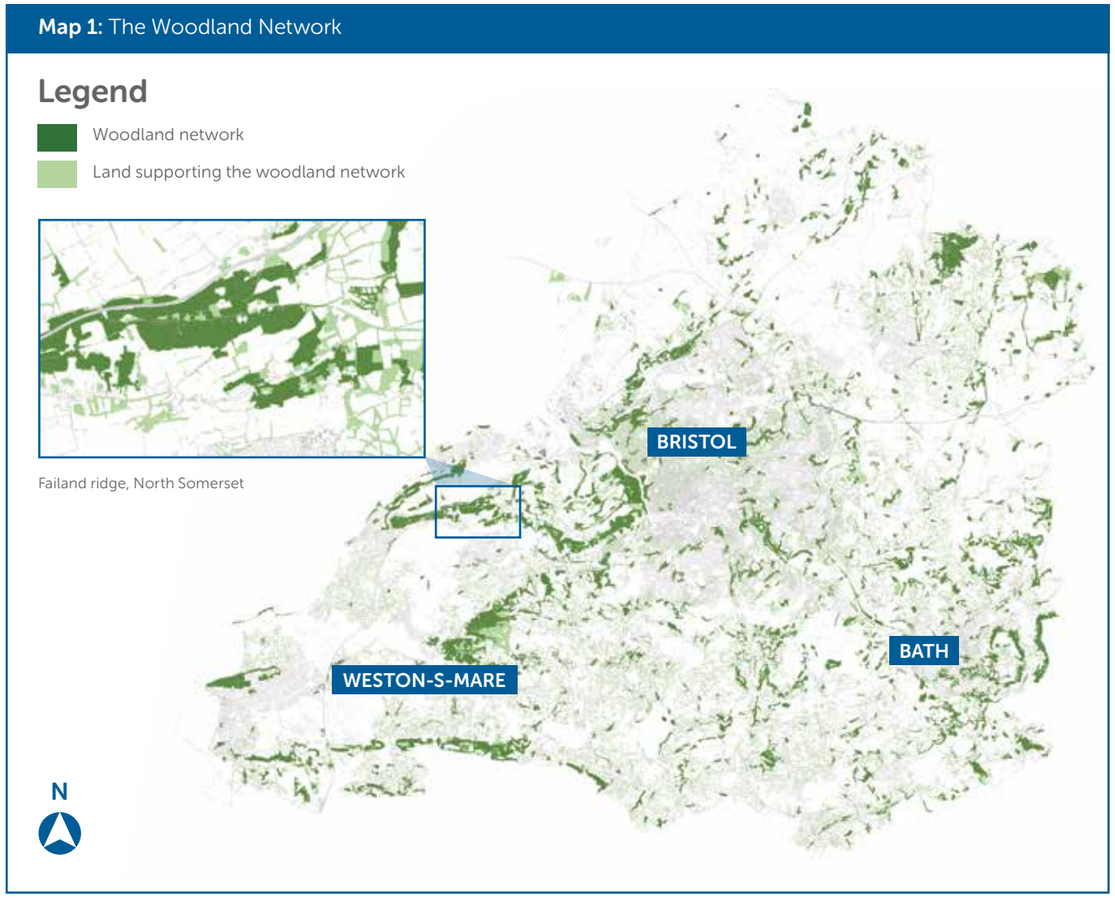
Bevis Watts

Map 1: The Woodland Network

Woodland in the West of England

The woodland network has been created by identifying areas of broadleaf woodland greater than two hectares. Areas must be close enough together that species and seeds can easily disperse across the area. The core network is supported by smaller patches of woodland and established hedges and scrub. These smaller refuge areas are crucial to enabling the network to function effectively, as they allow wildlife to move and forage for food, provide shelter and other essential roles.

Map 1: The Woodland Network



Key Stats

- The whole woodland network in the West of England is 282km², with 80km² being 'core woodland'
- Woodlands cover 12% of the UK land area.
- Woodlands provide a multitude of beneficial services, such as recreation, flood alleviation, carbon storage and soil stability.
- Across the UK, woodlands store around 150 million tonnes of carbon

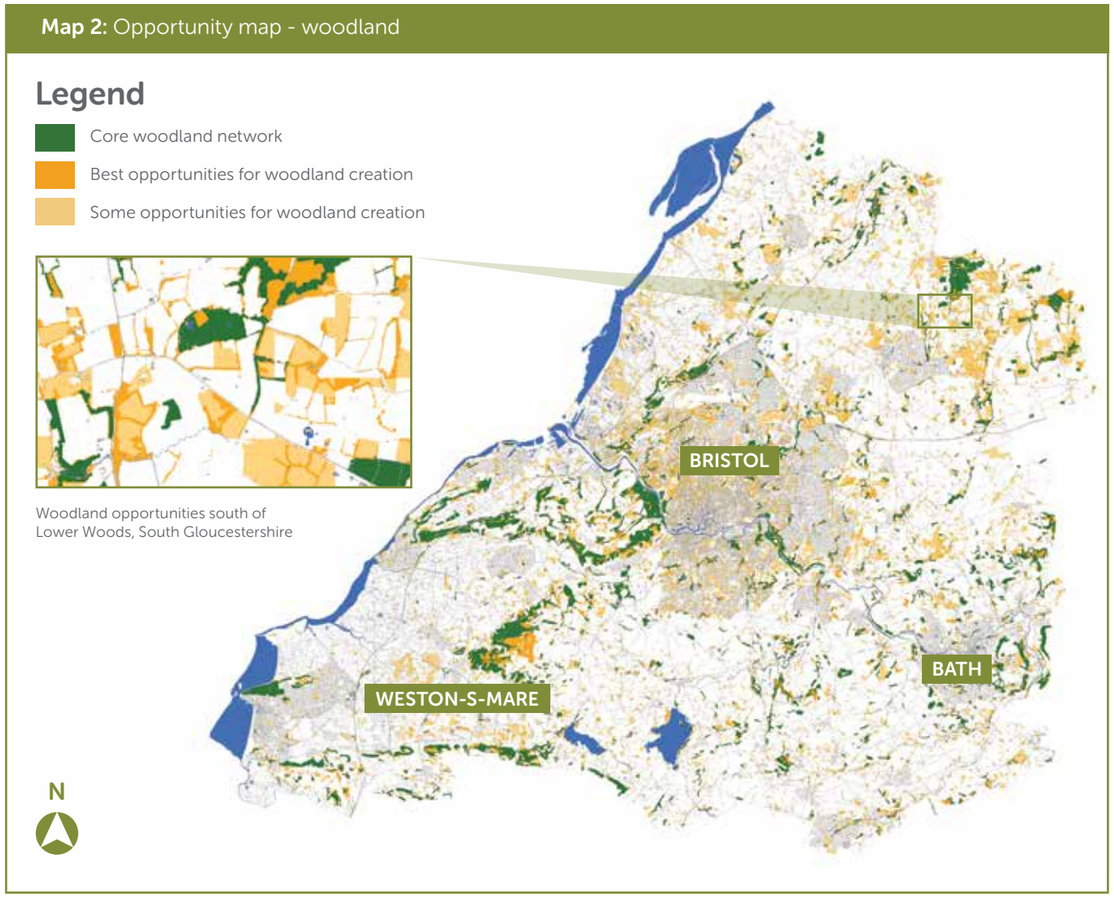

Blue Bells in Prior's Woods, North Somerset

Map 2: Opportunity Map - Woodland

Opportunities to strengthen the woodland network

Woodland creation will be most effective if the soil and habitat conditions are right. The areas with the greatest opportunity are those close to the existing woodland networks, in particular areas that can help buffer and protect woodlands that are of ecological importance, helping reduce further fragmentation or damage. This will in turn maximise the ecosystem services they provide.

Map 2: Opportunity map - woodland



Case Study 1: Forest of Avon Trust

Revitalising our local Woodlands Project

Local tree and woodland charity: the Forest of Avon Trust, is contacting all woodland owners across the West of England to get their woodland in to active management. To date, the charity has produced Forestry Commission approved woodland management plans for 800ha local woodlands, with a strong focus on conserving and enhancing biodiversity.

The charity prioritises connecting woodlands to enhance their ecological function, and have included all of Bristol's woodlands, the Avon Valley and the Failand- Tickenham ridge. The charity is also promoting new planting to maximise connectivity and landscape value, in line with the principles of the Forest of Avon Community Forest.

http://forestofavontrust.org/

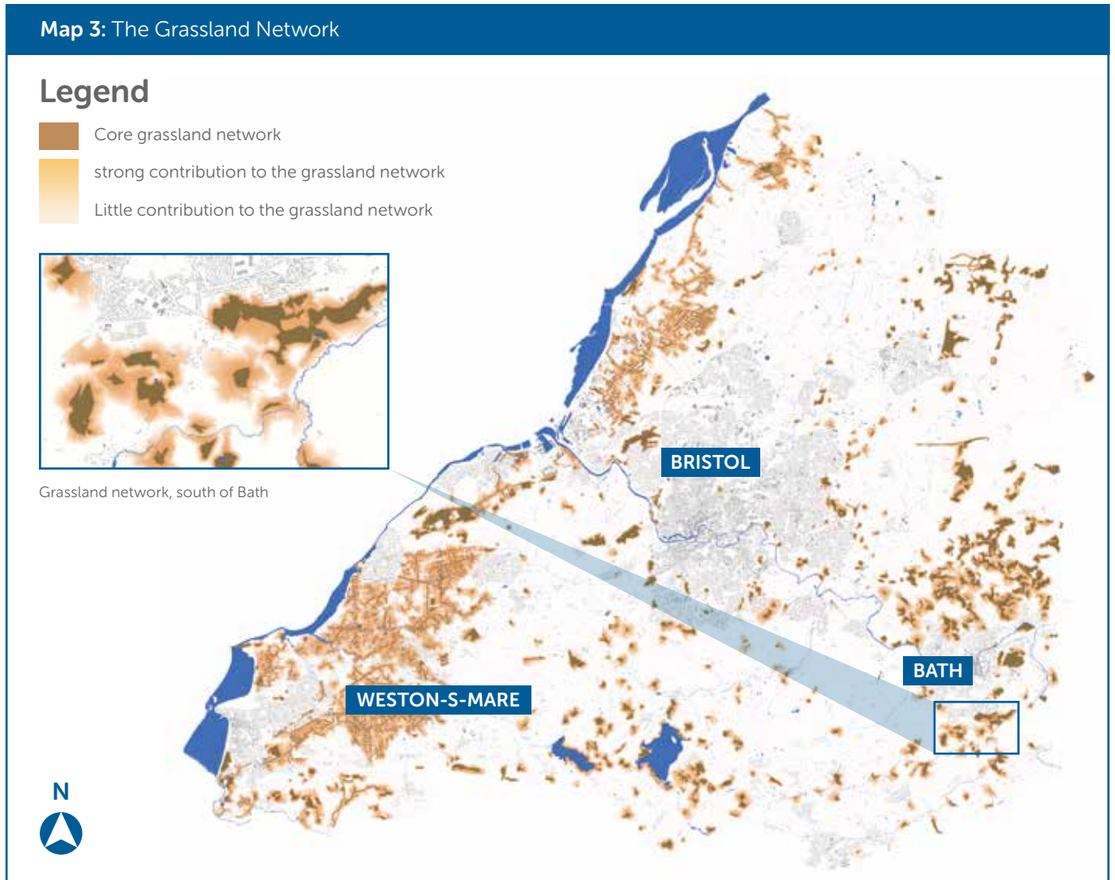
Map 3: The Grassland Network

The best wildflower-rich areas of grassland

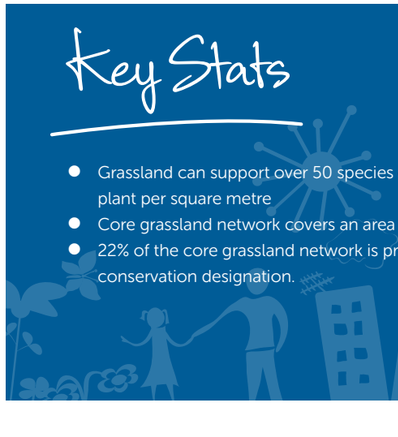
Wildflower-rich grassland is in decline, with over 97% of meadows degraded since the 1930s. These meadows are vital for pollinating insects, which pollinate over 80% of the plants we eat. The value of this ecosystem service has been estimated at £440m to UK agriculture annually (Natural Choice 2011).

The grassland network map shows the remaining areas of good quality grassland. The 'core' areas in brown, are made up of land greater than 0.5 hectares and contain a diverse array of plant and flower species. The land surrounding the core areas, in orange, show the land that is supporting or buffering the network, further strengthening the network.

Map 3: The Grassland Network



Grassland network, south of Bath



Wildflower meadow

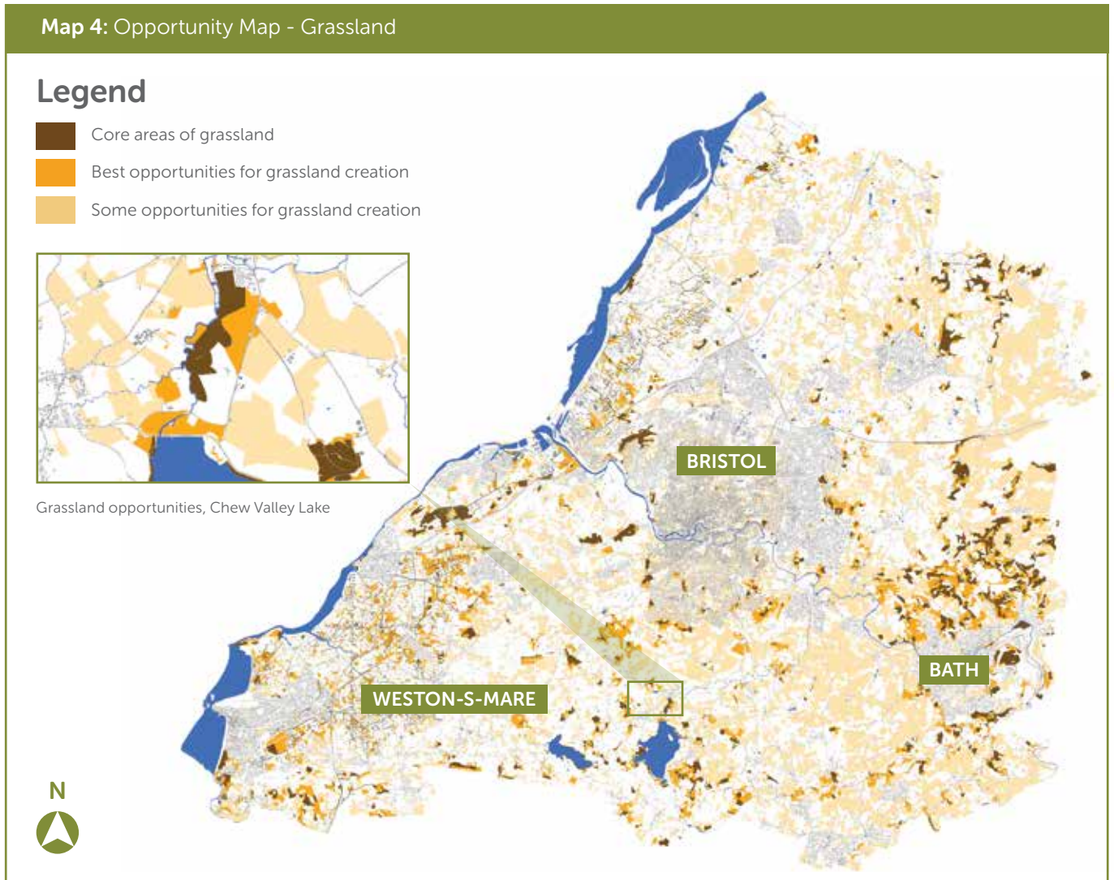
Paul Hobson

Map 4: Opportunity Map - Grassland

Opportunities to strengthen the grassland network

This map shows the most suitable locations for restoring or recreating grassland to encourage diverse plant and flower species to establish. The opportunities were identified by taking into account proximity to core habitat and designated sites, soil types and management regimes. This enables us to show where the 'best' opportunity exists – the areas which will have the best chance of establishing, will support the core networks and help build resilience, and where there are 'some' opportunities – those areas which are suitable but fall outside of the core networks, so may take longer to establish.

Map 4: Opportunity Map - Grassland



Grassland opportunities, Chew Valley Lake

Case Study 2: The West of England B-Lines project

The West of England B-Lines project is a collaborative project between Avon Wildlife Trust and Buglife with support from a number of other partner organisations from across the West of England.

www.avonwildlifetrust.org.uk/b-lines

B-Lines are a series of 'insect pathways' that link the best areas of grassland together. The project seeks to restore wildflower rich habitats and stepping stones, to extend and strengthen the grassland ecological network.

This will provide large areas of restored habitat benefiting bees and butterflies– but also a host of other wildlife.

Since starting in 2014 the project has worked within the B-Lines zones principally around Bath, Bristol and the Chew Valley and has restored 114 ha of wildflower meadow on land in private ownership.

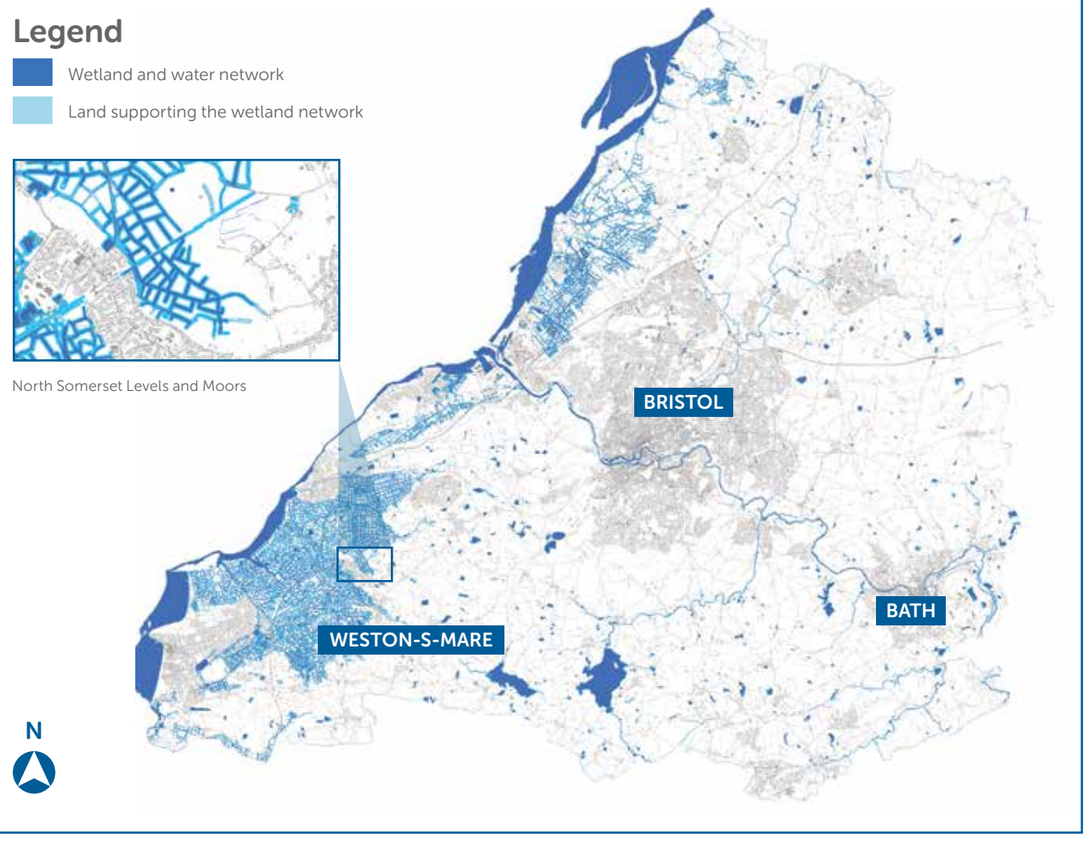
B-Lines is a nation-wide project. For more information see www.buglife.org.uk/campaigns-and-our-work/habitat-projects/b-lines

Map 5: Wetland Network

Wetlands in the West of England

Wetlands, as the name suggests, are areas of land dominated by the presence of water. Wetlands are home to a number of rare and notable species, particularly birds and invertebrates, who are attracted to these watery environments. They also provide a range of ecosystem services, including regulating water quality and quantity, making them an important habitat. Within the West of England, there is an extensive wetland network that predominantly runs along the land adjacent to the Severn Estuary. This area is characterised by the presence of a man-made rhyne and ditch system and is a beacon for wildlife.

Map 5: Wetland Network



Key Stats

- Total area of water and wetlands in the West of England is 100km^2
- 79% of the wetland network in the West of England is protected by a conservation designation.
- The services wetlands provide to the UK economy (flood prevention, carbon storage, water cleaning) saves the UK economy at least £6.7bn per annum.

Rhyne, Clapton Moor

Case Study 3:

Severnside Wetlands Nature Improvement Area

The West of England Nature Partnership has identified the land adjacent to the Severn Estuary as a locally-determined Nature Improvement Area. The Severn Estuary is recognised as nationally and internationally important for conservation due to the range of habitats and species supported. The area also plays an important role in providing natural flood defenses and water cleaning services.

Nature improvement Areas are large, discreet areas that take a landscape approach to nature conservation. The work with existing land-uses and aim to create large ecological networks. Through the extensive ditch and rhyne network, there exists opportunities to enhance the wetland network and provide multiple ecosystem services to benefit people, business and wildlife alike.

WENP partners are working with stakeholders throughout the area to explore opportunities to improve the area on a landscape scale.

In the northern part of the Nature Improvement Area, a large scale natural and cultural heritage project "A Forgotten Landscape" is being delivered to restore the heritage of the Lower Severn Vale Levels.

To find out more visit
www.wenp.org.uk/iconic-wildlife-landscapes-working-group/

James Flynn

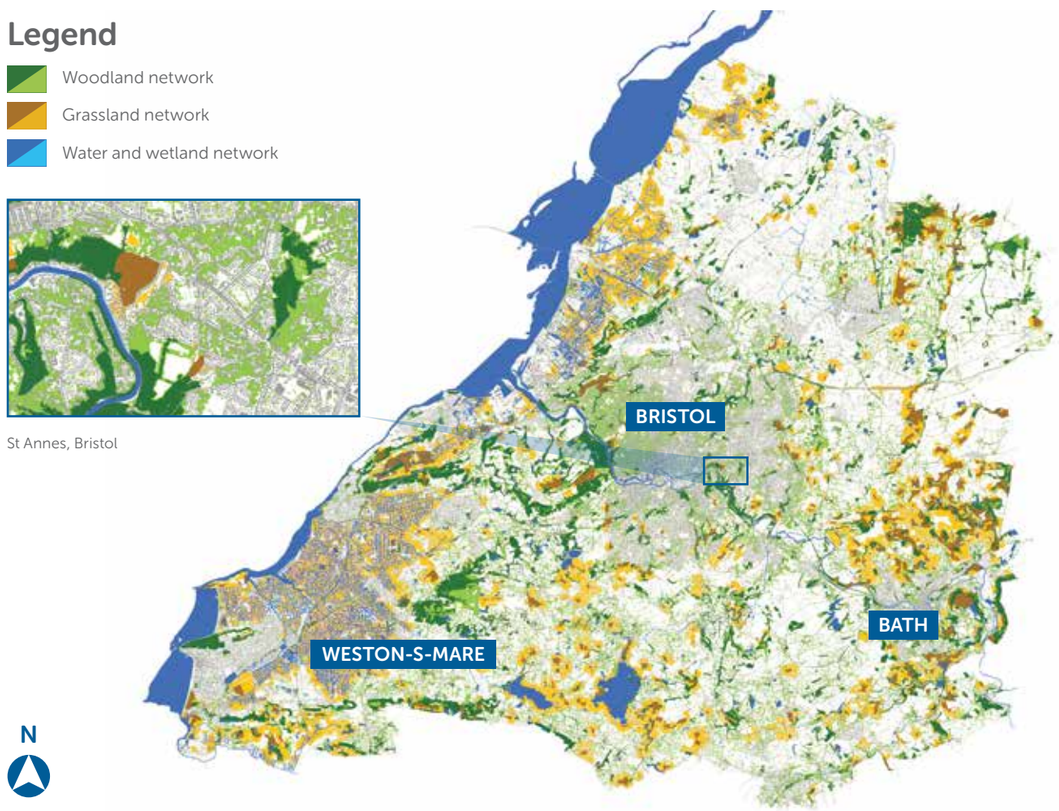
Map 6: Combined Ecological Networks

The grassland, wetland and woodland networks combined

By overlaying the woodland, grassland, and wetland networks, a combined network map has been created that highlights ecological networks across the West of England.

Landscapes that have a range of habitats tend to be more biodiverse, as species require a range of habitats to fulfil different requirements, such as feeding, sheltering and breeding. Different habitat types will also attract different species, adding to biodiversity.

Map 6: Combined Ecological Networks



Case Study 4: Planning for nature in the West of England

The importance of ecological networks is referenced in planning policy, which states that Local Planning Authorities should "identify and map components of local ecological networks..., wildlife corridors and stepping stones that connect them and the areas identified by local partnerships for habitat restoration or creation" (NPPF, para 117).

In the West of England, the four Unitary Authorities have committed to working together to produce a Joint Spatial Plan, which will determine the amount of homes and jobs required across the sub region and how this growth can be delivered sustainably, considering the economic, social, environmental and transport issues. The maps included in this report have been used as a key piece of environmental evidence to help inform the Joint Spatial Plan, which will inform planning policy from 2016 – 36.

Improving our Water Environment

Water needs careful management, too much can result in flooding, too little can cause drought. Ensuring there is a constant supply of fresh, clean water is an expensive business, a cost borne by the water companies and ultimately their customers. The natural environment, and ways that it is managed, has an integral role in our water supply by regulating its quantity and quality through natural systems. These systems have been mapped using habitat types, land management practices, underlying geology and position within the landscape.

The rivers and streams in the West of England are part of the wider Bristol Avon Catchment, along with parts of Gloucestershire , Somerset, and Wiltshire, which follow the natural hydrology of the River Avon. A partnership has been established to look at the water issues associated with the wider catchment and ways in which they can be addressed in a more integrated manner.

For more information visit www.bristolavoncatchment.co.uk

Map 7: Water Quality

Land that improves the quality of water

Fresh water is essential for life. The water quality map identifies areas where the natural environment contributes to improving the quality of water (shown in darker shades) by aiding the filtration and purification processes.

It also shows where water quality may be decreased (shown in lighter shades) due to impurities entering the river system, such as runoff in urban areas or in rural areas where some farming methods can result in agricultural chemicals and sediment being washed into rivers.

Map 7: Water Quality

Legend

Land that contributes to good water quality

Land that negatively impacts on water quality

Near Chelwood, Bath & North East Somerset

Key Stats

- 21% of the land in the West of England has a 'high' ability to contribute to good water quality.
- Only 24% of the Bristol Avon Catchment is classified as having 'good ecological status' (Water Framework Directive)
- On average, Bristol Water costumers consume 150 litres of water per person per day, that's over 200 million litres a day.

Sanderling

Neil Aldridge

Map 8: Opportunity Map - Water Quality

Land that provides opportunities to improve water quality

Carefully planned and strategic investments in the natural environment can help achieve water quality objectives. Woodland and wetland creation have been shown to be effective at delivering water quality improvements, as they reduce run-off, trap sediment and absorb pollution.

These improvements can often also benefit wildlife, and often cost less than hard engineered solutions such as water treatment plants for drinking water.

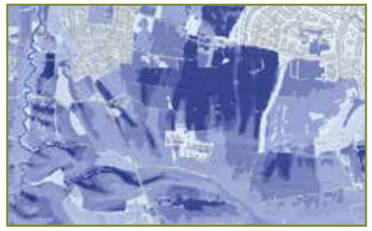
Map 8 identifies the areas with the greatest opportunities to improve water quality (shown in darker shades), they tend to be in rural locations, on steep slopes with shallow soil.

Map 8: Opportunity Map - Water Quality

Legend

Areas with the greatest opportunities to improve water quality

Areas with fewer opportunities to improve water quality



Water quality opportunities, south of Saltford

Case Study 5: Payment for Ecosystem Services – Winford Brook

Payments for ecosystem services, or PES for short, are payments provided to landowners for providing an ecological service. A project was undertaken within the Winford Brook catchment to investigate the potential of running a PES scheme. The Winford Brook runs into the Chew Magna reservoir, which provides drinking water to Bristol.

Bristol Water regularly has to remove silt and elevated nutrient levels from the reservoir and were keen to investigate whether changes in land management to tackle soil erosion and reduce flood risk further upstream would be a more viable and cost effective option. These changes could also deliver a range of other benefits, such as enhanced biodiversity. This Defra funded report was led by WENP partners - Eunomia, Bristol Water, Wessex Water, Avon Wildlife Trust and TLT Solicitors.

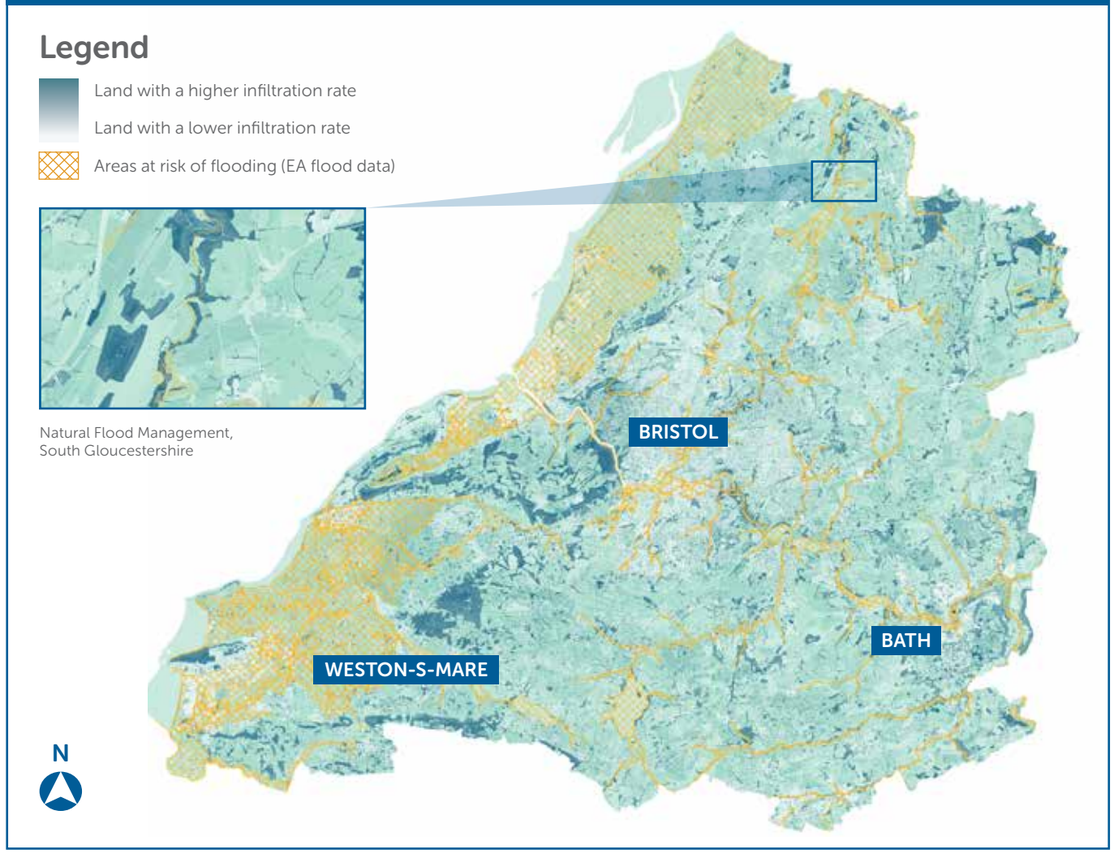
Visit ww.eunomia.co.uk/defra-publisheseunomia-payments-for-ecosystem-services-report.

Map 9: Water Quantity

Land that provides natural flood management

Flooding is a major hazard in the UK, with extreme flood likely to become more frequent as a result of climate change. Slowing surface water following rainfall, helps to reduce the risk of flood. The vegetation structure, slope gradient, soil type and underlying geology all affect the amount of water that is absorbed into the ground, and where and how that water is channelled overland. By spatially assessing these factors, it is possible to show where the land is slowing the movement of water and reducing the risk of flooding.

Map 9: Water Quantity



Key Stats

- Annual cost of flooding in the UK is about £1.4 bn
- 26,000 houses are at risk of flooding in Bristol
- 15% of the land in the West of England is already providing high natural flood management services.

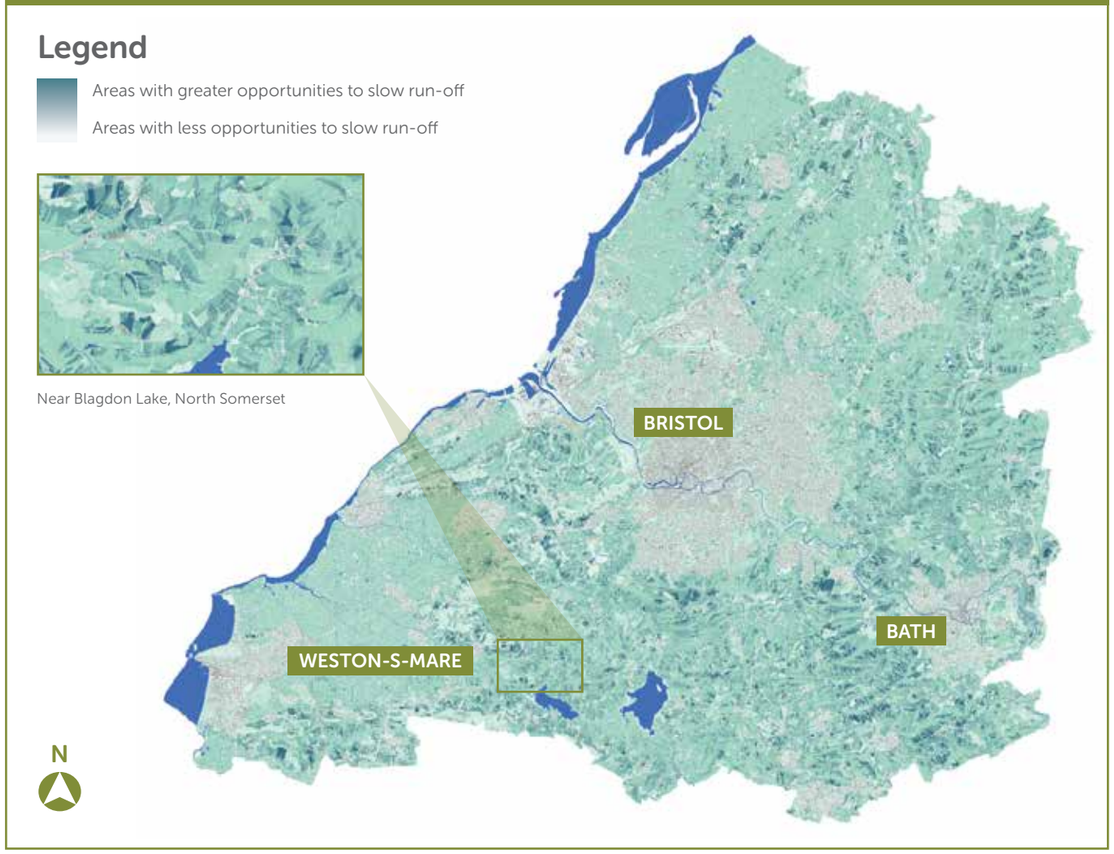
Bathampton Meadows

Map 10: Opportunity - Water Quantity

Areas with opportunities to provide natural flood management

Used in tandem with the water quality map, this shows where the greatest opportunities exist to provide natural flood defences (shown in darker shades). By analysing the underlying geology, soils, slope, and land management practices the map shows the best places to slow run-off. The drainage routes have been modelled to show how water travels overland and where inteventions would be most effective.

Map 10: Opportunity Map - Water Quantity



Case Study 6: Southmead SuDS Scheme

Bristol City Council has predicted that areas in Southmead are at high risk of surface water flooding. One way to increase resilience against flood risk and future climate change is to use sustainable urban drainage systems (SuDS). As part of a Green Capital grant, the Council, working in partnership with Sustrans, have designed and installed a small retrofit SuDS scheme on Embleton Road in Southmead. The scheme will increase the local areas' resilience to surface water flooding as well as achieve additional co-benefits associated with SuDS, such as improved water quality and biodiversity, as well as traffic calming measures. It is hoped the scheme will act as a catalyst for many more similar interventions across the authority area, and prove the effectiveness of them by monitoring the impact on the local surface water drainage network.

Map 11: Multiple Ecosystem Service Map

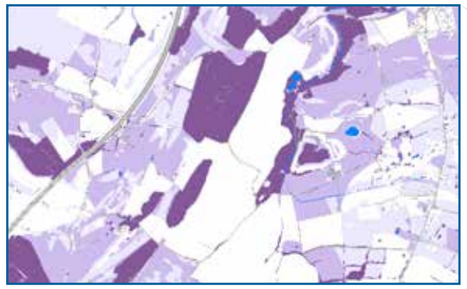
Combining ecosystem services in the West of England

It is often the case that more than one ecosystem service is being delivered, for example woodland can provide water quality improvements and reduce flood risk. By combining the data layers it is possible to show where multiple ecosystem services are being delivered in different areas. The darker the shade, the more services are being provided.

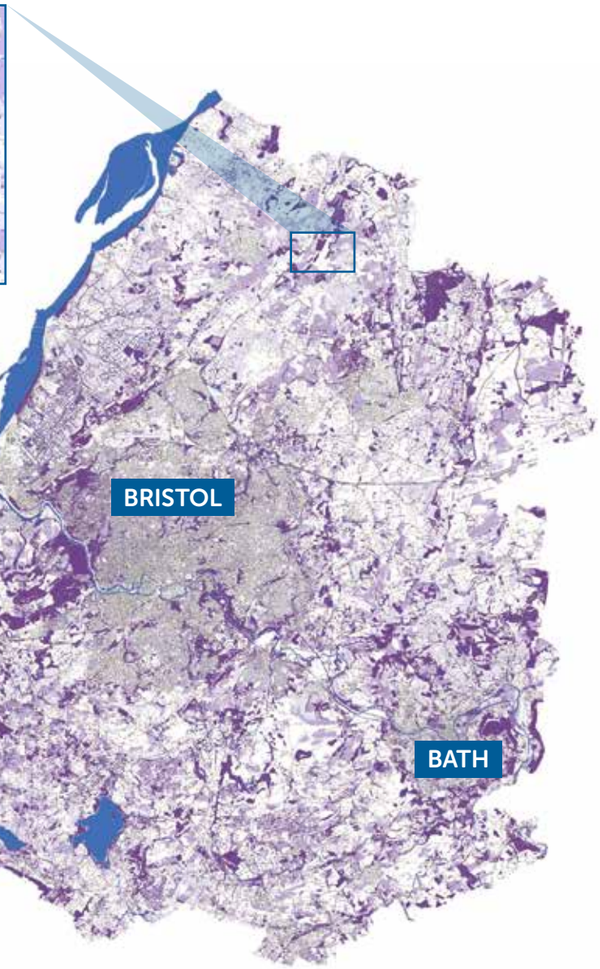
Map 11: Multiple Ecosystem Services

Legend

- Delivering 1 of 3 services
- Delivering 2 of 3 services
- Deliveriing 3 of 3 services



Multiple services, South Gloucestershire



N

Map 12: Opportunities Ecosystem Services

Opportunities to deliver multiple ecosystem services in the West of England

Using map 11, it is possible to show where opportunities exist to restore habitats to provide multiple ecosystem services simultaneously. The maps have identified 7% of the West of England which could be enhanced to provide three ecosystem services simultaneously. Investing in these areas, will not only make good economic sense, it will help strengthen the region's resilience and provide multiple benefits for all.

Map 12: Opportunity Map - Multiple Ecosystem Services

Legend

- Opportunity to deliver 1 ecosystem service
- Opportunity to deliver 2 out of 3 services
- Opportunity to deliver 1 out of 3 services

Multiple opportunities, B&NES

N

Summary

It is clear that we have a rich and diverse array of natural assets in the West of England, from the wildflower-rich networks, to ancient woodland and the spectacular coastline of international importance along the Severn Estuary.

These areas provide a multitude of ecosystem services that benefit society in many ways; providing food, water, and air that are essential for life, and the raw materials for our economy. They also provide us with the processes that purify water, air and waste products, and give us the space for our recreation, wellbeing and culture. The beauty of our natural environment plays a significant part in the number of people wanting to live and work in our region, and why businesses want to invest here.

This report takes a first step towards revealing their true value to us. Natural resources are under pressure and their capacity to continuing delivering these service in perpetuity is not secure. This work enables us to begin to understand the contribution that natural resources make; take full account of the environment and embed it into our strategies for spatial planning, economic development and public health so we can safeguard the environment for everyone's benefit in the West of England.

Steve Nicholls

Recommendations

1. That data is available via open access so that evidence based decisions to be made about the State of our Environment;

2. That the value of safeguarding ecosystem services in the WoE are factored into strategic planning and growth;

3. That strategic planning and growth result in a net gain in natural capital across the West of England.

Next steps

The West of England Nature Partnership are committed to continue increasing access to environmental data and evidence, so that we can better understand the 'State of our Environment' in the West of England. To talk to us about the next phase of mapping, please contact info@wenp.org.uk

With our partners, we aim to create a common digital data platform for the collection and collation of environmental data and evidence, so we can monitor change over time, the effectiveness of our restoration efforts and impacts on the natural environment.

Paul Glendell

The maps contained within this report and as part of our State of Environment Assessment have been created through ecosystem service modelling using the 'SENCE' method (Spatial Evidence for Natural Capital Evaluation) and were created by GIS and ecosystem service specialists Environment Systems www.envsys.co.uk

The information on the maps is provided for identification purposes only. No warranty as to accuracy is given or implied. WENP cannot be held responsible for any inaccuracies, but if you do spot any, please let us know info@wenp.org.uk

Visit our website to download the technical report to find out more about the data that was used in the production of these maps.

West of England Nature Partnership
32 Jacobs Wells Road, Bristol, BS8 1DR
@WoENP
www.wenp.org.uk

Information page published 2016
Printed on environmentally friendly paper