



Comisiynydd
**Cenedlaethau'r
Dyfodol**
Cymru

**Future
Generations**
Commissioner
for Wales

A Journey to

A Resilient Wales

1: Biodiversity and Soil: Maintain and enhance the natural environment through managing land appropriately to create healthy functioning ecosystems

2: Natural Green Space: Support social resilience and community well-being

3: Knowledge of Nature: Increase awareness of the importance of a biodiverse natural environment with healthy functioning ecosystems

4: Water and Air Quality: Support ecological resilience, making the environment healthier for wildlife and people

5: Using Natural Resources: Be adaptive to a changing environment where there is a need to use resources efficiently





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In the Well-being of Future Generations Act, this goal is defined as

“A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change”.



Defining the goal

Here in Wales, we are now among the most nature-depleted countries in the world, with 1 in 14 wildlife species facing extinction.

Wales also has some of the worst air quality in the UK, still emits high numbers of greenhouse gas emissions and is now at greater risk of flooding, soil erosion and poorer water quality. Without healthy functioning ecosystems, we cannot resist, recover from or adapt to the changes facing our planet.

Our natural environment here in Wales is vital for our well-being; it provides the air we breathe, our food, 951 million litres of drinking water per day, our clothes, medicine, materials such as timber, as well as green spaces to enjoy. However, we are living in an area of unprecedented change when it comes to our planet. Biodiversity, 'the variety of all life on earth', has seen an overall 60% decline in species across the globe since 1970.

The goal of a resilient Wales is to reverse the decline of our biodiverse natural environment, to develop better awareness of our impacts as individuals and organisations, to ensure we are ecologically resilient, with healthy ecosystems, and to support community well-being.



Case studies

Throughout the document you will find a number of reports relating to the topic subject. Please read the link if you see this symbol.



Natural Resources Wales

Other statutory requirements in relation to this goal

The Environment (Wales) Act 2016 introduces the Sustainable Management of Natural Resources (SMNR) and sets out an approach to planning and managing natural resources to ensure that the benefits they provide for our social, economic, environmental and cultural well-being are available now and for future generations.

The Natural Resources Policy sets out national priorities for the sustainable management of natural resources, for us all to contribute towards. The priorities are about mainstreaming action for biodiversity across our urban and rural areas and reducing the pressures on our natural resources.

Natural Resources Wales' area statements will be developed by 2020. They help deliver the priorities in the Natural Resources Policy in a place, and will be a valuable tool to support public bodies and others delivering local actions.

Section 6 under Part 1 introduced an enhanced biodiversity and resilience of ecosystems duty (the S6 duty) for public authorities (which includes public bodies in the WFG Act) in the exercise of functions in relation to Wales. More details can be found in the [Welsh Government Essentials Guide](#).

The [State of Natural Resources Report](#) (SoNaRR) sets out the national evidence base on the resilience of ecosystems in Wales so that we can understand the extent to which sustainable management of natural resources is being achieved. The building blocks of ecosystem resilience are – Diversity, Extent, Condition, Connectivity and Adaptability.

Planning Policy Wales plays a significant contribution to the improvement of well-being in all its aspects and embeds the spirit of the Well-being of Future Generations Act, through moving us towards a low carbon, resilient society with well-connected environments for everyone in Wales. The planning system can contribute to improving the resilience of ecosystems and ecological networks, halting and reversing the loss of biodiversity, maintaining and enhancing green infrastructure, ensuring resilient choices for infrastructure and built development, moving towards a more circular economy in Wales; and facilitating decarbonisation.

<https://gov.wales/sites/default/files/publications/2018-12/planning-policy-wales-edition-10.pdf>



Some of the suggested steps and actions in this document complement the policies set out in legislation - specific steps and actions that adhere to these are highlighted in orange and with an 'St' symbol.

Enablers

Achieving this goal is **more likely to happen** when...

- **There is urgent action at a pace and scale needed to combat the loss of biodiversity.**
- **Events and campaigns raise public awareness (e.g. Blue Planet 2 series) that can 'bring the topic to the political table'.**
- **It is recognised that Green Infrastructure (GI) is an achievable and effective way to alleviate multiple social, economic and environmental challenges.**
- **Organisations, including businesses, understand and work to Environment (Wales) Act, SMNR, SoNaRR report, Natural Resources Policy and Planning Policy Wales.**
- **Community organisations are enabled to drive change in their area, to ensure nature is something that can be accessed and appreciated by all.**



Disablers

Achieving this goal is **less likely to happen** when...

- **Environmental grants are reduced and restrictive and short-term.**
- **Economic growth, including jobs and business, are prioritised over the natural environment, with environmental damage trade-off for short-term growth.**
- **Failure to plan, design and manage green infrastructure from the start of programmes and projects.**
- **A focus on waste, transport and energy, away from the natural environment.**
- **Lack of knowledge – Green Infrastructure is seen as the role of environment department.**





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3: Knowledge Of Nature

Increasing awareness of nature across ALL areas of work, placing it at the centre of decision making.

Defining the issue

Often the conservation of the natural environment is in competition with economic growth, and jobs and business needs are prioritised. There needs to be understanding and appreciation across all areas of work about the public benefits that Green Infrastructure can deliver, that goes beyond what is possible through traditional, 'business-as-usual' approaches. We need to ensure that Green Infrastructure is embedded in all decision making through plans, policies and developments.

In 2010, the 'Every Child Outdoors' report showed that nature can have positive impacts on young people's education, physical health, emotional well-being, and personal and social skills. If children are connected with nature, they are more likely to enjoy it and want to save it. RSPB research found that only 21% of 8 to 12-year-olds in the UK have a level of connection to nature that is considered to be realistic and achievable for all children.

Synergies and connections to other journeys



Journey to a Wales of vibrant culture and thriving Welsh Language

Topic 4: Culture enabling prosperity and resilience



Making **Simple** Changes

Include Biodiversity/Green Infrastructure learning and awareness raising opportunities for employees, that is relevant to the different service areas across your organisation (learning could be through newsletters, lunch & learn, webinars, training courses, work shadowing, webpages etc) .

Eg

E.g. Natural Resources Wales organisation-wide training programme around SMNR.

“In September 2017, Natural Resources Wales embarked on an organisation-wide training programme around Sustainable Management of Natural Resources (SMNR) recognising where people are now and how they can

consider SMNR in everything they do going forward. The course is mandatory for all staff, from the legal teams, HR and Procurement to their Flood teams, Operatives and Permitting Teams with attendance very much encouraged by line managers, senior managers as well as the Executive Team. The training team now find that staff who have attended the training have found it so beneficial to their day-to-day work that they are encouraging their colleagues to attend. As the training is delivered internally, the trainers can use real-life projects and examples from the attendees to illustrate how they can effectively enhance

their work through considering the 9 SMNR principles, these principles reflect and embed the Well-being of Future Generations Act ways of working. By involving all staff from across the organisation, the learning builds on the collective knowledge and experience of participants and looks to share it with others.”

Advisor Embedding
Sustainable Management of
Natural Resources, Natural
Resources Wales

Making **Simple** Changes

Eg

E.g. **Hywel Dda University Health Board** developed a webpage to help staff understand and get involved with environment, transport and sustainability issues.

Encourage your staff to share and develop their knowledge and expertise in relation to nature; consider mentoring schemes, forums, awareness days, work shadowing, staff swaps and walk-throughs, as a regular good practice exchange network.

Eg

E.g. **Greening Our City – Innovate Trust & Cardiff City Park department collaborative project** to help people with disabilities to have the opportunity to work alongside the Cardiff Community Park Ranger team in managing Cardiff's parks and green spaces
<https://www.innovate-trust.org.uk/our-work/greening-our-city>

Facilitate and encourage staff volunteering with environmental organisations and community groups both during/outside of work.

Eg

E.g. **Employee Volunteering** examples; Marine Conservation Society Beach Cleans; <https://www.mcsuk.org/beachwatch/> Keep Wales Tidy <https://www.keepwalestidy.cymru/teambuilding>

Allocate staff within your organisation to be the initial point of contact with local groups and projects.

Eg

E.g. **Welcome to our Woods Project** – staff to understand project benefits
<http://welcometoourwoods.ac4.amitywebsolutions.co.uk/>

Making **Simple** Changes

Enable local partnerships

for all aspects of the natural environment, bringing together representatives from third, private and public sector organisations.

Eg

E.g. **Swansea Environmental Forum**

<http://swanseaenvironmentalforum.net/>

Identify and promote

participation in Citizen Science surveys and National Recording Days to increase biological records.

Educate, inspire and involve

people in National and International Days, such as World Environment Day

<https://www.biodiversitywales.org.uk/Wales-Nature-Week>

<http://worldenvironmentday.global/>

Survey sites on land you own or work with in the first instance to understand what's there, for example through 24hr [Bioblitzes](#) with local volunteers and experts, before taking appropriate management.

When working with schools

and young people promote and support uptake of initiatives such as Eco-schools, Forest Schools, Size of Wales. E.g 800 Schools are currently registered under the Eco-Schools scheme in Wales

<https://www.keepwalestidy.cymru/our-schools>

Eg

E.g. **Caerphilly Council**

encourage and support Eco-Schools

<https://your.caerphilly.gov.uk/sustainablecaerphilly/schools-and-esdgc/eco-schools>

Include signage on all natural planting schemes to educate the public on the plants, management and benefits to people and wildlife.

Being More **Adventurous**

Collaborate with others to provide community training rooms or facilities where staff or people you work with can learn techniques and environmental skills alongside experts.

Eg

E.g. Growing to Succeed Project in Cyfartha Greenhouses,
Merthyr Tydfil County Borough Council

E.g. **Cwm Tawe Uchaf** Wild Communities Project – working with organisations such as MIND, Jobcentre Plus and Communities First
<https://www.welshwildlife.org/living-landscapes/upper-tawe-valley-the-wild-communities-project/>

Sustainable Land Managers and grounds maintenance teams have continuous professional development opportunities to keep natural environment knowledge and skills up to date.

Complete the [Investing in Volunteers](#) Health Check.

Protect staff days to enable staff to visit relevant local projects and meet key people driving change.

Work in partnership with [Local Environmental Record Centres](#) to identify, record and share what is on your estate, and support local voluntary recorders.

Maintain, enhance, create or retrofit natural greenspace ('Wild Areas') with current and future schools.

Eg

E.g. In **Denbighshire** children from Rhos St Primary School in Ruthin have been granted access to protected piece of land adjacent to their school as an 'outdoor classroom' and place where they will be helping to monitor endangered species whilst carrying out practical tasks and selling any byproducts (such as weaved willow baskets).

Being More **Adventurous**

When working with young people, support regular outdoor learning for all school children, with additional learning for teachers about benefits of nature.

Eg

E.g. **Bridgend County Borough Council** are developing green spaces as early years learning spaces, providing activities and facilities aimed at experiential learning of children outdoors. Teacher and family resources will be developed at the foundation stage to maximise early years learning outdoors.

Work with traditional skills and crafts people, who work with the natural environment, and encourage training schemes to teach these as a way of managing your estate.

Work with community champions and groups (such as Community Climate Champions) to tap into their local knowledge and dedication when starting new initiatives.

Eg

E.g. **Monmouthshire** Community Climate Champions was established in 2008 when Monmouthshire County Council developed its Climate Change and Sustainable Energy Strategy, and recognised that community groups were already doing a lot on energy and climate.

Engage with experts to deliver training across all staff in your organisation and to build on learning around Green Infrastructure and SMNR.

Owning your **Ambition**

Collaborative or national actions

Multiple organisations work proactively and collaboratively together at a landscape scale to resolve local challenges.

Ensure that environmental stewardship is a vital part of education in Wales, creating a bond between children and nature that is vitally important and making outdoor learning an essential part of all aspects of the curriculum.

Invest in our natural resource knowledge and evidence base to secure future expertise in taxonomy, ecology, and nature conservation.

Commit to stable and secure funding for [Local Environmental Record Centres](#) across Wales.

Owning your **Ambition**

Organisational actions

Become an [Investing in Volunteers](#) Organisation, to enable your staff to volunteer with local environmental projects on a regular basis.

Second your staff to environmental and community groups or organisations for short term or longer term placements to share skills and develop opportunities to enhance understanding about nature and the environment

E.g The **Welsh Government** Short Term Experience Programme (STEP) will promote links between civil servants and the third sector across a range of departments.

Clearly demonstrate how biodiversity information is fed into and considered in the decision-making process for all projects at an early stage.


Focus on the environment within your Apprenticeship Schemes to widen skills and access to 'Green' jobs.

E.g. **Brecon Beacons National Park Authority** previously ran a trainee project to promote careers in conservation
<https://governance.beacons-npa.gov.uk/documents/s28211/NPA%20Information%20report%20BBNPA%20Skills%20programmes%20February%202018.pdf>

Eg

HOME

Other examples and resources




Speakers 4 Schools aims to end educational inequality by giving all young people access to the top opportunities for their young people through inspiring school talks and eye-opening work experience placements.

<https://www.speakers4schools.org/news/25-more-leaders-to-give-talks-for-the-great-british-plastics-challenge/>




This WCVA Environmental Volunteering Toolkit details how to find opportunities; https://drive.google.com/file/d/1D6G44aq_XQf-nzK60HggV5CmYHQVxTC7/view



NRW Natural Progression model to show how everyone has the potential to move from being in and connecting with the natural environment to establishing lifelong positive behaviours

<https://naturalresources.wales/guidance-and-advice/business-sectors/education-learning-and-skills/whats-your-connection-with-nature-like/?lang=en>



There are a number of Citizen Science Surveys that people and organisations can take part in – many are detailed in this resource; https://www.wcva.org.uk/media/6365167/recording_the_natural_world_-_toolkit_english_.pdf