# The Nature Recovery Plan for Wales Setting the course for 2020 and beyond

Part 1: Our Strategy for Nature

Part 2: Our Action Plan

Part 3: The Nature Recovery Framework

#### MINISTERIAL FOREWORD

Nature is the planet's life support system. All the plants, animals and microorganisms and the places where they live, provide direct and indirect economic, social, aesthetic, cultural and spiritual benefits to us as humans. Nature provides our food, water, fibre, building materials as well as benefiting our mental and physical health, inspiring us and shaping our culture.

In Wales we recognise that our well being and the well being of future generations are dependent upon the health of our environment. The state of our natural environment and the nature it supports is a key test of whether we are learning to live sustainably. But our nature is under pressures: from over exploitation, habitat loss, pollution, climate change and invasive non native species.

This Nature Recovery Plan is aimed at addressing these underlying causes of loss by putting nature at the heart of our decision-making, by increasing the resilience of our natural systems (ecosystems), and by taking specific action for habitats and species. It sets out how Wales will deliver the commitments of the EU Biodiversity Strategy and the UN Convention on Biological Diversity to halt the decline in our biodiversity by 2020 and then reverse that decline.

The plan builds on our ground-breaking new legislative framework. The Well-being of Future Generations (Wales) Act challenges us all to look at the long-term impacts of decisions and to work to meet our seven Well-being Goals, including increasing the resilience of our ecosystems, while the Environment (Wales) Bill enshrines the principles of the UN's Convention on Biological Diversity in law by adopting an ecosystems approach to how we manage our natural resources in future.

Conserving and restoring the nature that we have in Wales is an essential investment for everyone's quality of life in Wales. Taking action now, working in partnership, we can achieve real lasting benefits for this and future generations.

#### **ACRONYMS**

BAP - Biodiversity Action Plan

BARS - Biodiversity Action Reporting System

CBD - Convention on Biological Diversity

CFP - Common Fisheries Policy

**EPS - European Protected Species** 

**EUBS - EU Biodiversity Strategy** 

GES - Good Environmental Status

INNS - Invasive non-native species

LBAP - Local Biodiversity Action Plan/Partnership

MA - Millennium Ecosystem Assessment

MCZ - Marine Conservation Zone

MPAs - Marine Protected Areas

MSFD - Marine Strategy Framework Directive

NEA - National Ecosystem Assessment

NNRP - National Natural Resource Policy

NRW - Natural Resources Wales

PiPs - Prioritised Improvement Plans

SMNR - Sustainable Management of Natural Resources

SoNaRR - State of Natural Resources Report

SAC - Special Areas of Conservation

SPA - Special Protection Areas

SSSI - Sites of Special Scientific Interest

SuDS - Sustainable Drainage Systems

WBP - Wales Biodiversity Partnership

#### Part 1: Our Strategy for Nature

#### 1. INTRODUCTION: WHY IS BIODIVERSITY IMPORTANT?

Biodiversity is the variety of life found on earth. It includes all species of plants and animals, their abundance and genetic diversity. It is our fascinating wildlife and iconic species and habitats; it is vital to connect people with nature; and it contributes to society's well-being, sense of place and cultural identity.

Biodiversity underpins our lives and livelihoods and supports the functioning and resilience of ecosystems in oceans, wetlands, lakes, rivers, mountains, forests and agricultural landscapes.

Our economy, health and well-being depends on healthy, resilient ecosystems, which provide us with our food, clean water and air, the raw materials and energy for our industries and protect us against hazards, such as flooding and climate change.

Changes in the distribution and abundance of plants, animals, and microbes affect ecosystem functions and the capacity of those functions to deliver ecosystem services. Loss of species from ecosystems affect their ability to resist invasion by other species, affect production and nutrient cycling, and affect the reliability and stability of ecosystems. Therefore, biodiversity is essential to sustaining ecosystems that provide the vital services our lives depend on. Where biodiversity is lost and perhaps never fully recovered, it affects the capacity of ecosystems to adapt to changes and disturbances.<sup>1</sup>

**Figure 1** shows the value of biodiversity in underpinning healthy functioning ecosystems, human well-being and the economy.

It is therefore vital that we maintain and enhance our biodiversity to ensure it remains healthy, resilient and capable of adapting to change.

We must not forget either, that biodiversity has its own intrinsic value, and we have a moral obligation to protect it and prevent any further loss.

However, it is widely recognised that biodiversity is under pressure from a range of influences. Despite much work, and some notable successes, our habitats and species continue to decline. Appendix 1 shows the current status and trends of some of these in Wales.

The Nature Recovery Plan specifically aims to support our nature: our species and their habitats, its variety and abundance, both for its own sake, and to ensure the healthy functioning of our ecosystems.

<sup>&</sup>lt;sup>1</sup> Environment (Wales) Bill Explanatory Memorandum

ecosystems socio-economic systems ecosystem use and management other capital inputs cosystem services functions human well-being · nutrition, clean air and water benefits · health, safety, security enjoyment, · economic value • health value value · shared (social) value biodiversity · other values drivers of change institutions, businesses policies (agriculture, forestry, response fishery, environment, ...) state stakeholders and users present and future

**Figure 1:** Biodiversity underpins healthy functioning ecosystems, human well-being and the economy<sup>2</sup>

The plan consists of three parts:

**Part 1:** Our Strategy for Nature sets out our commitment to biodiversity in Wales, the issues we need to address, and our objectives for action. It sets out how our current and proposed action, particularly through the Well-being of Future Generations (Wales) Act 2015<sup>3</sup>, and through the Sustainable Management of Natural Resources, will contribute to reversing the loss of biodiversity in Wales.

**Part 2:** Our Action Plan sets out those actions which have been specifically identified to meet our objectives to reverse the decline of biodiversity.

**Part 3:** The Nature Recovery Framework, in development, will show the governance structure for the Nature Recovery Plan, and the roles and responsibilities of everybody involved in the delivery of action for biodiversity in Wales. It will also define the accountability measures in place to ensure delivery.

<sup>&</sup>lt;sup>2</sup> http://biodiversity.europa.eu/maes

<sup>-</sup>

<sup>&</sup>lt;sup>3</sup> Well-being of Future Generations (Wales) Act 2015 – The Essentials

The Nature Recovery Plan is not a one off document. It is a live document that all with an interest have a responsibility to review and update as policies and priorities evolve over time.

The Nature Recovery Plan for Wales sets out how we will address the Convention on Biological Diversity's (CBD) Strategic Plan for Biodiversity and the associated Aichi Biodiversity Targets in Wales<sup>4</sup>, as well as the EU Biodiversity Strategy targets<sup>5</sup>. It is the National Biodiversity Strategy and Action Plan for Wales.

The Nature Recovery Plan has been produced by the Wales Biodiversity Strategy Board, members of which represent both land and sea managers, Natural Resources Wales, the environmental third sector, local authorities, Wales Biodiversity Partnership and Welsh Government. It is for everyone in Wales.

<sup>&</sup>lt;sup>4</sup> Convention on Biological Diversity - Strategic Plan for Biodiversity 2011-2020, including Aichi Biodiversity Targets

5 TH Biodiversity Convention on Biological Diversity - Strategic Plan for Biodiversity 2011-2020, including Aichi Biodiversity Targets

EU Biodiversity Strategy targets

#### 2. OUR COMMITMENT TO BIODIVERSITY

The Well-being of Future Generations Act recognises the importance that the Welsh Government places on our nature and its biodiversity. Along with six other goals for the sustainable Wales we want, the Act puts in place the 'Resilient Wales' goal:

'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 (for example climate change).'

All public bodies in Wales will have to work towards this and all of the goals as required under the Act and adopt the principles outlined in the Act.

We are also committed to the vision of the **Convention on Biological Diversity's** (CBD) Strategic Plan for Biodiversity 2011 -2020:

'By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.' with its mission 'to take urgent action to halt the loss of biodiversity'.

The vision, mission and the five strategic goals are shown in full in Appendix 2. These goals are to be met with 20 targets, known as the Aichi targets, which are shown in Appendix 3.

The **European Union's Biodiversity Strategy** sets out how European policy can best contribute to the achievement of the CBD's Strategic Plan and contains a number of objectives and targets. These are also shown in Appendix 2.

#### Our ambition

In order to meet our commitments to biodiversity our ambition is:

'To reverse the decline in biodiversity, for its intrinsic value, and to ensure lasting benefits to society'

The Nature Recovery Plan defines the objectives and key actions needed in Wales to achieve our ambition and meet both the Resilient Wales goal and the global and European commitments to halting the loss of biodiversity.

These are actions that can be delivered in the short term but will set us on course to deliver our longer term commitments beyond 2020.

#### Measuring our progress

The National Indicators developed for the Well-being of Future Generations will help us to measure whether we are achieving the Resilient Wales goal.

A further set of indicators will be developed to measure the progress of the Nature Recovery Plan against our objectives.

In addition to the National Indicators, in the marine environment we are committed to achieving Good Environmental Status (GES) of our seas by 2020 as required by the Marine Strategy Framework Directive (MSFD)<sup>6</sup>. A number of targets and indicators have been developed under MSFD specific for marine biodiversity and the wider marine environment which will show our progress towards GES.

The Nature Recovery Framework will set out the governance arrangements to ensure we deliver our biodiversity commitments, and report against our progress.

<sup>&</sup>lt;sup>6</sup> Marine Strategy Framework Directive (MSFD)

#### 3. WHAT WE NEED TO DO: OUR OBJECTIVES FOR NATURE RECOVERY

It is widely recognised that biodiversity is under pressure from a range of influences. Despite much work, and some notable successes, our habitats and species continue to decline. Appendix 1 shows the current status and trends of some of these in Wales.

The effect of climate change on biodiversity over the coming decades is likely to be significant, including a further loss of habitat and a potential increase in invasive species.

A number of objectives have been identified to address the issues that are driving the decline in our biodiversity, and to support recovery.

# → Objective 1: Engage and support participation and understanding to embed biodiversity throughout decision making at all levels.

Placing nature at the centre of decision making is essential to address the underlying cause of biodiversity loss. In 2011, the UK National Ecosystems Assessment (UK NEA)<sup>7</sup> identified the underlying cause of biodiversity loss and ecosystem degradation:

'The natural world, its biodiversity and its constituent ecosystems are critically important to our well-being and economic prosperity, but are consistently undervalued in conventional economic analyses and decision making.'

A lack of awareness, and subsequent valuation of the critical contribution that our nature makes to our well-being and livelihoods, means we often do not account for that contribution in decision making, at all levels of society, from individuals, through local authorities, to businesses. This can lead to damage or overexploitation of our nature. There is also a lack of mechanisms to support this accounting. For example, 'income foregone' does not adequately account for the value of ecosystem services provided by a farm habitat.

# → Objective 2: Safeguard species and habitats of principal importance and improve their management

Species and habitats are wonderful and awe-inspiring and we have a moral obligation to protect them and their genetic variety for future generations. They are the building blocks of our ecosystems and their functioning from which we derive many services and benefits, and we need to ensure we have resilient populations of species to support these.

Sites designated for nature conservation play an important role: they are a key mechanism for maintaining natural diversity required for resilience, and disproportionately contribute to a wide range of ecosystem services and benefits.

<sup>&</sup>lt;sup>7</sup> UK National Ecosystems Assessment

Sites are designated for nature conservation purposes to protect and enhance our rarest habitats and species, and the best examples of our natural biodiversity and geo-diversity in Wales. These environments are complex, often ancient, systems with great richness and genetic reserves of plants and animals.

The traditional approaches to nature conservation based on designated sites and the protection of species and habitats have had notable successes and we will continue to use these approaches. Our protected sites and species are a core resource, but they can become isolated, and outside pressures on sites can make management challenging.

# → Objective 3: Increase the resilience of our natural environment by restoring degraded habitats and habitat creation

Degraded habitats are ones which no longer support the full potential of our native wildlife. In order to safeguard our protected species and to improve the resilience of more widespread species and habitats, we need to restore networks of habitats to a healthy condition across Wales, both on land and in the sea.

Restoration of degraded habitats and habitat creation will build the resilience of our natural environment through taking action on the four attributes of resilience:

- Increasing diversity
- Increasing ecosystem extent through reducing fragmentation
- Increasing connectivity within and between ecosystems
- Improving habitat condition.

This resilience will also increase the ability of species and habitats to adapt to other pressures including climate change.

#### → Objective 4: Tackle key pressures on species and habitats

The UK NEA identified changing land management practices, through agriculture and urbanisation, pollution and invasive non-native species as key pressures leading to habitat and species loss and fragmentation. This, together with acidification and eutrophication, has changed the quantity and quality of habitats and the species they can support.

In the marine environment key pressures include unsustainable human activity, climate change leading to the warming and acidification of the world's seas and oceans, and the introduction of invasive non-native species.

It is vital to anticipate, prevent and mitigate the causes of biodiversity loss at source, using both our legislation, and innovative and holistic nature-based solutions.

#### → Objective 5: Improve our evidence, understanding and monitoring

To help nature to recover we need to inform the delivery of action by a better understanding of the ecology and science of our habitats and species, their status and trends, and the pressures and drivers leading to changes.

## → Objective 6: Put in place a framework of governance and support for delivery

Underpinning our action, we also need a governance structure that is fit for purpose to support and deliver action on the ground. We need to ensure we have the skills, expertise, personnel and functions in place to deliver.

It is essential that these objectives inform all of our approaches to reversing the loss of biodiversity, across all of our policies, strategies and programmes.

#### 4. EMBEDDING BIODIVERSITY INTO DECISION MAKING IN WALES.

Key to meeting all of our objectives is the ground breaking legislation put in place to bring biodiversity into the heart of decision making in public life.

The Well-being of Future Generations (Wales) Act 2015 makes public bodies take a more joined up approach to improving the environmental, as well as the economic, cultural and social well-being of Wales. The Sustainable Management of Natural Resources (SMNR)<sup>8</sup> put in place by the Environment (Wales) Bill<sup>9</sup> will enable Wales' natural resources (including biodiversity) to be managed in a more proactive, sustainable and joined-up way.

### How the Well-being of Future Generations (Wales) Act 2015 will help nature to recover in Wales

In adopting fully the principle of sustainable development the Act recognises the need to tackle long-term trends and the root causes of the strategic challenges we face, including for our biodiversity.

It sets seven well-being Goals for the sustainable Wales we want:

- a prosperous Wales
- a resilient Wales
- a healthier Wales
- a more equal Wales
- a Wales of cohesive communities
- a Wales of vibrant culture and thriving Welsh language
- a globally responsible Wales.

Achieving the Resilient Wales goal is our top commitment to biodiversity which will also support a number of the other well-being goals.

The Act requires public bodies, including the Welsh Government, Natural Resources Wales and the National Park Authorities, to consider the achievement of the well-being goals in all policies and strategies, and in all grant aiding and funding. Each public body must set and publish well-being objectives that are designed to maximise its contribution to achieving each of the well-being goals, and take all reasonable steps to meet those objectives.

The Act will, therefore, require public bodies, to set objectives to achieve a biodiverse natural environment with healthy functioning ecosystems, and to take all reasonable steps to achieve those objectives.

<sup>&</sup>lt;sup>8</sup> Environment (Wales) Bill Factsheet - Sustainable Management of Natural Resources Delivery Framework

<sup>&</sup>lt;sup>9</sup> Environment (Wales) Bill Factsheet - Overview of the Environment (Wales) Bill

There are also 5 ways of working that public bodies need to use to show that they have applied the sustainable development principle:

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.

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

**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.

**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.

Following these ways of working will help all public bodies to work collaboratively. avoid repeating past mistakes and tackle some of the long-term challenges we are facing. Working this way will be a fundamental step towards the corporate change that is needed to embed the consideration of biodiversity into decision making at an early stage.

#### How the Sustainable Management of Natural Resources and the Environment (Wales) Bill<sup>10</sup> will help nature to recover in Wales

The objective of the Sustainable Management of Natural Resources (SMNR) is to maintain and enhance the resilience of ecosystems and the benefits they provide and, in so doing, meet the needs of present generations of people without compromising the ability of future generations to meet their needs.

Halting and reversing the loss of biodiversity is integral to this objective.

#### The purpose of SMNR is:

- to reflect the role that our natural resources play in contributing to the achievement of the well-being goals introduced by the Well-being of Future Generations (Wales) Act 2015
- to maintain and improve the condition of our ecosystems and emphasise the role of ecosystem benefits (or services) within the decision-making process
- to ensure that management and use of our natural resources is undertaken in such a way that does not diminish the ability of those resources or of ecosystems to be able to deliver multiple social, economic and environmental benefits over the long-term

<sup>&</sup>lt;sup>10</sup> At time of writing the Bill is proceeding through the National Assembly for Wales.

- to ensure that the impact of activities on our natural resources and ecosystems is considered in terms of how they affect the resilience of our ecosystems and consequently their ability to provide social, economic and environmental benefits for both current and future generations
- to ensure that a wide range of relevant ecosystem benefits can be considered and valued within the decision-making and delivery process. This includes the value we place on our natural resources for their own sake
- to reduce the negative impacts generated by the use of natural resources<sup>11</sup>.

Biodiversity is a key natural resource, and therefore each of these purposes will contribute to achieving the objectives of the Nature Recovery Plan.

The principles and framework for delivery of SMNR (see below) will also ensure that biodiversity, and its management, is considered as an essential component of ecosystems.

#### The Biodiversity and Resilience of Ecosystems Duty<sup>12</sup>

The Environment (Wales) Bill introduces an enhanced biodiversity and resilience of ecosystems duty that will apply to public authorities who exercise functions in relation to Wales.

This enhanced duty will place biodiversity as a "natural and integral part of policy and decision making" within public authorities in Wales. A new reporting duty enables public authorities to report on actions taken to improve biodiversity and to promote the resilience of ecosystems and also what actions have been taken to incorporate biodiversity measures into other areas of policy, strategies or initiatives.

Fulfilling this duty will help public bodies to achieve their well-being goals, and the Nature Recovery Plan objectives.

Environment (Wales) Bill Explanatory Memorandum
 Environment (Wales) Bill Factsheet - Biodiversity and Resilience of Ecosystems Duty

#### The SMNR Principles

The Environment (Wales) Bill puts the ecosystem approach into statute through a set of principles, which are based on the 12 principles of the Convention on Biological Diversity (CBD)<sup>13</sup>.

All public bodies subject to the Environment (Wales) Bill when it is enacted will need to use these principles in designing and implementing projects and programmes of work.

Building resilience	A resilient ecosystem is one that is healthy and functions in a way that is able to address pressures and demands placed on it, and is able to deliver benefits over the long term to meet current social, economic and environmental needs. Biodiversity underpins this resilience.
Managing for multiple benefits	Our ecosystems provide us with a wide range of services and benefits. We need to take <b>all</b> of these, including biodiversity, into account when we make decisions about how we use them, so that they provide multiple benefits for the long term. This includes taking into account their intrinsic value.
Adaptive management	Ecosystem processes and functions are complex and variable, and our approach will be adaptive with a focus on active learning derived from monitoring and outcomes and taking into account the time lags and feedback times for ecosystems to respond to interventions. It is about 'learning by doing'.
Long term	It is also important to take account of the short, medium and long term consequences of actions.
Evidence	This means gathering information and considering all the social, economic and environmental evidence (including evidence in respect of uncertainties) from a wide range of experts and stakeholders at the local, regional and national level as appropriate, both to identify priorities and opportunities for their management and also in delivering the management actions.

<sup>&</sup>lt;sup>13</sup> https://www.cbd.int/ecosystem/principles.shtml

Collaboration
and co-
operation

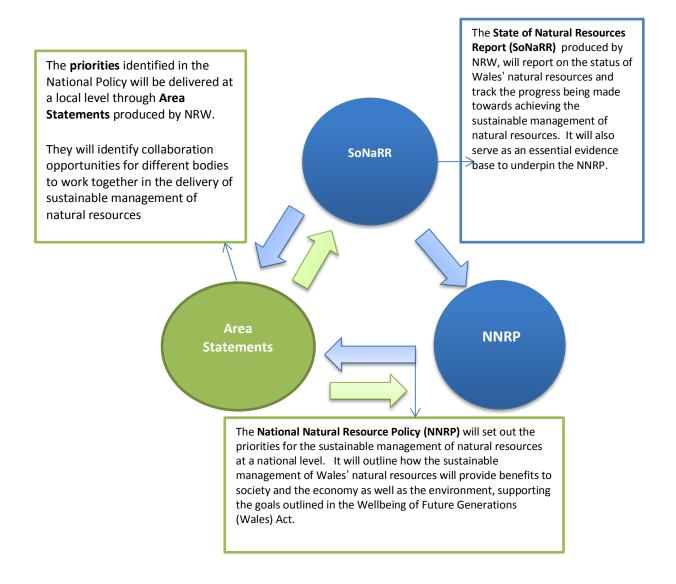
It is about having a two way communication across local, regional, national and international levels and being interconnected between policy, process and people to break down silo ways of working. This approach supports the development and implementation of the new, innovative solutions that are needed.

Working at the right scale

An ecosystem is a functioning unit that can operate at any scale depending on the problem or issue being addressed.

#### The SMNR Delivery Framework

The Bill also introduces an iterative and interconnected framework through the publication and review of the following documents:



The Nature Recovery Plan will inform this framework by:

- providing the best available evidence to prepare area statements, reflecting local pressures on biodiversity and priorities for species and habitat recovery
- providing evidence and information to prioritise biodiversity action within the National Natural Resources Policy (NNRP). Priority actions will be delivered through appropriate Welsh Government strategies, policies and delivery mechanisms, as well as through specific activities by NRW and others, and supported by more specific Nature Recovery Plan actions
- identifying and reporting on biodiversity status and trends and indicators, to inform the SoNaRR.

The SMNR framework will improve the position of biodiversity in decision making and encourage holistic approaches to tackling negative factors, for example through nature based solutions to address pollution and the fragmentation of habitats.

#### The Legislative Framework for Marine Biodiversity

The Well-being of Future Generations (Wales) Act 2015 and the Environment (Wales) Bill apply to both the terrestrial and marine environments. In addition to these, the Marine Strategy Regulations 2010<sup>14</sup> implement the **Marine Strategy Framework Directive (MSFD)**<sup>15</sup>, which aims to achieve or maintain Good Environmental Status of our seas by 2020 by protecting the marine environment, preventing its decline, restoring it where practical and using marine resources sustainably.

MSFD provides the overarching framework for a number of other key Directives and legislation at the European and UK level that are applicable to the marine environment. For example, the EC Habitats Directive<sup>16</sup>, the EC Birds Directive<sup>17</sup>, the EU Water Framework Directive<sup>18</sup>, the Common Fisheries Policy <sup>19</sup> and the UK Marine and Coastal Access Act<sup>20</sup>.

MSFD will also help us to meet our international commitments on Sustainable Development and the Convention on Biological Diversity (CBD).

The Marine and Coastal Access Act 2009 established the Welsh Ministers as the Marine Planning Authority for Wales. The Welsh National Marine Plan<sup>21</sup> will promote

<sup>&</sup>lt;sup>14</sup> The Marine Strategy Regulations 2010

<sup>&</sup>lt;sup>15</sup> Joint Nature Conservation Committee (JNCC) information on the Marine Strategy Framework Directive

<sup>&</sup>lt;sup>16</sup> EC Habitats Directive

<sup>17</sup> EC Birds Directive

<sup>18</sup> EU Water Framework Directive

<sup>&</sup>lt;sup>19</sup> Common Fisheries Policy

UK Marine and Coastal Access Act

<sup>&</sup>lt;sup>21</sup> At the time of writing the Welsh National Marine Plan is being drafted.

sustainable development of the marine area and the sustainable use of our marine resources.

Both the Marine Plan and MSFD integrate marine policies and place the ecosystem approach at the heart of decision making for Welsh seas.

#### 5. ACTION FOR NATURE RECOVERY IN THE TERRESTRIAL ENVIRONMENT

This section summarises the actions needed to achieve our objectives and the programmes and mechanisms to support delivery in the terrestrial environment.

Our nature recovery objectives will be delivered by our European and domestic legislation and all of our policies and strategies - particularly as the latter are adapted to address the Well-being of Future Generations (Wales) Act 2015.

The Nature Recovery Plan also puts in place actions to support delivery through this legislation, particularly raising awareness of the value of biodiversity, guiding restoration of degraded habitats and improving evidence.

Part 2 of the Nature Recovery Plan is the Action Plan which shows the actions in further detail. These will be reviewed regularly to ensure we continue to act on the top priorities to meet our objectives.

#### Objective 1: Engage and support participation and understanding, to embed biodiversity throughout decision making at all levels

Addressing this objective demands corporate change, and the integration of biodiversity values, both economic and intrinsic, into decision making, so that the value is recognised, accounted for and acted on at an early stage.

For public bodies, this will be driven by the new legislative framework, which will mean embedding biodiversity into all Welsh Government strategies and programmes and pushing forward prioritised, joined up action at national, regional and local scales.

However, as a large proportion of Wales is in private ownership, we need to work with all decision makers and land managers, from individuals and small businesses, to large corporations, as well as public bodies. We need to ensure that their work for biodiversity is recognised, and we need to continue to work to find better ways to fund that work, both through the Rural Communities - Rural Development Programme<sup>22</sup> and through new and innovative finance mechanisms.

The benefits of biodiversity to our health and well-being, and to land management (for example through natural pest control) are well known<sup>23</sup>. We need to ensure these benefits are accounted for in business planning on farms, and across commercial land management. There is already work underway on natural capital accounting in businesses at a UK level, which will inform our approaches on building biodiversity into business management.

Underpinning this, to aid decision making there needs to be a major effort to improve understanding and raise awareness of the importance and value of our nature and its biodiversity across Wales. We need to make it easier for everyone to act by:

Rural Communities - Rural Development Programme
 http://www.leafuk.org/leaf/farmers/Simply\_Sustainable\_Biodiversity.eb

- describing simple actions which will meet our objectives
- education and training through schools, colleges and knowledge transfer initiatives.

#### Key Interventions include:

- The Well-being of Future Generations (Wales) Act introduces well-being goals that public bodies must work towards achieving, setting objectives and taking all reasonable steps to achieve them. National Indicators will be used to measure progress towards the goals, including the Resilient Wales goal.
- ➤ The Environment (Wales) Bill will introduce a new, enhanced Biodiversity and Resilience of Ecosystem Duty on public bodies to ensure that biodiversity is an integral part of decision making. The Duty will replace the existing Natural Environment and Rural Communities (NERC) Act 2006Duty <sup>24</sup>. Public authorities will be required to report on the actions they are taking to improve biodiversity and promote ecosystem resilience.
- ➤ The Wales Biodiversity Strategy Board will develop an ambitious communications strategy that will engage and support public participation and improve understanding, to embed biodiversity throughout decision making at all levels.
- ➤ The integration of the WG **Front Line Service** will ensure that consistent messages are provided to decision makers and that the WFG principles are put into practice helping to achieve the well-being goals.

#### Other examples of actions to achieve this objective:

- Conwy County Council carried out a biodiversity audit across its service areas, identifying current practice that impacts on biodiversity and taking steps to address those, putting in place positive practice.
- ➤ The **Planning (Wales) Act 2015**<sup>25</sup> delivers a planning system which is fair, resilient and enables development, helping to create sustainable places where citizens have improved access to quality homes, jobs and infrastructure, whilst protecting our most important built and natural environments and supporting the use of the Welsh language.
- The Strategic Framework for Welsh Agriculture<sup>26</sup> recognises that sustainable production from a progressive industry means profitable farm businesses that generate employment and make a valuable economic, environmental, social and cultural contribution to Wales' well-being. The protection and management of our natural resources should not conflict with production, rather the two are reliant on each other.

<sup>&</sup>lt;sup>24</sup> Natural Environment and Rural Communities (NERC) Act 2006

Planning (Wales) Act 2015

Welsh Government Consultation Document - A Strategic Framework for Welsh Agriculture (2015)

- Farming Connect<sup>27</sup> is the knowledge transfer, innovation and advisory service under the Welsh Government Rural Communities - Rural Development Programme 2014 – 2020.
- Forgotten Landscapes <sup>28</sup> is a four year partnership project in Torfaen, funded by the Heritage Lottery Fund and the Welsh Government's Nature Fund. Project activities include engagement with the local community, awareness raising and developing education programmes.

#### Objective 2: Safeguard species and habitats of principal importance and improve their management

Our species and habitats of principal importance are those that have been identified through legislation for Europe, the UK and for Wales. We need to ensure that any lists of species and habitats of principal importance for Wales are current and fit for purpose - reflecting our biodiversity objectives.

The protected site series (including Sites of Special Scientific Interest (SSSI)<sup>29</sup>, Special Areas of Conservation (SAC) and Special Protection Areas (SPA)<sup>30</sup>, Ramsar Wetlands of International Importance<sup>31</sup> and Marine Conservation Zones<sup>32</sup>) has been established over many decades, as a statutory duty to both UK and European legislation. Our species are protected particularly under the Wildlife and Countryside Act 1981<sup>33</sup> and the Conservation of Habitats and Species Regulations 2010<sup>34</sup>.

We need to use the legislation that we have to ensure we safeguard our protected species and habitats, and to manage them better to reduce the multiple pressures they are facing<sup>35</sup>.

However, we need to ensure these sites and our protected species are in good condition in their natural habitats, both for their intrinsic value, and for the benefits they provide to us.

Improving the condition of these priority areas while expanding and making connections between them will improve the resilience of our ecosystems, and help develop protected sites as the cores of large-scale functional networks rather than being 'islands' within the landscape.

**Farming Connect** 

<sup>&</sup>lt;sup>28</sup> Forgotten Landscapes

<sup>&</sup>lt;sup>29</sup> Sites of Special Scientific Interest

Special Areas of Conservation (SAC) and Special Protection Areas (SPAs)

Ramsar Wetlands of International Importance

Marine Conservation Zones

Joint Nature Conservation Committee (JNCC) information on The Wildlife and Countryside Act 1981

<sup>34 &</sup>lt;u>Conservation of Habitats and Species Regulations 2010</u> 35 <u>NRW Natura 2000 LIFE project outputs</u>

For example, National Parks and Areas of Outstanding Natural Beauty offer the opportunity to tackle the better management of designated sites at scale and through this also offer connectivity. National Nature Reserves managed directly by Natural Resources Wales and other partner organisations also provide the opportunity to demonstrate 'exemplar' conservation management of designated sites. Non-statutory sites will also contribute to a network of sites to better deliver our biodiversity objectives.

We need to identify opportunities for policy change, managing for multiple benefits and using resources (both human and monetary) innovatively. Partnership working is key.

#### **Key Interventions:**

- Natural Resources Wales continues to work to deliver our legislative obligations under the Conservation of Habitats and Species Regulations 2010<sup>36</sup>, providing for the designation and protection of 'European sites', the protection of European Protected Species, and the adaptation of planning and other controls for the protection of European Sites and the Wildlife and Countryside Act 1981 protecting animals, plants, and certain habitats.
- NRW identifies opportunities to enter into management agreements with landowners and land managers, under Section 15 of the Countryside Act 1968, to ensure that **Sites of Special Scientific Interest** are managed in ways that conserve the special features for which they were designated.
- ▶ Build on the outputs of NRW's Natura 2000 LIFE project <sup>37</sup> which has identified the actions needed to improve the management of individual sites and sites across Wales through Prioritised Improvement Plans and Thematic Action Plans.
- > Keep our protected site series under review to ensure it meets our biodiversity objectives.
- ➤ Under the **Environment (Wales) Bill** Welsh Ministers must prepare and publish, in consultation with Natural Resources Wales, a list of species and habitats which are of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales. This new list will replace the existing list of species and habitats of principal importance identified under Section 42 of the NERC Act<sup>38</sup>.
- Provide guidance on how best to safeguard these priority species and habitats, particularly to assist public bodies to fulfil the new Biodiversity and Resilience of Ecosystems Duty under the Environment (Wales) Bill.

Other examples of actions to meet this objective:

Management of National Nature Reserves and SSSIs by NRW and partner organisations, such as RSPB, the Wildlife Trusts and Local Authorities.

38 Section 42 of the NERC Act

<sup>&</sup>lt;sup>36</sup> JNCC information on The Conservation of Habitats and Species Regulations 2010

NRW's Natura 2000 LIFE project

- Selection and management of Local Wildlife Sites/Sites of Importance for Nature Conservation by Local Authorities.
- Action for specific species recovery carried by NRW, and many environmental NGOs, for example for Water Voles, Marsh Fritillary butterflies, freshwater pearl mussels, chough and twite, and lower plants.<sup>39</sup>

# Objective 3: Increase the resilience of our natural environment by restoring degraded habitats and habitat creation

Action is needed across the whole of Wales to recover biodiversity and build the resilience of our ecosystems.

We know many of our habitats are degraded in terms of the biodiversity they can support. We need to be able to recognise this wherever they occur, in both urban and rural areas, for example in parks, and on farms, understand how to restore these habitats, and put this into practice at every opportunity.

However, we also need to identify priorities for restoration in order to make the biggest gains for biodiversity that we can with limited resources. We need to direct our programmes and mechanisms for achieving restoration of degraded habitats to these priorities.

We need to better integrate protected sites with the wider countryside, which when linked to appropriate management and restoration of degraded habitats, will build the resilience of our ecosystems across the whole of Wales.

#### **Key Interventions:**

- ➤ Identify critical priorities for restoration through expert advice, mapping of Ecosystem Services, opportunity mapping, to inform strategies, policies and guidance, for example **Area Statements** under the Environment Bill.
- ➤ Use the measures under the Rural Communities Rural Development Programme to develop and deliver habitat restoration initiatives, through the Co-operative measure and piloting new schemes.
- Welsh Government's Peatland Restoration Project Wales has a commitment to bring all peatland habitat in Wales into sustainable management by 2020 and is actively engaged in developing the Integrated Proposal for LIFE funding on peatlands for the UK.

Other examples of actions to meet this objective:

<sup>&</sup>lt;sup>39</sup> Further information on the Wales Biodiversity Partnership website: http://www.biodiversitywales.org.uk/Species-in-Wales

- The Berwyn and Migneint, Black Mountains and Radnor upland recovery project<sup>40</sup>, managed by the Game & Wildlife Conservation Trust and funded by the Welsh Government's Nature Fund, aims to support landscape-scale species recovery and wider ecosystem service delivery.
- The **Action Plan for Pollinators**<sup>41</sup> aims to reduce and reverse the decline in pollinators in Wales through: providing more diverse flower rich habitats; maintaining healthy, sustainable populations of pollinators; raising awareness and providing information; encouraging positive action by everyone and; building an evidence base to inform future actions.

#### Objective 4: Tackle key pressures on species and habitats

To address this objective we need to use the legislation we already have in place, for example the Water Act 2003<sup>42</sup>, and the EU Directive establishing a framework for the Community action in the field of water policy (the Water Framework Directive<sup>43</sup>) to combat environmental damage.

However, we need to think and plan more holistically, looking for whole system approaches to address this objective.

The Sustainable Management of Natural Resources puts in place a framework and tools for an integrated approach to tackling negative impacts on our biodiversity while building resilience of our environment.

For example, the use of nature based solutions, such as Sustainable Drainage systems (SuDS), will both reduce the impacts of pollution and flooding on biodiversity and increase the opportunities for connecting our habitats together.

Green infrastructure such as private gardens, allotments and community growing sites, street trees and verges can absorb pollutants and provide opportunities for nature.

Invasive non-native species (INNS) are a significant and growing threat and an increasingly important pressure on our habitats and species. The NRW Natura 2000 LIFE project has identified INNS as a major issue on protected sites.

Increasing connectivity can allow INNS to spread and colonise our important habitats and sites, and cause economic, environmental and social problems, such as soil erosion on riverbanks. Improved understanding of connectivity may help predict the

<sup>&</sup>lt;sup>40</sup> Nature Fund Factsheet - The Berwyn, Migneint, Black Mountains and Radnor Upland Recovery Project

<sup>41</sup> http://www.biodiversitywales.org.uk/Wales-Action-Plan-for-Pollinators

<sup>42</sup> Water Act 2003

<sup>43</sup> Water Framework Directive

movement of INNS in the landscape, and so inform the design of restoration and expansion projects such that INNS impacts are better controlled.

#### Key Interventions:

- Rivers, lakes and coastal waters are vital natural resources that provide crucial habitats for many different types of wildlife. The Water Framework Directive 2000<sup>44</sup> expands the scope of water protection to all waters and sets out clear objectives that must be achieved by specified dates.
- ➤ Environmental Impact Assessment<sup>45</sup> aims to prevent, reduce or offset the significant adverse environmental effects of development proposals, and enhance positive ones. In Wales, this became law through the Town and Country Planning (Environmental Impact Assessment)(England and Wales) Regulations 1999, as amended.
- ➤ The Sustainable Management of Natural Resources demands that, for every strategy, policy and project, activities are assessed for their impact on biodiversity, and nature based solutions are used to restore habitats and improve connectivity, as well as, for example, reduce pollution or mitigate flood.
- ➤ The **Planning (Wales) Act 2015**<sup>46</sup> delivers a planning system which is fair, resilient and enables development, helping to create sustainable places where citizens have improved access to quality homes, jobs and infrastructure, whilst protecting our most important built and natural environments and supporting the use of the Welsh language.
- ➤ NRW's National Habitat Creation Programme.
- First published in 2008 and updated in 2015 the **GB Invasive Non-native Species Strategy**<sup>47</sup> was developed to meet the challenge posed by invasive non-native species in Great Britain.
- The Environment (Wales) Bill will also provide Natural Resources Wales with powers to enter into land management agreements and to trial new techniques and methods<sup>48</sup> in order to help manage our natural resources in a more sustainable way.

Other examples of actions to meet this objective:

- A collaborative farmer-led project, benefitting from the Welsh Government's Nature Fund, is carrying out connectivity work in the Duhonw Catchment<sup>49</sup> in the Cambrian Mountains.
- ➤ Led by the Pembrokeshire Coastal Forum, the Ecosystem Enterprise Partnership<sup>50</sup> is a nutrient trading scheme for the Cleddau catchment. The

<sup>47</sup> The Great Britain Invasive Non-native Species Strategy – August 2015

<sup>&</sup>lt;sup>44</sup> <u>JNCC information on Council Directive 2000/60/EC establishing a framework for Community action in the field of water policy (Water Framework Directive)</u>

<sup>&</sup>lt;sup>45</sup> Environmental Impact Assessment

Planning (Wales) Act 2015

Environment (Wales) Bill Factsheet - Land Management Agreements and Experimental Schemes

<sup>&</sup>lt;sup>49</sup> Nature Fund Fact Sheet: Connectivity Work in the Duhonw Catchment

- project aims to reduce emissions to the Milford and Cleddau catchments. The project is funded by the Welsh Government's Nature Fund.
- Natural Resources Wales and the National Trust are working on an ambitious project to create compensatory saltmarsh habitat at Cwm Ivy on the Gower peninsular<sup>51</sup>.

#### Objective 5: Improve our evidence, understanding and monitoring

To inform the delivery of our actions to help nature recover we need to improve the quality of data and the confidence we have in it, direct relevant and prioritised research and review and develop monitoring and surveillance. Accessible, reliable data is also essential for decision makers at all levels from land managers to Government.

We must ensure we have the best available evidence and knowledge to;

- understand how biodiversity drives and supports ecosystem functioning,
- monitor status and trends in biodiversity,
- report our progress towards reversing the decline in biodiversity, and,
- inform future policy to achieve our objectives.

We also need to develop a set of biodiversity indicators for Wales which will monitor our progress towards the Resilient Wales goal of the Well-being of Future Generations (Wales) Act 2015, contribute to assessing the state of our natural resources, and allow us to evaluate how well we are achieving the objectives of the Nature Recovery Plan.

#### Key Interventions:

- National Indicators will be used to measure progress towards the well-being goals introduced by the Well-being of Future Generations (Wales) Act.
- ➤ Better utilisation of Local Environmental Record Centres<sup>52</sup> and the Biodiversity Action Reporting System<sup>53</sup> (BARS).
- ➤ The Wales Biodiversity Partnership Evidence Gaps Project<sup>54</sup> aims to address biodiversity and ecosystem approach evidence gaps, engage the research community in Wales, and beyond, deliver new approaches, and integrate with existing mechanisms, and ensure good provision of evidence and advice to Government, environment sector and others.

<sup>&</sup>lt;sup>50</sup> Nature Fund Fact Sheet: Ecosystem Enterprise Partnership – A Nutrient Trading Scheme for the Cleddau Catchment

New project to create compensatory saltmarsh habitat

Local Environmental Record Centres

<sup>&</sup>lt;sup>53</sup> Biodiversity Action Reporting System

Wales Biodiversity Partnership Evidence Gaps Project

- ➤ The **Lie Geo-Portal**<sup>55</sup> has been developed as a partnership between Welsh Government and Natural Resources Wales. Lie serves as a hub for data and information covering a wide spectrum of topics, but primarily around the environment.
- ➤ The Glastir Monitoring and Evaluation Programme<sup>56</sup> (GMEP) has been commissioned by the Welsh Government to assess the performance of Glastir, using innovative methods to monitor condition of habitat in Wales.

Other examples of actions to meet this objective:

- ➤ The **Ancient Woodland Inventory**<sup>57</sup> identifies woodlands that have had continuous woodland cover for centuries. These woodlands are typically ecologically diverse and of a high nature conservation value.
- ➤ The **GB non-native species secretariat**<sup>58</sup> provides tools and information for those working to support the **GB Invasive Non-native Species Strategy**.

#### Objective 6: Put in place a framework of governance and support for delivery

We need to ensure we have the skills, personnel, expertise and functions in place to deliver our objectives and embed biodiversity into decision making at all levels.

The Public Services Boards, established under the Well-being of Future Generations (Wales) Act 2015 will be required to take account of Area Statements when preparing local well-being plans. We need to ensure these are as well informed and prioritised as possible, and that this information is accounted for in local planning and decision making.

Much valuable work has already been carried out on the ground in Wales by Natural Resources Wales, local authorities and Local Biodiversity Action Plan (LBAP) Partnerships, the many environmental and conservation organisations, as well as businesses and individuals, including farmers, through voluntary work and agrienvironment schemes.

We need to continue to support this work, putting in place a Nature Recovery Framework, to facilitate collaborative working to achieve our objectives; and provide the governance and support to ensure it meets our ambition.

#### This will include:

 our land managers carrying out on the ground action and resource efficient working practices

<sup>55</sup> Lle Geo-Portal

Glastir Monitoring and Evaluation Programme

Ancient Woodland Inventory

<sup>58</sup> GB non-native species secretariat

- environmental organisations carrying out work at landscape scale and joining up initiatives
- Natural Resources Wales and public bodies delivering Sustainable Management of Natural Resources
- local authorities and local partnerships informing and feeding into area statements
- public bodies, led by Welsh Government, embedding biodiversity into policies and programmes
- businesses pioneering sustainable practice and biodiversity valuation mechanisms.

We also need to ensure that we monitor our progress against our objectives, and keep our actions under regular review.

Essentially, we need to put in place resourcing (both human and monetary) to achieve our nature recovery objectives. We need to utilise funding sources imaginatively and innovatively, developing new mechanisms such as Payment for Ecosystem Services. However, we also need to recognise the importance and value of biodiversity, and embed these values into decision making at an early stage. The Well-being of Future Generations (Wales) Act 2015 offers an opportunity to bring resourcing for biodiversity action into the central decision making process for public bodies, which we need to use to the greatest effect.

#### Key Interventions:

- Ensuring all grant funding mechanisms are compliant with the Well-being of Future Generations (Wales) Act 2015 in achieving the Resilient Wales goal For Example: core and small scale project funding.
- Putting in place a Nature Recovery Framework to bring together the key players concerned with the action to recover nature in Wales, including the public, private and voluntary sectors, to ensure they are joined up with the new legislation, (e.g. the Well-being of Future Generations Public Service Boards) representative of all land managers and owners, and to ensure the flow of information and feed back to and from policy.
- ➤ To include a refresh of the Wales Biodiversity Partnership (WBP)<sup>59</sup> and the Local Biodiversity Action Plan (LBAP) partnerships<sup>60</sup> in Wales. WBP provides a leadership role and an expert steer on priorities for action on biodiversity and ecosystems in Wales and facilitate the delivery and reporting of local action by managing LBAPs on BARS and linking to local action delivered by others.
- Encourage practical action to enhance biodiversity and improve our environment through support for applications to the EU LIFE Programme<sup>61</sup>.

61 EU LIFE Programme

<sup>&</sup>lt;sup>59</sup> Wales Biodiversity Partnership (WBP)

Local Biodiversity Action Plan (LBAP) partnerships

➤ The Rural Communities - Rural Development Programme 2014-2020<sup>62</sup> is a seven year European Agricultural Fund for Rural Development (EAFRD) programme funded by the European Union and Welsh Government. Activities eligible for financial support include restoring, preserving and enhancing ecosystems dependent on agriculture and forestry

.

<sup>62</sup> Rural Communities - Development Programme 2014-2020

#### 6. ACTION FOR NATURE RECOVERY IN THE MARINE ENVIRONMENT

This section summarises the actions needed to achieve our objectives and the programmes and mechanisms to support delivery in the marine environment.

In order to achieve our objectives for the marine environment we will use the Marine Transition Programme as the vehicle to deliver our aims as part of our wider vision to have clean, healthy, safe, productive and biologically diverse seas in Wales.

Part 2 of the Nature Recovery Plan is the Action Plan which shows the actions in further detail. These will be reviewed regularly to ensure we continue to act on the top priorities to meet our objectives.

While the terrestrial and marine environments are closely linked, there are a number of distinct differences that need to be considered when developing actions to recover nature in the marine environment:

- the marine environment is very dynamic, the physical processes (tides, flows and currents), ecosystem structuring, species characteristics, populations, and communities differ from those on land.
- the marine environment is highly connected; the spatial distribution of many species is influenced by currents and tides that are not hindered by transport infrastructure, urbanisation and agriculture as they are on land.
- a substantial area of our sea benefits from spatial protection; 75% of our coastline and 35% of our sea area falls within Marine Protected Areas (compared with 12% of the area protected on land).
- ownership of the sea is different; the majority of foreshore and seabed are owned by The Crown Estate and there are no boundaries at sea between local authorities, with the exception of the intertidal and coastal area out to the Mean Low Water line.
- access to the majority of the sea is open and therefore the co-operation and support of a wide range of sea users is required to generate change whilst regulation and enforcement of activities, often in remote areas, is a challenge.
- monitoring the marine environment is technically challenging because the water creates both a visual and physical barrier that makes understanding and introducing effective measures to recover biodiversity more difficult.

In light of these differences, actions to safeguard and recover marine biodiversity and ecosystems also differ to those required for the terrestrial environment. Our key actions, detailed below, cut across a number of the Nature Recovery Plan objectives and reflect the importance of Welsh waters at a local, national and international level:

# Objective 1: Engaging and supporting participation and understanding, to embed biodiversity throughout decision making at all levels

We place great value on biodiversity which is why we have adopted the principles of the Convention on Biological Diversity. We are also implementing the Marine Strategy Framework Directive, the Well-being of Future Generations (Wales) Act and when enacted, the Environment (Wales) Bill. Collectively our legislation will ensure biodiversity is a key consideration in all decision-making in Wales.

We have established a number of forums that bring marine and fisheries stakeholders together, this, along with our public participation exercises where necessary, ensures we have effective and meaningful engagement to support and inform delivery of the Marine Transition Programme.

In addition to the **Well-being of Future Generations (Wales) Act 2015** and the **Environment (Wales) Bill** we have the first draft **Welsh National Marine Plan**<sup>63</sup> and the **Marine Strategy Framework Directive**, both of which detail specific targets, objectives or polices to help recover marine biodiversity where needed, and they place the ecosystem approach at the heart of decision making for the marine environment.

#### **Key Interventions:**

- > We have established the following stakeholder groups:
  - The Wales Marine Strategic Advisory Group, which is represented by a
    wide range of sea users, such as industry (aggregates, fisheries, and
    renewables), commercial and recreational boating, Local Planning
    Authorities, Local Port Authorities and environmental interest groups.
  - The Welsh Marine Fisheries Advisory Group and the Inshore Fisheries Groups (IFGs). These comprise representatives from fisheries associations, recreational fishermen, environmental interest group and marine scientists.
  - Marine Planning Stakeholder Reference Group. This group helps inform our approach to marine planning in Wales.
- The first Welsh National Marine Plan will integrate economic, social and environmental considerations, providing clear policies and direction to decision makers and sea users on the sustainable use of our marine area. The marine plan will also place the ecosystem approach at the heart of decision making and ensure decisions in the marine environment are made using sound evidence.

Supporting the marine plan will be our evidence base – the Wales Marine Evidence Report<sup>64</sup> and the Marine Planning Portal<sup>65</sup>, an interactive planning tool that will support the marine planning process by; raising awareness and understanding of the marine data that is readily available for Welsh seas, providing an understanding of the marine planning evidence base currently available and provide interested parties with the opportunity to comment on the evidence base and the need or availability of further spatial evidence.

65 Marine Planning Portal

<sup>&</sup>lt;sup>63</sup> Welsh National Marine Plan

<sup>64</sup> Wales Marine Evidence Report

The Welsh National Marine Plan will meet also meet objectives 2-5.

Delivery of the Better Fisheries project. Working with IFGs we are moving towards an ecosystem approach to the management of fisheries and more sustainable and environmentally accepted fishing practices, using reliable evidence bases. In particular, we will shortly be introducing new legislation on crustaceans. We are prioritising the update of legislation to manage fisheries for bass, whelks and scallops in Cardigan Bay. We are also delivering the reformed Common Fisheries Policy (CFP) and assessing Welsh fishing activities in European marine sites.

Through the reformed CFP a framework will be established to manage fisheries sustainably and to achieve Maximum Sustainable Yield for all major fisheries by 2020. CFP will also put in place conditions that provide a better future for fish and fisheries as well as the marine environment that supports them, as fish and shellfish depend on the health and resilience of our ecosystems to thrive.

Delivery of the Better Fisheries project will also meet objectives 5 and 6.

Other example of action for this objective

Marine Ecosystems Project (Llŷn EBA project) is a project managed by the Pen Llŷn a'r Sarnau (PLAS) SAC and is a joint project between PLAS and the Welsh Fishermen's Association (WFA). A steering group has been established that includes marine and fisheries stakeholders to consider how the fishing industry can become more involved in marine management. This project was developed by the WFA.

# Objective 2: Safeguard species and habitats of principal importance and improve their management

Wales is situated at the boundary of three oceanic climate zones (North-east Atlantic, Arctic Boreal, Lusitanian) which provides the foundation for the rich marine life in our seas. The diversity of our marine habitats supports a wide range of species that are of importance locally, nationally and internationally.

Our European and domestic legislation, for example, the Habitats and Bird Directives, provide the tools we need to safeguard specific protected marine species and habitats and provides for the creation and management of an ecologically coherent well-managed network of marine protected areas that support important population of species and habitats of interest.

We have 128 Marine Protected Areas (MPAs)  $^{66}$  already designated, covering 75% of our coastline and 35% of our seas. When taken together these MPAs form a network of sites around Wales, the UK and beyond.

<sup>&</sup>lt;sup>66</sup> Marine Protected Areas

#### In Wales, our MPAs are:

- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)
- Marine Conservation Zones (MCZ)
- Sites of Special Scientific Interest (SSSI)
- Ramsar Sites that have a marine component

As habitats and species are interlinked in the marine environment we are aiming for a network of sites that has been designed in such a way that protects the range of habitats and species, is resilient and able to adapt or recover quickly from impact and connects areas to allow for linkages and movement of species between areas.

#### **Key Interventions:**

- We are contributing to an ecologically coherent network of **Marine Protected Areas (MPAs)**. MPAs are a key element of our marine work in Wales to ensure we use our seas in a sustainable way and safeguard them for the future. We are also assessing the contribution our existing sites make to the wider network to identify if any further protection is required.
- ➤ We have established an MPA Management Steering Group to work with us to ensure we have a well-managed network of MPAs. Group members are drawn from authorities in Wales with statutory duties relating to Welsh waters.

The MPA network will also meet objective 4 and 6.

- A list of European species that require strict protection can be found at Annex IV of the Conservation of Natural Habitats and of Wild Fauna and Flora Directive. The Conservation of Habitats and Species Regulations 2010 make it an offence to deliberately kill, injure, capture or disturb the European Protected Species (EPS), listed in Annex IV.
- The Wildlife and Countryside Act 1981 (as amended) makes it an offence (subject to exceptions) to intentionally kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. The Act also prohibits certain methods of killing, injuring, or taking wild animals.
- ➤ A list of species of principal importance to Wales can be found at Section 42 of the Natural Environment and Rural Communities Act 2006. The Act requires public authorities to have regard to conserving biodiversity when undertaking their responsibilities. This duty is soon to be enhanced by the Environment (Wales) Bill.

# Objective 3: Increase the resilience of our natural environment by restoring degraded habitats and habitat creation

The restoration of marine biodiversity is an on-going commitment of the Welsh Government. Restoring and enhancing marine biodiversity will build the resilience of our ecosystems, ensuring they can adapt to change and continue to provide the

essential benefits to society such as a healthy food source, protection against natural disasters and the regulation of our climate.

By restoring degraded habitat we can repair damaged areas, returning them to their natural condition which will benefit species that rely on the habitat to survive and as a consequence build the resilience of our ecosystems. Through enhancing the marine environment we can improve and increase its quality and value.

We are already making a significant contribution towards the protection of marine biodiversity and the wider marine environment through delivery of our Marine Transition Programme. However, we aspire to do more.

#### Key Interventions:

We will be working with the Welsh Marine Stakeholder Advisory Group to establish a **Task and Finish Group** to identify and deliver opportunities for recovering and enhancing habitats and species in the marine environment where needed.

Restoring and enhancing habitats and species will meet objectives 2, 4 and 5.

Other example of action to meet this objective:

▶ Porthdinllaen seagrass project <sup>67</sup> is run by the Pen Llŷn a'r Sarnau SAC to bring the intertidal mudflats and sandflats into favourable condition. Seagrass is a component of the mudflats and sandflats feature and it is currently under pressure from human activities such as moorings and anchoring. A steering group has been established by the SAC officer that includes site users and managers (PLAS SAC, National Trust, NRW, Llŷn Fishermen's Association, RYA, Porthmadog Sailing Club) to looking at a range of matters such as gathering local evidence to demonstrate the value of the habitat locally and considering management options (adapting moorings, use helical anchors, anchor zone).

#### Objective 4: Tackle key pressures on our species and habitats

Unstainable human activity, climate change and invasive non-native species are the main pressures on marine biodiversity. The Welsh National Marine Plan will ensure decisions in the marine environment are made in a sustainable way. While MSFD which aims to achieve Good Environmental Status (GES) by 2020, will address detrimental factors affecting the health of marine biodiversity, such as invasive non-native species and marine litter. MSFD describes GES in 11 descriptors, covering the important aspects of the marine ecosystem and all the main human pressures on them.

MSFD will also meet objectives 1, 2, 3 and 5.

<sup>&</sup>lt;sup>67</sup> Porthdinllaen seagrass project

#### **Key Interventions:**

- Under MSFD Descriptor 2 (invasive non-native species) a priority list of invasive non-native species has been established at a UK level. These species will be the subject of monitoring and surveillance.
- Also under MSFD Descriptor 2 a marine pathways project has investigated the main pathways of introducing invasive non-native species into Welsh waters.
- ➤ NRW and Natural England have produced joint **Biosecurity Planning Guidance**<sup>68</sup> to help developers and sea users tackle the issue of spreading and introducing invasive non-native species.
- ➤ Water Framework Directive (WFD) promotes water management and places a commitment to achieve good status of all water bodies, including marine waters up to one nautical mile from the shore. WFD also aims to protect and enhance the status and prevent further deterioration of ecosystems and wetlands which depend on good water quality.

WFD will also meet objectives 1, 5 and 6.

#### Objective 5: Improve our evidence, understanding and monitoring.

Under MSFD a number of targets and indicators have been established to monitor our progress towards achieving GES in our waters by 2020. MSFD operates on a six year cycle. Progress against GES will be reviewed every six years (next due in 2018) and this will be an opportunity to consider whether the targets, indicators and related measures, need to be updated.

#### Key Intervention:

- A monitoring programme is being established under MSFD to provide coordinated monitoring for the ongoing assessment of the environmental status of our marine environment. It will also highlight where further research is necessary to improve our evidence base.
- We are developing a **Marine Evidence Strategy**. We will use the evidence base in the Wales Marine Evidence Report to set out, through the marine planning process, our strategic evidence priorities and needs that will support implementation of marine planning.

#### Objective 6: Put in place a framework of governance and support for delivery.

Ownership and management of the marine environment differ to that on land. At sea there are no boundaries between local authorities, with the exception of the intertidal and coastal areas. So we rely on the support and co-operation of all sea users.

-

<sup>&</sup>lt;sup>68</sup> Biosecurity Planning Guidance

As access to the majority of the sea is open it makes the regulation and enforcement of different activities more challenging. The first Welsh National Marine Plan will help effectively manage and protect the marine environment as it will ensure decisions made for activities within the marine environment are sustainable, and that regard is given to land and marine policies for decisions that affect coastal areas.

#### Key Interventions:

- We are working with our marine stakeholders to **improve the effectiveness of our MPAs** and to assess the management needs. There are a number of tools that will support the management of our MPA network that focus efforts to conserve, restore and enhance marine biodiversity. These are:
  - Thematic Action Plans produced for each of the main issues that affect marine Natura 2000 sites across Wales to focus on actions which will be delivered at regional, national or even international level rather than at a site level.
  - Prioritised Improvement Plans (PiPs) created for each Natura 2000 site in Wales. The PiPs highlight the priority issues and actions required at a site level, as well as itemising costs for activities and funding sources.

The MPA network will also meet objectives 1, 2 and 4.

#### **GLOSSARY**

**Acidification**: Nutrient bases (calcium, magnesium and potassium) are lost and replaced by acidic elements (hydrogen and aluminium).

**Biodiversity:** The variety of life found on earth. It includes all species of plants and animals, their abundance and genetic diversity.

**Ecosystem:** A functioning unit made up of our living organisms (plants, animals and micro-organisms) in conjunction with their non-living environment (air, water, minerals and soil) and all the diverse and complex interactions that take place between them. They can function at many different scales.

**Ecosystem services/benefits:** The benefits that people obtain from ecosystems. They can be divided into 4 categories:

- **Supporting services** necessary for the production of all other ecosystem services, such as soil formation, nutrients cycling and primary production.
- **Provisioning services** such as crops; fish; timber and genetic material.
- Regulating services such as water purification; flood control; carbon sequestration and pollination.
- Cultural services providing a source of aesthetic, spiritual, religious, recreational or scientific enrichment.

**Eutrophication:** Increased addition of nutrients to freshwater and/or marine systems, leading to increased plant growth and often to undesirable changes in ecosystem structure and function.

**Genetic material:** Any material of plant, animal, microbial or other origin containing functional units of heredity.

**Genetic diversity:** The variety of genetic material within a species. Greater genetic diversity allows a species to be more adaptable to environmental change and therefore have a greater chance of survival.

**Green infrastructure:** A network of green space in both urban and rural areas such as private gardens, allotments, street trees, road verges and hedgerows that provide ecosystem benefits and contribute to the well-being of people.

**Habitat:** The place or type of site where an organism or population naturally occurs.

**Habitat connectivity:** How patches of habitat are linked together to form a connected habitat network that allows the movement of species.

**Habitat fragmentation:** Habitats are separated into smaller patches as a result of land use change and development.

**Nature-based solutions:** solutions that are inspired or supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience.

**Intrinsic value:** Value of natural resources e.g. ecosystems, habitats and species, for their own sake.

**Invasive Non-native Species (INNS):** An organism (plant, animal, fungus, or bacterium) that is not native and has negative effects on our economy, environment, or health.

**Natural resources:** All living organisms (excluding people) and the non-living components and materials of the natural environment; our geological resources, air, water, soil, tide, wind and solar.

**Natural resource managers and users:** Any one who manages or uses natural resources e.g. land managers, farmers, fishers.

**Nature:** Our species and their habitats, its variety and abundance.

**Natural capital:** Parts of the natural environment that produce value to people.

**Overexploitation of our nature:** Unsustainable use of our natural resources; harvesting exceeds reproduction.

Resilient ecosystem/ecosystem resilience: An ecosystem that is healthy and functions in a way that is able to address pressures and demands placed on it, and is able to deliver benefits over the long term to meet current social, economic and environmental needs. There are four attributes of resilience: increasing diversity; increasing ecosystem extent through reducing fragmentation; increasing connectivity within and between ecosystems; improved condition. Biodiversity underpins this resilience.

**Species:** A group of organisms that can successfully breed with each other producing healthy offspring which are capable of interbreeding.

**Sustainable urban drainage systems (SUDS):** An alternative to conventional, piped drainage which has benefits in protecting water quality and reducing flood risk, and can provide amenity and biodiversity opportunities.

**Urbanisation:** An increase in the proportion of people living in urban areas. It also means to take on the characteristics of urban areas.

### Appendix 1: Key trends and statistics for biodiversity in Wales

# **The UK National Ecosystem Assessment**

The UK National Ecosystem Assessment (UK NEA) was the first analysis of the UK's natural environment in terms of the benefits it provides to society and continuing economic prosperity.

The need for the UK NEA arose from findings of the 2005 global Millennium Ecosystem Assessment (MA), which not only demonstrated the importance of ecosystem services to human well-being, but also showed that at global scales, many key services are being degraded and lost. As a result, in 2007 the House of Commons Environmental Audit recommended that the Government should conduct a full MA-type assessment for the UK to enable the identification and development of effective policy responses to ecosystem service degradation.

The UK NEA commenced in mid-2009 and reported in June 2011. It was an inclusive process involving government, academic, NGO and private sector institutions. Chapter 20 of the <u>UK National Ecosystem Assessment Technical Report</u> (Status and Changes in Ecosystems and their Services to Society - Wales) (2011) lists some of the characteristics of Wales that provide the context for considering ecosystem services and biodiversity. The key findings of the study were:

- Biodiversity contributes to economic and social prosperity in Wales by underpinning valuable ecosystem services.
- Mountains, Moorlands and Heaths in Wales hold significant amounts of stored carbon, but many protected sites in this broad habitat type are in declining condition.
- The alteration of the composition of lowland Semi-natural Grasslands was one the most rapid and widespread vegetation changes to have taken place in Wales during the 20th Century.
- About 37.4% of Wales is Enclosed Farmland, consisting of 34% Improved Grassland and 3.4% Arable and Horticultural land.
- Woodland area in Wales has almost tripled since the early 1900s, and now covers 14% of the country's total land area.
- Welsh freshwater ecosystems still suffer from an industrial legacy, for example, point sources of metal pollution from mines, but there is evidence of improvement following remediation measures.
- Five per cent of Wales is classified as urban habitat. During the past 40 years, activities have taken place to improve the quality of human well-being in the urban environment by expanding green space and tree planting, and increasing the numbers of local nature reserves close to urban centres.
- Sand Dunes, Saltmarsh and Sea Cliffs are the most extensive coastal habitats in Wales and are important for a range of regulating services, including coastal erosion protection.
- Wales is currently regarded as a net sink for carbon dioxide in the land use, land use change and forestry sector.

- Wales records some of the highest rainfall levels in the UK. There are large reserves of surface water in Wales that have long served as sources of supply for the UK more widely.
- Provisioning services from agriculture contributed some £418 million or 1.1% to the Welsh economy in 2003.
- Wales is renowned for its attractive landscapes, with three National Parks and five Areas of Outstanding Natural Beauty covering 24% of the country's land surface.
- A 2001 study estimated that the environment contributed £8.8 billion of goods and services annually to the Welsh economy, 9% of Welsh GDP and one in six Welsh jobs, mainly in the leisure and tourism, agriculture and forestry, water abstraction, conservation and waste management sectors. It also found that the environment is relatively more important to the Welsh economy than it is to the other UK nations.

The chapter also set out some of the trends pointing to an overall decline in the quantity and diversity of habitats and species in Wales, and the continuation of these trends. Overall, the chapter reported significant changes to biodiversity in Wales over the past 70 years, with some species thriving or recovering from earlier losses, while others have contracted in numbers.

#### **Habitats**

- In 2005, 59% of Biodiversity Action Plan (BAP) habitats in Wales were in declining condition. However, this decline is slowing at many sites and 65% of BAP habitats in Wales can therefore be classed as improving, remaining stable or showing signs that decline is fluctuating or slowing.
- Only 8% of terrestrial habitats showed continued or accelerated decline compared to 33% for freshwater habitats.
- Priority habitats classed as stable or improving increased from 30% in 2002 to 36% in 2008.
- A rapid review in 2006 judged conservation features at 47% of Welsh Sites of Special Scientific Interest (SSSIs) to be in favourable condition, with 53% in unfavourable condition.
- 5% of Woodlands are SSSIs. However, just 9% of these are considered to be in favourable condition and 25% are classed as being in unfavourable but recovering condition.
- Seven in every eight hectares of European designated Natura 2000 sites in Wales (0.5 million ha) are Marine areas, reflecting their high importance for conservation.

### **Species**

- Due to the large number of species which have unknown trends in Wales, it is difficult to compare progress in Wales to progress at the UK level.
- Fifty-four per cent of Biodiversity Action Plan species were assessed as being in 'unfavourable condition' in 2008, but with considerable variation between species

- groups. Three species which are showing a continuing/ accelerating decline are lapwing, curlew and golden plover.
- 80% of marine mammals and birds were in favourable or recovering condition, while 80% of amphibians, butterflies and freshwater fish were recorded as being in unfavourable condition.
- Seven taxonomic groups (more than 50% of Section 42 species) show increasing, stable or fluctuating/slowing declines (lichens, mosses and liverworts, stoneworts, vascular plants, invertebrates, freshwater fish, amphibians and reptiles).
- The most notable negative trends are in the birds (34%) and invertebrates (19%).
- Based on longer-term data from the Breeding Bird Atlas, 43% of bird species have experienced range decreases between 1968 and 1972 and between 1988 and 1991, with just 17% having increased.
- Key seabird species have increased during the past 30 years; numbers of wild plants, butterflies of specialist habitats and farmland birds have declined.

Source: UK National Ecosystem Assessment, (2011) The UK National Ecosystem Assessment: Technical Report. UNEP-WCMC, Cambridge. http://uknea.unep-wcmc.org/

# **The State of Nature Report**

The State of Nature Report was produced in 2013 by a partnership of 25 of the UK's wildlife organisations, in order to communicate clear, consistent messages about how our wildlife is faring. The report provides an authoritative assessment by the partnership of the status and population trends, where these could be assessed, of animals and plants in the United Kingdom and its Overseas Territories. It looks at how the patterns change between habitats and taxonomic groups and places those patterns of species change in the context of a changing environment, looking at both the key pressures faced and the conservation work being undertaken.

Full details and the main report can be found at:

http://www.rspb.org.uk/ourwork/projects/details/363867-the-state-of-nature-report The following headline statistics were published in the State of Nature Report for Wales in 2013:

- Of the 25 butterfly species assessed, a similar number (13) have decreased in abundance in Wales compared to those that have increased.
- 57% of Wales's flowering plants are declining, while 43% are increasing a similar story to the rest of the UK. The overall pattern of change is similar to that found in England, with species of open, nutrient-poor, basic or acidic areas declining, and those of shaded, nutrient-rich, neutral areas increasing.
- We can assess population trends for less than half of bird species in Wales. Of the bird species assessed, slightly more have increased than decreased.
   Wintering waterbirds are doing particularly well; however, many farmland species continue to decline rapidly.
- Between 1970 and 1990, twice as many bird species suffered contractions to their Welsh ranges, compared to species whose ranges increased.

However, there was a general lack of good quality data that could be used to assess status and trends of species in Wales.

Source: Burns F, Eaton MA, Gregory RD, et al. (2013) State of Nature report. The State of Nature partnership.

The summary for Wales can be found at http://www.wildlifetrusts.org/publications

#### Appendix 2: The Global and European goals and targets for biodiversity

## The Convention on Biological Diversity

The Global policy context is set by The 1992 United Nations Convention on Biological Diversity (CBD). This has an overall objective of 'the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources.'

The Convention commits signatories to develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity and to integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

The Convention sets out 12 operational principles which focus on the application of an ecosystem approach to the management of biodiversity, which can be found here.

The vision for the CBD's Strategic Plan for Biodiversity 2011-2020 is:

'By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.'

The mission of the plan is to "take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet's variety of life, and contributing to human well-being, and poverty eradication. To ensure this, pressures on biodiversity are reduced, ecosystems are restored, biological resources are sustainably used and benefits arising out of utilization of genetic resources are shared in a fair and equitable manner; adequate financial resources are provided, capacities are enhanced, biodiversity issues and values mainstreamed, appropriate policies are effectively implemented, and decision-making is based on sound science and the precautionary approach."

The Strategic Plan contains five strategic goals:

**Strategic Goal A:** Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society.

**Strategic Goal B:** Reduce the direct pressures on biodiversity and promote sustainable use.

**Strategic Goal C:** To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity.

**Strategic Goal D:** Enhance the benefits to all from biodiversity and ecosystem services.

**Strategic Goal E:** Enhance implementation through participatory planning, knowledge management and capacity building.

Each goal has a number of targets, referred to as the Aichi Biodiversity Targets. These can be found <a href="here">here</a>. They can also be seen in Appendix 3 below.

## The European Union Biodiversity Strategy

The EU Biodiversity Strategy (EUBS) (2011) 'Our life insurance, our natural capital: an EU Biodiversity Strategy to 2020' contains the vision that 'By 2050, European Union biodiversity and the ecosystem services it provides — its natural capital — are protected, valued and appropriately restored for biodiversity's intrinsic value and for their essential contribution to human wellbeing and economic prosperity, and so that catastrophic changes caused by the loss of biodiversity are avoided.'

To help achieve this vision, the Strategy contains a headline target:

'Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss.'

The EUBS sets out how European policy can best contribute to the achievement of the CBD's Strategic Plan and contains a number of objectives for member states. The EUBS objectives and targets and how they address the Aichi targets can be found here.

#### The UK Biodiversity Framework

As biodiversity is a devolved matter, each of the four UK countries works to address both the CBD and EU goals and targets in their own territory.

Work which was previously carried out under the UK Biodiversity Action Plan (UK BAP) is now focused at the country level (England, Northern Ireland, Scotland, Wales). Many of the tools developed under the UK BAP remain of use; for example, background information about the lists of priority habitats and species.

However these lists are now kept and updated separately in each country. In Wales the current lists are those under Section 42 of the Natural Environment and Rural Communities Act 2006. These will be superseded by lists under Section 7 of the Environment (Wales) Bill.

The UK Biodiversity Framework shows how the work of the four UK countries joins up with work at a UK level to achieve the Aichi Biodiversity Targets and the aims of the EU Biodiversity Strategy. It identifies the activities required to complement the country biodiversity strategies, and where work in the country strategies contributes to international obligations. In total, 23 areas of work have been identified where all the countries have agreed that they want to contribute to, and benefit from, a

continued UK focus, and an <u>Implementation Plan</u> was published in November 2013. <u>Annual reporting</u> on progress with the Implementation Plan is also undertaken, and reporting to the CBD is also co-ordinated at a UK level.

# Appendix 3: How the Nature Recovery Plan addresses the Aichi targets

AICHI Targets	Wales' Nature Recovery Plan objectives and actions
Strategic Goal A - Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society	Engage and support participation and understanding to embed biodiversity throughout decision making at all levels.
Target 1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	Actions to:  Integrate biodiversity into decision making  Ensure biodiversity is accounted for in business decisions  Improve understanding and raise awareness of the importance and value of biodiversity  Encourage everyone to act.
Target 2: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems	
Target 3: By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.	
Target 4: By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.	Further actions to address each Goal and target are carried out at a UK level, co-ordinated by the UK Biodiversity Framework, see Appendix 2.

Strategic goal B. Reduce the direct pressures on biodiversity and promote sustainable use.	Tackle key pressures on species and habitats
Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.  Target 6: By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits	Actions to:  Use the suite of legislation already in place to combat pollution, invasive species, etc.  Use evidence based and up to date knowledge for decision making on drivers of change and key negative factors for biodiversity  Use whole system approaches and nature based solutions to reduce pollution and fragmentation of our habitats, creating native, biodiverse habitats.  Encourage sustainable management of agriculture, fisheries and forestry
Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.  Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that	
are not detrimental to ecosystem function and biodiversity.  Target 9: By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.	
Target 10: By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.	

Strategic Goal C. Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity	Safeguard species and habitats of principal importance and improve their management
Target 11: By 2020, at least 17 per cent of terrestrial and inland water areas, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.  Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.  Target 13: By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.	Actions to:  Use the suite of legislation in place to protect our marine and terrestrial species and habitats  Increase resilience of our protected sites, habitats and species by improving the attributes of resilience: diversity, extent, condition and connectivity  Improve and prioritise site management to tackle key pressures on habitats and species  Ensure lists of species and habitats reflect Welsh priorities, and identify
	critical priorities.

Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services	Increase the resilience of our natural environment by restoring degraded habitats and habitat creation
Target 14: By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.  Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.  Target 16: By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.	<ul> <li>Actions to:         <ul> <li>Identify priorities for restoration outside of designated sites. (What and where)</li> <li>Provide plans and guidance for restoration built on best practice integrating restored biodiversity with social and economic needs – for land managers and public bodies (How)</li> <li>Restore areas of degraded habitats through the Rural Communities-Rural Development Programme, and other mechanisms.</li> </ul> </li> </ul>

Strategic Goal E. Enhance implementation through participatory planning, knowledge management and capacity-building	Improve our evidence, understanding and monitoring
	Put in place a framework of governance and support for delivery
Target 17: By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.	<ul> <li>Actions to: <ul> <li>Standardise collection and use of appropriate data in an open and accessible manner</li> <li>Define an appropriate set of Welsh indicators to show progress against the Nature Recovery Plan objectives</li> <li>Focus research and development on agreed priorities</li> <li>Continue and, where possible, improve monitoring and surveillance</li> <li>Mobilise funding mechanisms and innovative finance for biodiversity</li> <li>Ensure NRP objectives and actions are delivered, and reported on.</li> </ul> </li> </ul>
Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.	
Target 19: By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.	
Target 20: By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.	