



Llywodraeth Cymru
Welsh Government



Essentials Guide

Sustainable Management
of Natural Resources
and our Well-being

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Foreword

Wales' natural resources and ecosystems underpin our well-being and quality of life. They fuel our industries, provide our food, clean air and water and create jobs and wealth.

Evidence shows that our natural resources, and the benefits that our ecosystems provide, are in decline. Stresses such as pollution, habitat fragmentation, climate change and over-exploitation are placing even greater pressure on them.

Building resilience into our natural resources and ecosystems, so that these benefits are available now – and for our future generations – is vital. In managing our natural resources wisely we can provide solutions across all four pillars of sustainable development to support our economic, social, environmental and cultural well-being. This is the 'sustainable management of natural resources'.

We all have a role to play:

- Across Welsh Government, public sectors and authorities
- Land and marine managers
- Utility companies
- Communities
- Health professionals
- NGOs
- Academic institutions
- Planners and developers.
- Natural Resources Wales provides leadership, working across Wales to support and enable the sustainable management of natural resources in its own work and working with others.

This Essentials Guide focuses on the role of public service delivery.

The legislative framework

To secure the long term well-being of Wales, we need to work together. The:

- Well-being of Future Generations Act
- Environment (Wales) Act, and the
- Planning (Wales) Act.

put in place the legislative framework.

For Wales to develop sustainably, we have changed the law to put in place the key elements that will enable it to happen.

The Well-being of Future Generations (Wales) Act

The Well-being of Future Generations (Wales) Act is about improving the social, economic, environmental and cultural well-being of Wales. It makes the public bodies listed in the Act think more about the long-term, work better with people, communities and each other, looking to prevent problems and take a more joined-up approach.

Environment (Wales) Act

Part 1 of the Environment (Wales) Act sets out the 'sustainable management of natural resources' – an approach to managing Wales' natural resources and ecosystems to ensure that the benefits they provide for our social, economic, environmental and cultural well-being are available now and for future generations¹.

Planning (Wales) Act

The Planning (Wales) Act puts in place a process to ensure the right development is in the right place.

Together, these will help us to create a Wales that we all want to live in, now and in the future.

This Essentials Guide sets out for public service delivery:

- What the sustainable management of natural resources is, and why it is important.
- How the Well-being of Future Generations Act and the sustainable management of natural resources work together to improve well-being.
- The action that you can take.

Well-being
of Future
Generations
(Wales) Act
2015

Places seven well-being goals into law, and requiring public bodies to apply the sustainable development principle in five key ways.

Environment
(Wales) Act
2016

Putting in place a modern statutory process to plan and manage our natural resources in a joined up and sustainable way.

Planning
(Wales) Act
2015

Improves the existing Planning process to ensure the right development is located in the right place.

What is the sustainable management of natural resources, and why is it important?

Wales' natural resources and ecosystems² underpin our well-being and quality of life. They fuel and provide the raw materials for our industries, provide our food, clean air and water, create jobs and wealth and contribute to our quality of life and personal health and well-being.

The sustainable management of natural resources is about improving the social, economic, environmental and cultural well-being of Wales through taking an ecosystem approach³ to managing natural resources.

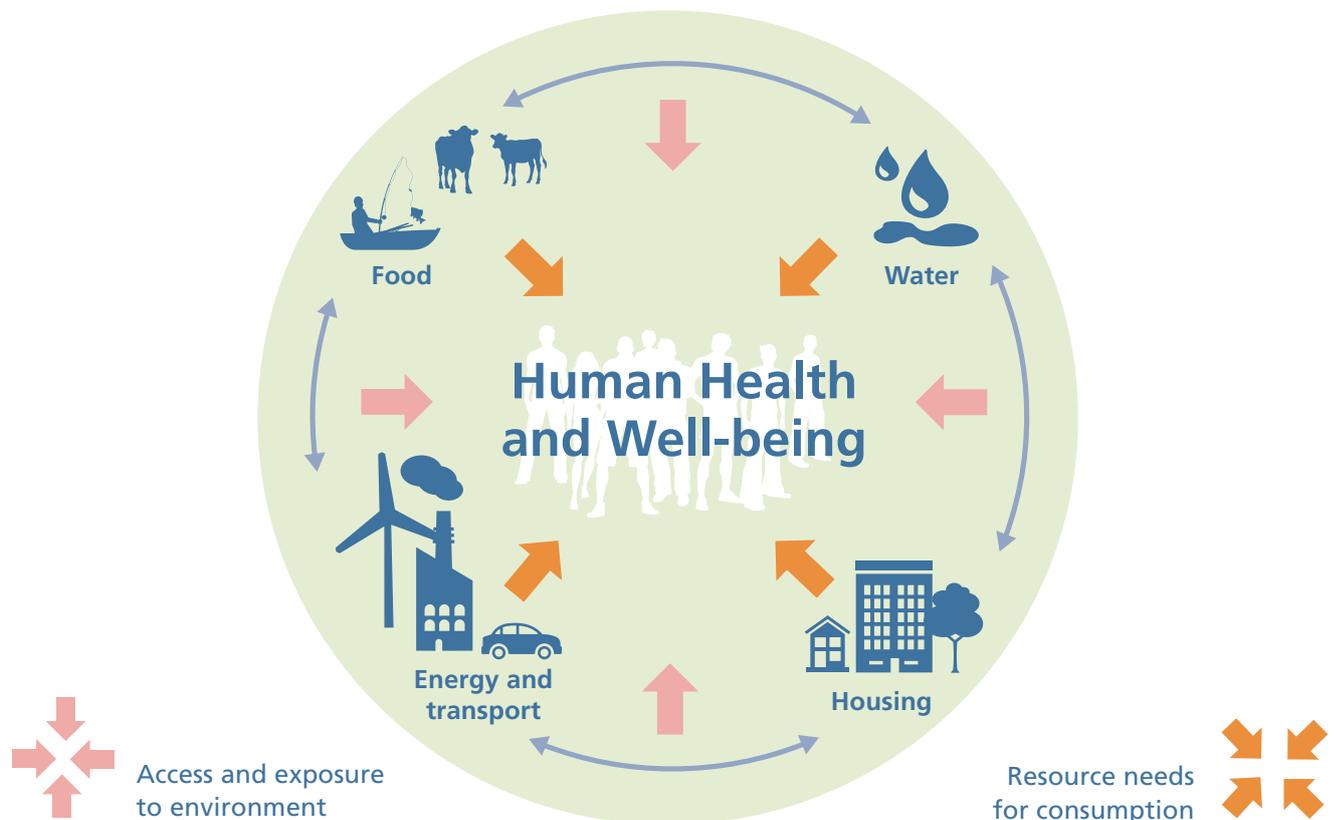
Ecosystems are our plants, animals, air, water, minerals and soils and the interactions that take place between them.

Ecosystems provide us with a wide range of benefits ('ecosystem services') which support our well-being.

How are the environment and our well-being and health connected?

Natural resources fuel our production and consumption, and create wealth and jobs, contributing to our quality of life and well-being. But our level of resource consumption is undermining our ecosystems' capacity to provide for us in the future.

Global and Welsh Ecosystems



Air pollution is the largest public health issue after smoking, and above physical inactivity related illnesses such as diabetes and obesity.

Noise pollution is considered the second biggest environmental contributor to the burden of disease in the UK.

What do we get from ecosystems?

Provisioning Services



food



wood



medicines



energy



fibres

Regulating Services



water filtration



waste decomposition



crop pollination



climate regulation



disease control

Cultural Services



aesthetic



spiritual



personal growth



leisure and fun

All these services are supported by the natural processes of nutrient cycling, soil formation and photosynthesis.

The sustainable management of natural resources is an approach that asks us to consider **ALL** these benefits when we make decisions on how we manage our natural resources and ecosystems – not just one or two.

All the benefits we get from, for example, trees



Ecosystems depend on biodiversity – the variety of our life on earth – to function⁴ but both our ecosystems and the biodiversity that supports them, are in decline. We need to take action so that all the benefits they provide for our well-being are available now, and for future generations.

Biodiversity and well-being

The natural abundance of planet Earth is the basis of our existence.

What is biodiversity?

Biological diversity, also known as biodiversity, is the sum of *species diversity*, *genetic diversity* within species and *ecosystem diversity*.

Ecosystem diversity -----

Species diversity -----

Genetic diversity -----



Pressures – such as pollution, habitat fragmentation, climate change and over-exploiting our natural resources – are affecting our ecosystems and the sustainable management of natural resources is about tackling these too.

Biodiversity and resilient ecosystems are the basis of our existence

Water



Biodiversity driven ecosystems maintain the water cycle and make **clean drinking water** available.

Food



Biodiversity and sustainably managed land make it possible to **feed ourselves** and many crop varieties depend on insect pollination.

Culture



Biodiversity and ecosystems provide our iconic landscapes and species, and contribute to our **culture** and **heritage**.

Health



Biodiversity and ecosystems support our mental and physical **health**, and most synthetic **medicines** are also of natural origin.



Biodiversity and healthy resilient ecosystems mitigate the impacts of **climate change** e.g. by providing protection against drought or flooding.

The threats to biodiversity and ecosystems

Pollution



Habitat Fragmentation



Climate Change



Over exploiting natural resources



Invasive non-native species



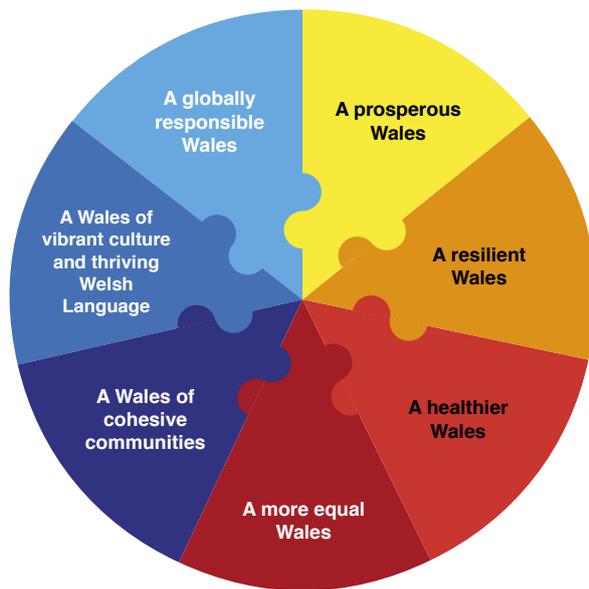
More information on biodiversity and ecosystems – what they are and why they are important – can be found at www.biodiversitywales.org.uk/Biodiversity

How the Well-being of Future Generations Act and the sustainable management of natural resources work together to support Well-being

The Well-being of Future Generations Act and the sustainable management of natural resources in part 1 of the Environment (Wales) Act have been developed to work together because Wales' natural resources and ecosystems underpin our cultural, social, economic and environmental well-being.

Well-being goals and the sustainable management of natural resources

Well-being goals



In the **Well-being of Future Generations Act** 'sustainable development' means the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle⁵, aimed at achieving the well-being goals. The well-being goals set a shared vision for Wales for the public bodies in the Act to work towards. For Wales to be sustainable it is important that we improve all four aspects of well-being. They are all equally important. Each public body listed in the Act must work to improve the economic, social, environmental and cultural well-being of Wales, set well-being objectives to maximise their contribution towards the goals and take steps towards meeting those objectives.

Sustainable Management of Natural Resources

Part 1 of the Environment (Wales) Act sets out an objective, the sustainable management of natural resources. This is about taking action to build resilience into Wales' natural resources and ecosystems so that the ecosystem services they provide are available now, for future generations, and so

they contribute to the achievement of the well-being goals.

The definition is clearly linked to the sustainable development principle to reflect that Wales' natural resources and ecosystems underpin our well-being⁶.

Part 1 of the Act also sets out the delivery framework for the sustainable management of natural resources, as follows:

The State of Natural Resources Report

Natural Resources Wales' State of Natural Resources Report sets out the national evidence base for the sustainable management of natural resources. It shows that no ecosystem in Wales is currently showing all the attributes of resilience, which is impacting on the ability of our ecosystems to provide benefits for our well-being. It also sets out how Wales' natural resources contribute to our well-being.

More information on the report can be found here – <https://naturalresources.wales/evidence-and-data/research-and-reports/the-state-of-natural-resources-report-assessment-of-the-sustainable-management-of-natural-resources/?lang=en>

The Natural Resources Policy

The Welsh Minister's Natural Resources Policy sets out the national priorities for the sustainable management of natural resources drawing from the national evidence base in the State of Natural Resources Report. The national priorities are the key ways in which Wales' natural resources contribute across all the well-being goals. They have been developed to both address the challenges to our natural resources and realise the opportunities from them.

The national priorities are:

- Delivering nature-based solutions.
- Increasing resource efficiency and renewable energy.
- Taking a place based approach.

More information can be found here:

<https://gov.wales/docs/desh/publications/170821-natural-resources-policy-en.PDF>

Further details on how the national priorities contribute across all the well-being goals can be found in Annex 2.

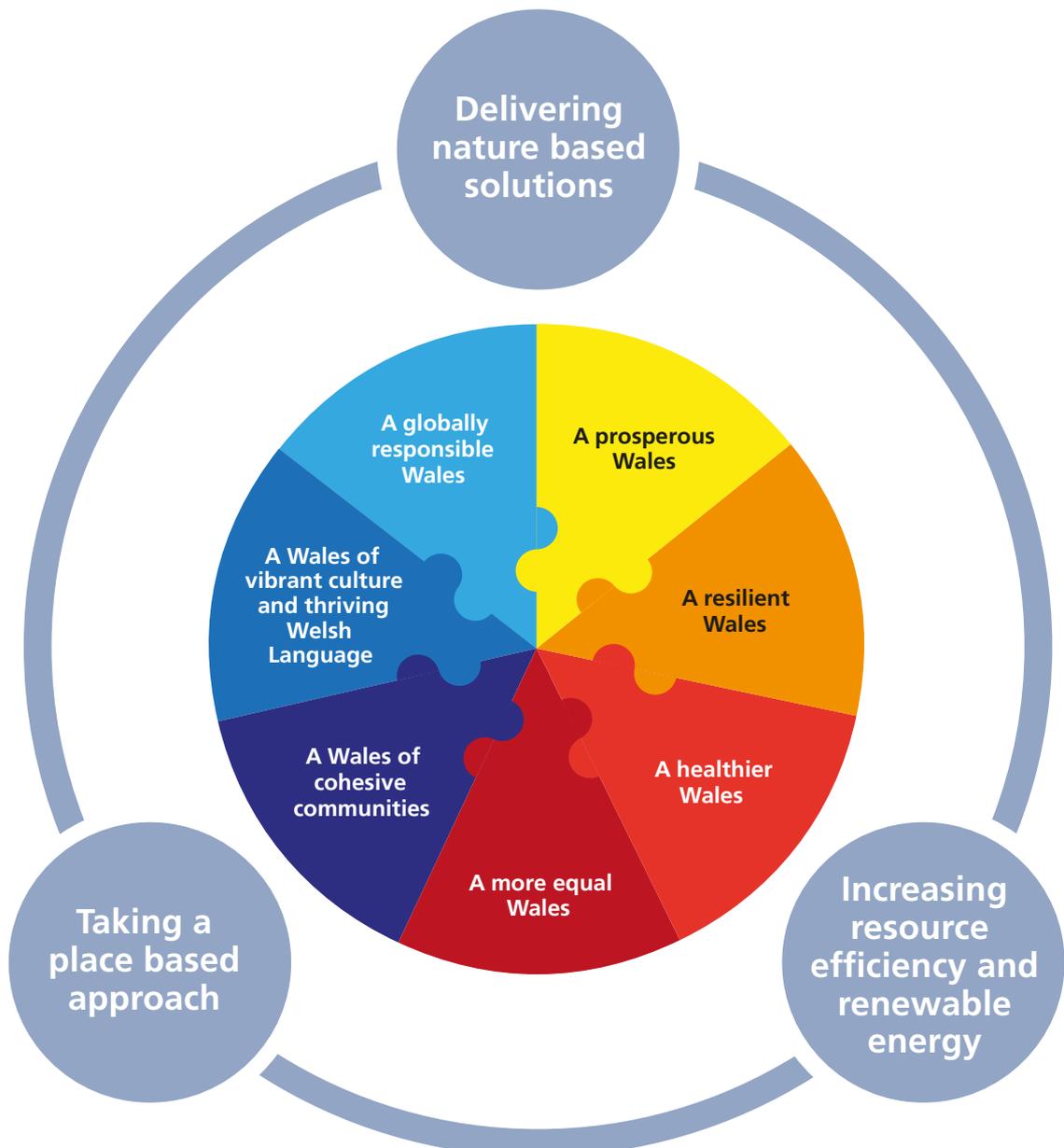
Area Statements

Natural Resources Wales' Area Statements contribute to implementing the Natural Resources Policy in a local context, taking a place based approach. Taking a place based approach focuses on collaborative working to deliver better results at a local level.

Communities are best placed to shape local priorities and opportunities linked to the national priorities and find practical solutions that bring the widest possible benefits, ensuring local people benefit fully from the natural resources in their locality.

Further information can be found here:

<https://naturalresources.wales/about-us/area-statements/?lang=en>



Ways of working

Public bodies must take all reasonable steps to meet their well-being objectives in accordance with the sustainable development principle.

The 5 ways of working apply to public bodies who must show how they have applied the sustainable development principle in taking forward their well-being objectives.

Long term

The importance of balancing short-term needs with the need to safeguard the ability to also meet long-term needs.

Prevention

How acting to prevent problems occurring or getting worse may help public bodies meet their objectives.

Collaboration

Acting in collaboration with any other person (or different parts of the body itself) that could help the body to meet its well-being objectives.

Integration

Considering how the public body's well-being objectives may impact upon each of the well-being goals, on their objectives, or on the objectives of other public bodies.

Involvement

The importance of involving people with an interest in achieving the well-being goals, and ensuring that those people reflect the diversity of the area which the body serves.

The Environment (Wales) Act also sets out nine principles or ways of working which apply when working towards the objective of the sustainable management of natural resources.

The principles of SMNR apply when managing natural resources:

- To NRW in exercising their functions including the State of Natural Resources Report and Area Statements.
- To Welsh Ministers when developing and implementing the Natural Resources Policy

The principles

Take account of the short, medium and long term consequences of actions

Take action to prevent significant damage to ecosystems

Promote and engage in collaboration and co-operation

Make appropriate arrangements for public participation in decision-making

Take account of all relevant evidence and gather evidence in respect of uncertainties

Manage adaptively, by planning, monitoring, reviewing and, where appropriate, changing action

Consider the appropriate spatial scale for action

Take account of the benefits and intrinsic value of natural resources and ecosystems

Take account of the resilience of ecosystems.

Biodiversity Duty and Lists

The Environment (Wales) Act recognises the essential contribution biodiversity makes to the sustainable management of natural resources and to our well-being by putting in place the section 6 biodiversity and resilience of ecosystems duty. This duty requires public authorities to seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions⁷.

Section 7 of the Environment (Wales) Act also requires that the Welsh Ministers prepare and publish a list of species and habitats of principal importance for Wales and take all reasonable steps to maintain and enhance those species and habitats, and encourage others to take such steps.

The national priorities for the sustainable management of natural resources

The national priorities for the sustainable management of natural resources are the key ways in which Wales' natural resources contribute across all the well-being goals.

The national priorities are:

- Delivering nature-based solutions
- Increasing resource efficiency and renewable energy
- Taking a place based approach

Delivering nature-based solutions

Nature-based solutions are about using nature and natural processes to address some of our big challenges such as flooding, air pollution or health issues associated with physical inactivity, by using nature and natural process. They include a wide range of approaches to build resilience into ecosystems and enhance

biodiversity; improve infrastructure, land and water management; support climate change adaptation and mitigation and support our health and well-being. Using biodiverse nature-based solutions also helps us build resilience into our natural resources and ecosystems – a 'win-win' solution.

Innovating with Nature

Nature based solutions support economic growth, create jobs and support our well-being. They help us tackle some of our big challenges in a cost effective way.



Delivering more biodiverse urban green infrastructure is an example of a nature based solution

Urban green infrastructure:

- is all our open spaces and network of habitat, parks, playing fields, allotments, private gardens, ponds, rivers, canals, woodland, street and garden trees, and hedges. It includes all green space as urban areas can contain substantial amounts of semi-natural habitat.
- Can be engineered to form green roofs and walls, sustainable urban drainage or as street trees.
- Can be part of our transport links, for example, when wild flowers are planted into grass verges along our road and rail networks and at roundabouts to encourage nature.
- Includes the links between our urban areas and their surroundings so they 'join up'.

It forms part of our critical infrastructure and can support our built solutions.

For example, building it into housing developments can improve land value, add value to local communities and encourage positive investment.

Biodiverse urban green infrastructure provides multiple benefits

Physical and mental health

Helps to tackle urban air, noise and water pollution and reduce surface water flooding by filtering out pollution and increasing rain water infiltration.

Supports remediation of contaminated land for wider community benefit.

Provides habitat for wildlife close to where people live, enabling many people to experience and interact with nature, supporting our mental health and providing opportunities for outdoor learning.

Allotments and gardens provide opportunities to grow community food.

Provides opportunities for active travel.

Social cohesion

When our green spaces are accessible to local communities they can be safe places to meet and play, helping us to relax and exercise.

Climate action

Carbon stored in soils and trees helps mitigate climate change and green infrastructure supports climate adaptation by cooling urban areas and buildings and reducing flooding. Green walls and roofs help increase energy efficiency, both as part of retrofits and in new builds and increased biomass from green infrastructure can provide opportunities for renewable energy.

Prosperity

Companies are attracted to locations that offer well designed and managed public places, supporting regeneration.

Good quality parks increase visitor and cash spend and stimulate an increase in property prices, providing more council tax.

More urban green infrastructure can have a big impact on our well-being:

- In 2015, natural pollution removal by plants across the UK resulted in an estimated saving of over £1 billion of avoided health costs in that year alone.
- People who live within 500 metres of accessible green space are 24% more likely to meet 30 minutes of exercise levels of physical activity.
- Defra has estimated that if everyone had access to sufficient green space the benefits associated with increased physical activity could save the health system £2.1bn per year.

Increasing resource efficiency and renewable energy

These help to both reduce the pressures on Wales' natural resources and also provide new jobs and market opportunities, by using fewer natural resources. Managing natural resources wisely is a key enabler that drives competitiveness for successful businesses.

Currently we are 'drawing down' natural resources by consuming more than can be replenished. This creates unmanaged risks in supply chains that threaten the stability of businesses. In a circular economy the value of products and materials is maintained for as long as possible.



Waste and resource use are minimised, and when a product reaches the end of its life, it is used again to create further value. This can bring major economic benefits, contributing to innovation, growth and job creation. It is an approach which can be applied across many different sectors of the economy.

We need to reduce energy demand and increase energy efficiency to achieve decarbonisation. All sectors and areas have their part to play in helping meet decarbonisation and renewable energy targets and we should actively seek opportunities to invest in energy efficiency and generating renewable energy, which will retain more value locally and increase wellbeing.

We should use available renewable resources, considering available land, buildings and funding, for renewable electricity and heat generation. We have opportunities to work with local communities and businesses to deliver energy projects. Welsh Government has set an ambition for a carbon neutral public sector by 2030.

- The Welsh Government Energy Service provides support services to public sector and community organisations to identify, develop and deliver energy efficiency and renewable energy projects.

Taking a place based approach

Taking a place based approach is about working with communities to shape local priorities and opportunities for natural resources, ensuring that local people benefit fully. Natural Resources Wales' area statements will support place based approaches and working.

More information on the national priorities and the actions that you can take are in Annex 1.

What does this mean for public service delivery?

High quality natural resources and healthy resilient ecosystems underpin well-being. Taking action on the

- sustainable management of natural resources
- national priorities in the Natural Resources Policy and
- section 6 Biodiversity and Ecosystem Resilience Duty

are key ways that public service delivery can contribute towards their duties in the Well-being of Future Generations Act and the Environment (Wales) Act.

Area statements

Natural Resources Wales' area statements will support place based approaches linked to the challenges, opportunities and national priorities in the Natural Resources Policy. They are a series of products which translate the national priorities into the action that can be taken across Wales. They set out a local evidence base for the sustainable management of natural resources and identify the opportunities where working together can help us deliver the national priorities, build ecosystem resilience and make the most of the benefits Wales' natural resources and ecosystems provide for Well-being. Local Development Plans, Public Service Board Well-being Assessments, National Park and AONB plans must have regard to this evidence. Public bodies must provide Natural Resources Wales with information it requires for both the State of Natural Resources Report and Area Statements. Natural Resources Wales can also ask public bodies to assist in addressing the priorities, risks and opportunities for the sustainable management of natural resources identified in Area Statements.

The Section 6 Biodiversity and resilience of ecosystems duty

Action for biodiversity is important for the sustainable management of natural resources, because biodiversity underpins how our ecosystems function – and our biodiversity is in decline.

The section 6 duty aims to ensure that the consideration of biodiversity becomes an integral part of the decision making and actions that public authorities take in relation to Wales. Public authorities can take action to reverse the decline in biodiversity by thinking about biodiversity in decision making and how they carry out their functions.

Public authorities include public bodies listed within the Well-being of Future Generations Act. Complying with the S6 duty requires those public bodies to maintain and enhance biodiversity, which in turn supports the sustainable management of natural resources and the well-being goals. The section 6 plan, required under the Act, can be a key means of demonstrating and reporting on the steps being taken by a public body or public service board to meet well-being objectives and plans. Natural Resources Wales' State of Natural Resources Report and Area Statements provide national and local evidence bases on biodiversity and ecosystem resilience, for public authorities to draw from when discharging the section 6 duty.

Further information can be found in the guidance for the s6 duty here, and in Annex 1, and at www.biodiversitywales.org.uk/Environment-Wales-Act

What we need to do for biodiversity

Embed biodiversity values and benefits into decision making.



Safeguard important species, habitats and protected areas.



Restore and create resilient ecological networks.



Use the best available evidence in decision making.



What action can I take to support the sustainable management of natural resources?

Delivering nature based solutions

Delivering nature-based solutions – general

ec.europa.eu/research/environment/index.cfm?pg=nbs

<https://www.iucn.org/commissions/commission-ecosystem-management/our-work/nature-based-solutions>

Delivering nature-based solutions – city case studies

Bristol – NBS for ensuring a sustainable future

www.oppla.eu/node/18002

London – NBS for a leading sustainable city

www.oppla.eu/node/18093

Edinburgh – NBS enhancing health, wealth and sustainability

www.oppla.eu/node/18004

Dublin – NBS for a more sustainable city by 2030

www.oppla.eu/node/17999

Delivering nature-based solutions – green infrastructure

www.tcpa.org.uk/green-infrastructure-research-database

www.buildingwithnature.org.uk/

mainstreaminggreeninfrastructure.com/

Integrating nature-based solutions across sectors

Housing and commercial development

www.buildingwithnature.org.uk/

Health

ec.europa.eu/environment/nature/ecosystems/pdf/Green%20Infrastructure/GI_health.pdf

Transport

ec.europa.eu/environment/nature/ecosystems/pdf/Green%20Infrastructure/GI_transport.pdf

Energy

ec.europa.eu/environment/nature/ecosystems/pdf/Green%20Infrastructure/GI_energy.pdf

Financial sector

ec.europa.eu/environment/nature/ecosystems/pdf/Green%20Infrastructure/GI_finance.pdf

Water and flood management

naturalresources.wales/flooding/managing-flood-risk/maps-for-natural-flood-management/?lang=en

www.gov.uk/government/uploads/system/uploads/attachment_data/file/654431/Working_with_natural_processes_evidence_directory.pdf

www.therrc.co.uk/eu-riverwiki

www.sepa.org.uk/media/163560/sepa-natural-flood-management-handbook1.pdf

www.hrwallingford.com/projects/green-infrastructure-supporting-green-river-engineering

www.nerc.ac.uk/research/funded/programmes/nfm/

www.catchmentbasedapproach.org/resources/tools-and-casestudies

Climate change adaptation

ec.europa.eu/environment/nature/ecosystems/pdf/Green%20Infrastructure/GI_climate_adaptation.pdf

Increasing resource efficiency and circular economy

www.livingcircular.veolia.com/en/eco-citizen/circular-economy-home

www.ellenmacarthurfoundation.org/circular-economy/overview/concept

Energy Efficiency and Renewable Energy

The Welsh Government Energy Service provides support services to public sector and community organisations to identify, develop and deliver energy efficiency and renewable energy projects.

Biodiversity

Action for biodiversity should, as far as possible, be guided by the 6 objectives of the Nature Recovery Action Plan for Wales (NRAP⁸) which have been identified to contribute to reversing the decline of biodiversity in Wales.

The 6 objectives to maintain and enhance biodiversity are:

- Objective 1: Engage and support participation and understanding to embed biodiversity throughout decision making at all levels
- Objective 2: Safeguard species and habitats of principal importance and improve their management
- Objective 3: Increase the resilience* of our natural environment by restoring degraded habitats and habitat creation
- Objective 4: Tackle key pressures on species and habitats
- Objective 5: Improve our evidence, understanding and monitoring
- Objective 6: Put in place a framework of governance and support for delivery.⁹

*The Environment (Wales) Act sets out the following attributes of ecosystem resilience:

- Diversity – generally speaking, more diverse ecosystems are more resilient to external influences and their impacts. This includes biological, geological and physical diversity
- Connectivity within and between ecosystems

- Scale and Extent – the bigger the ecosystem extends, without fragmentation, the more resilient it is likely to be
- Condition – ecosystems need to be in a healthy condition to function effectively, to deliver a range of important ecosystem services
- Adaptability – the ability of ecosystems to adapt to events, understanding that ecosystems are not static and will change over time.

Each function of a public authority should consider where they can contribute to the NRAP objectives and to promoting resilience, through addressing its attributes as above. In some cases action across the organisation as a whole is more appropriate.

Some examples are given below:

- Raise awareness across the organisation about how each and every role can impact and influence biodiversity and consider measures to enhance biodiversity and ecosystems in all policies, plans and projects. Embed this into your corporate business planning
- Think about how enhancing biodiversity can help deliver across the organisation's activities e.g. to support active recreation, education, flood prevention, and local food growing. For example, green roofs help to provide wildlife habitats, reduce energy consumption and improve drainage systems
- Use native, bio-diverse, nature based solutions wherever possible
- Reduce, re-use, recycle materials, but where products such as paper are bought, ensure that supplies come from sustainable sources – i.e. paper from sustainable forests
- Look for opportunities, whether they are big or small, to help encourage biodiversity – e.g. plant native species, wildflower areas for pollinators, leaving areas of unmown grass; and improving connectivity between valuable habitats
- Safeguard protected species, habitats and areas
- Restore habitats to as natural and resilient state as possible
- Support the creation of new habitats, such as local orchards, native hedges, wildflower meadows or other areas of wildlife-friendly green space that is accessible to local communities
- Manage the land over which you have control to be wildlife friendly, and involve staff in the planning and management of this
- Take action to support pollinators and become a Bee Friendly¹⁰ organisation
- If you have responsibility for road verge management, manage these in a way which contributes to road safety and wildlife conservation
- Making decisions and plans based on the best available evidence, and contributing to our body of knowledge where possible, for example by supporting citizen-science initiatives
- Providing support, involvement and/or funding for partnerships and collaboration for local and community-based biodiversity action.

Further information can be found at:

www.wcva.org.uk/what-we-do/enviromet-cymru/ms4n/invest-in-nature

The Natural Resources Policy priorities and the well-being goals

NRP National Priorities	Scope	Relevant Well-being Goals	Commentary
<p>Delivering Nature – Based Solutions</p>	<ul style="list-style-type: none"> • Support the development of resilient ecological networks to maintain and enhance the resilience of Wales' ecosystems. • Support climate change adaptation and mitigation, and flood risk management. • Improve infrastructure, such as green infrastructure and water treatment systems, for example sustainable urban drainage, swales and reed beds. • Improve land and water management such as integrated coastal zone management and adaptation, integrated water resources management, natural flood management, better soil management for carbon storage and sequestration, water quality and continued productivity, for example peat bog management, streamside corridors and strategic hedge planting on farms. 	<p>A prosperous Wales</p> <p>A resilient Wales</p> <p>A healthier Wales</p> <p>A more equal Wales</p> <p>A Wales of Cohesive Communities</p> <p>A Wales of vibrant culture and thriving Welsh language</p> <p>A globally responsible Wales</p>	<p>Delivering nature-based solutions will contribute to the national goal of '<i>A prosperous Wales</i>' by helping to create resilient ecosystems that contribute to favourable conditions for economic activity. The measures set out in the NRP under this priority will also help ensure that ecosystems are resilient to climate change, providing a long term contribution towards this goal. The potential to develop ecosystem services within the economy may also support this goal.</p> <p>Supporting the development of resilient ecological networks to maintain and enhance the resilience of Wales' ecosystems will work towards the achievement of the national goal of '<i>A resilient Wales</i>'.</p> <p>Improvements to green infrastructure will contribute towards the national goal of '<i>A healthier Wales</i>'. The NRP identifies the opportunity for health trails, green gyms and tranquillity.</p> <p>Nature-based solutions, combined with the place-based approach could provide the opportunity to achieve the national goal of '<i>A more equal Wales</i>', for example, by targeting projects to areas of deprivation and ensuring that people benefit</p>

NRP National Priorities	Scope	Relevant Well-being Goals	Commentary
			<p>in the long term from enhanced infrastructure but also involving local people in delivering schemes to enhance skills and employment prospects.</p> <p>Using nature-based solutions to tackle existing problems of pollution, flood risk and infrastructure capacity/resilience will contribute to attractive, viable, safe and well connected communities, consistent with the national goal of <i>'A Wales of cohesive communities'</i>.</p> <p>NRW will have a key role in the design and delivery of nature-based solutions and Area Statements. Nature-based solutions could provide the opportunity to seek out opportunities to promote and develop the use of Welsh through the production of Area Statements and design and implementation of projects. This will help to achieve the national goal of <i>'A Wales of vibrant culture and thriving Welsh language'</i>.</p> <p>The pursuit of nature-based solutions to tackle issues like climate change mitigation and develop specific measures like carbon storage and sequestration will contribute to the national goal of <i>'A globally responsible Wales'</i>.</p>

NRP National Priorities	Scope	Relevant Well-being Goals	Commentary
Increasing Renewable Energy and Resource Efficiency	<ul style="list-style-type: none"> • As well as looking at the ways in which we manage our land and seas, we also need to look at how we can manage our natural resources more efficiently. • Reduce the pressures that face our natural resources and also provide new jobs and market opportunities, and reduce operating costs and exposure to market volatility. 	<p>A prosperous Wales</p> <p>A resilient Wales</p> <p>A healthier Wales</p> <p>A more equal Wales</p> <p>A Wales of Cohesive Communities</p>	<p>This priority will include providing for opportunities for jobs and sustainable economic growth and helping address risks to long-term supply chain security and will contribute to a low carbon society. This will support the national goal of '<i>A prosperous Wales</i>'.</p> <p>Increasing renewable energy and resource efficiency will be central to achieving the national goal of '<i>A resilient Wales</i>'. Increasing renewable energy will require</p>

NRP National Priorities	Scope	Relevant Well-being Goals	Commentary
	<ul style="list-style-type: none"> • As well as looking at the ways in which we manage our land and seas, we also need to look at how we can manage our natural resources more efficiently. • Reduce the pressures that face our natural resources and also provide new jobs and market opportunities, and reduce operating costs and exposure to market volatility. • Build on our success on renewable energy and recycling. Developing a more resource efficient economy has a crucial role to play in green growth. • Moving towards a more circular economy in Wales, where raw materials are kept in productive use for longer is already reducing the demand for material. • Reduce our impact on our natural resources whilst providing opportunities for jobs and sustainable economic growth and helping address risks to long-term supply chain security. 	<p>A Wales of vibrant culture and thriving Welsh language</p> <p>A globally responsible Wales</p>	<p>careful consideration of individual renewable energy schemes to avoid inappropriate siting that could have an effect on the environmental interests that support resilience.</p> <p>This NRP priority could contribute to the national goal of '<i>A healthier Wales</i>' by the continued pursuit of measures to improve the energy efficiency of the existing dwelling stock. Improved energy efficiency measures, combined with appropriate ventilation, could help reduce fuel poverty and improve health by reducing exposure to the cold and air pollution.</p> <p>Moving towards a circular economy and increased use of renewables will provide opportunities for employment. This priority could therefore contribute to the national goal of '<i>A more equal Wales</i>'.</p> <p>Increasing renewable energy and resource efficiency could contribute to communities that are attractive by reducing the long term need for land-fill. There is also an opportunity to promote local renewable energy schemes that could provide environmental improvements. This could contribute to the goal of '<i>A Wales of cohesive communities</i>' (which includes making communities more attractive).</p> <p>Increasing renewable energy and resource efficiency could contribute to the national goal of '<i>A Wales of vibrant culture and thriving Welsh language</i>' but it would depend on how projects were implemented.</p>

NRP National Priorities	Scope	Relevant Well-being Goals	Commentary
			<p>The drive towards a circular economy and efficiency could provide opportunities for international cooperation in research, investment and trade opportunities consistent with the national priority of '<i>A globally responsible Wales</i>'.</p>
<p>Taking a Place-based Approach</p>	<ul style="list-style-type: none"> • A fundamental aspect of our approach to managing natural resources sustainably is our focus on collaborative working to deliver better results at a local level. • Communities are best placed to shape and understand local priorities and opportunities and to find practical solutions that bring the widest possible benefits. • Ensure that local people benefit fully from the natural resources in their locality. • Enable collaboration at the right scale (be that site, regional, catchment landscape or ecosystem) and the right locations. Area Statements will play a key role in identifying local opportunities and constraints linked to the national priorities 	<p>A prosperous Wales</p> <p>A resilient Wales</p> <p>A healthier Wales</p> <p>A more equal Wales</p> <p>A Wales of Cohesive Communities</p> <p>A Wales of vibrant culture and thriving Welsh language</p> <p>A globally responsible Wales</p>	<p>Taking a place-based approach could help achieve many of the key themes identified under the goal of '<i>A prosperous Wales</i>'. If employment arising from schemes is targeted it could contribute to improved skills and experience for the local workforce, contribute to a prosperous future for Welsh agriculture and support community-led projects.</p> <p>Taking a place-based approach to identify local issues and solutions will contribute the national goal of '<i>A resilient Wales</i>'. The place-based approach will be fundamental to achieving biodiverse natural environments with healthy functioning ecosystems that support social, economic and ecological resilience and have the capacity to adapt to change in line with this goal.</p> <p>Taking Wales Forward recognises the link between mental health and employment and if the place-based approach includes targeted employment then this could contribute to the national goal of '<i>A healthier Wales</i>'.</p> <p>Place-based initiatives that provide training and employment would also be consistent with the achievement of the national priority of '<i>A more equal Wales</i>'. The principle of ensuring that local people benefit from the natural resources in their locality is also</p>

NRP National Priorities	Scope	Relevant Well-being Goals	Commentary
			<p>consistent with this goal. Taking a place-based approach is also consistent with the national goal of achieving '<i>A Wales of cohesive communities</i>'.</p> <p>As with the other priorities, taking a place-based approach provides the opportunity to contribute to the national goal of '<i>A Wales of vibrant culture and thriving Welsh language</i>'.</p> <p>The priority recognises that the appropriate 'place' to tackle an issue will vary and could therefore be geographically extensive, possibly trans-boundary. In any event, it will be important to consider potential impacts beyond the local level (for example, the benefits associated with managing peatland and carbon sequestration). There is therefore the potential for this priority to contribute to the goal of '<i>A globally responsible Wales</i>'.</p>

Endnotes

- 1 Section 3 (1) 'Sustainable management of natural resources'
 - (a) using natural resources in a way and at a rate that promotes achievement of the objective in subsection (2),
 - (b) taking other action that promotes achievement of that objective, and
 - (c) not taking action that hinders achievement of that objective.

Section 3 (2) sets out the objective of SMNR to maintain and enhance the resilience of ecosystems and the benefits (ecosystem services) they provide, and in doing so meet the needs of present generations of people without compromising the ability of future generations to meet their needs, and contribute to the achievement of the well-being goals in section 4 of the Well-being of Future Generations (Wales) Act 2015.
- 2 Natural Resources are our plants, animals and other organisms; air water and soil, minerals, geological features and processes, physiological features and processes and climatic features and processes. Ecosystems are our living organisms (plants, animals and micro-organisms), in conjunction with non-living natural resources (air, water, minerals and soil), and all the diverse and complex interactions that take place between them.
- 3 The UN Convention of Biological Diversity (CBD) describes the ecosystem approach as 'a strategy on the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way' and is widely recognised as international best practice for addressing the decline in biodiversity. Through the concept of 'sustainable management of natural resources' part 1 of the Environment (Wales) Act puts the ecosystem approach on a statutory basis, drawing on the 12 principles established by the CBD.
- 4 Biodiversity means the diversity of living organisms, whether at the genetic, species or ecosystem level. It includes all species of plants and animals, their abundance and genetic diversity. Biodiversity drives the functioning of ecosystems, and underpins ecosystem resilience and the sustainable management of natural resources. Where biodiversity is lost and perhaps never fully recovered, it affects the capacity of ecosystems to adapt to changes and disturbances.
- 5 In the WFG Act, any reference to a public body doing something "in accordance with the sustainable development principle" means that the body must act in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.
- 6 The objective of SMNR is to maintain and enhance the resilience of ecosystems and the benefits (ecosystem services) they provide, and in doing so meet the needs of present generations of people without compromising the ability of future generations to meet their needs, and contribute to the achievement of the well-being goals.
- 7 There is not intended to be a conflict between the general functions of an authority and the biodiversity duty. The duty applies when public authorities are carrying out their functions.
- 8 Previously referred to as the Nature Recovery Plan for Wales, this can be found at gov.wales/topics/environmentcountryside/consmanagement/conservationbiodiversity/?lang=en
- 9 These objectives address the strategic goals of the UN's Convention on Biological Diversity www.cbd.int/sp/elements/default.shtml
- 10 www.biodiversitywales.org.uk/Wales-Action-Plan-for-Pollinators