

## National Assembly for Wales

### Halting Biodiversity Loss: Progress Made May 2010

This paper assesses the progress made by the Welsh Government towards the 2010 biodiversity target. Progress in meeting targets set at an International, European and national level is assessed.

An analysis of stakeholder views is provided which considers the reasons stakeholders believe the targets have not been met and what the future direction of biodiversity policy should be.



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## **National Assembly for Wales**

### **Halting Biodiversity Loss: Progress Made May 2010**

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## Summary

Biodiversity continues to decline globally. Several reports have demonstrated the significant contribution that biodiversity makes to society and human well-being, and perhaps more importantly, the potential economic repercussions of biodiversity loss.

Biodiversity delivers value through essential ecosystem services, such as the provision of food and climate regulation, which are vital to the achievement of a number of policy objectives. The value of these services is likely to become increasingly important given the threats posed by the changing climate, as strong resilient ecosystems hold greater potential for mitigating and adapting to climate change.

In response to the global biodiversity crisis, targets were set to significantly reduce the rate of biodiversity loss globally, and to halt biodiversity decline within the EU, by 2010. The UK Government has signed up to these targets and the UK Biodiversity Action Plan (BAP) process is a key mechanism for the delivery of biodiversity objectives within the UK. The Welsh Government has also adopted these targets and the delivery of the UK BAP process within Wales is the responsibility of the Welsh Government.

Whilst the Welsh Government contributes to the delivery of the UK BAP, the Welsh Government does not have a single biodiversity strategy. Instead, biodiversity targets have been incorporated into national schemes and strategies, with many policy mechanisms involved in the delivery of these targets. Responsibility for the delivery these mechanisms fall on a number of bodies but ultimately reside with the Welsh Government.

The *Wales Sustainable Development Scheme* and the *Environment Strategy for Wales* are national strategies that include key outcomes for biodiversity. Progress made towards the outcomes of these strategies is assessed using indicators, a key one of which is trends in UK BAP priority species and habitats.

This paper assesses the progress made by the Welsh Government towards the 2010 biodiversity targets. It considers what progress has been made on the delivery of biodiversity related actions in Welsh Government strategies and whether or not work completed on these actions has delivered the intended outcomes when measured against the relevant indicators.

A number of key actions within the *Environment Strategy for Wales* are still yet to be completed. Achieving favourable status of designated sites is a key issue. Much of the other ongoing work relates to the application of the ecosystem approach to the management of land and sea. The development of indicators to allow progress to be assessed is also a key issue.

Stakeholder views have also been sought, which highlight key issues as to why targets have not been met and what the future direction of biodiversity policy should be. A recurring theme for stakeholders is the need to broaden the focus of biodiversity policy from focussing on designated sites and individual species to protecting the wider environment and making it more resilient to climate change.

The proposals made for future biodiversity policy targets post-2010 at an International, EU and Wales level are considered.

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# Halting Biodiversity Loss: Progress Made

## 1. Introduction

This research paper assesses the progress that the Welsh Government has made with regards to the issue of biodiversity. Targets agreed at International, EU and national levels are outlined. In Wales, a number of actions have been agreed as necessary to reach these targets, and the policy mechanisms through which these actions are being delivered are explained. The outcomes that these actions have had, in terms of the status of biodiversity in Wales, is then assessed. A short analysis of stakeholders' views considers the reasons stakeholders believe biodiversity targets in Wales have not been reached, and the future direction of biodiversity policy is also considered.

### *1.1. The importance of biodiversity*

Biodiversity is the term given to the variety of life on Earth,<sup>1</sup> and encompasses individuals, species, communities and ecosystems. All these elements of biodiversity are complexly intertwined, interacting with one another and with the physical environment. Humans have been affecting this natural balance for centuries, but, according to the *Global Biodiversity Outlook 2*, over the past 50 years, humans have changed ecosystems faster and more extensively than in any comparable period of time in human history.<sup>2</sup>

Several authoritative reports confirm that global biodiversity remains under severe threat,<sup>3</sup> with species going extinct at rates as much as 1,000 times the background rates typical of Earth's past.<sup>4</sup> More than a third of species assessed by the International Union for Conservation of Nature (IUCN) are facing extinction.<sup>5</sup> Marine biodiversity is also under pressure, and approximately 90 per cent of the planet's biodiversity lives in the ocean.<sup>6</sup> The direct causes of biodiversity loss include habitat destruction, over-exploitation, the introduction of invasive non-native species and nutrient loading, the impacts of which are all exacerbated by a changing climate.<sup>7</sup>

Whilst it can be argued that biodiversity has intrinsic value, biodiversity also delivers value through essential ecosystem services.<sup>8</sup> Ecosystem services are the benefits that people derive from ecosystems,<sup>9</sup> and include **provisioning services** such as food, water, timber and fibre; **regulating services** that affect climate, floods, disease, wastes

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<sup>1</sup> Convention on Biological Diversity, [Global Biodiversity Outlook 2](#) March 2006 [Accessed 30 March 2010]

<sup>2</sup> *ibid*

<sup>3</sup> European Commission, [Options for an EU vision and target for biodiversity beyond 2010](#), January 2010 [Accessed 30 March 2010]

<sup>4</sup> Millennium Ecosystem Assessment, [Ecosystems and human well-being, Biodiversity Synthesis](#) 2005 [Accessed 30 March 2010]

<sup>5</sup> [About biodiversity](#), IUCN website [Accessed 30 March 2010]

<sup>6</sup> European Commission, [Options for an EU vision and target for biodiversity beyond 2010](#) January 2010 [Accessed 30 March 2010]

<sup>7</sup> Convention on Biological Diversity, [Global Biodiversity Outlook 2](#) March 2006 [Accessed 30 March 2010]

<sup>8</sup> European Commission, [Options for an EU vision and target for biodiversity beyond 2010](#) January 2010 [Accessed 30 March 2010]

<sup>9</sup> Millennium Ecosystem Assessment, [Ecosystems and Human Well-being: Current State and Trends, Volume 1](#) 2005 [Accessed 30 March 2010]

and water quality; **cultural services** that provide recreational, aesthetic, and spiritual benefits; and **supporting services** such as soil formation, photosynthesis, and nutrient cycling.<sup>10</sup> These vital goods and services are integral to sustainable development and underpin economic prosperity, social well-being and quality of life.<sup>11</sup>

The *Millennium Ecosystem Assessment (MEA)*, a scientific undertaking involving over 1,300 experts working in 9 countries, confirmed the overwhelming contributions made by natural ecosystems to human life and well-being.<sup>12</sup> At the same time that the importance of ecosystem services was acknowledged however, the MEA found that 15 of the 24 ecosystem services it described were already in decline.<sup>13</sup> Yet the value of ecosystems to human societies promises to become all the more apparent as environmental change accelerates, with strong resilient ecosystems holding greater potential for mitigating and adapting to the consequences of climate change.<sup>14</sup>

Furthermore, as highlighted in a recent study on *The Economics of Ecosystems and Biodiversity (TEEB)*, biodiversity loss and ecosystem degradation have direct economic repercussions that are widely underestimated.<sup>15</sup> The European Commission states that the annual loss of ecosystem services is estimated to be equivalent to €50 billion, while by 2050 the cumulated welfare losses are estimated to be equivalent to 7 per cent of the European Union's Gross Domestic Product (GDP).<sup>16</sup> The need to include the real value of biodiversity and ecosystem services in economic systems and markets has been advocated.<sup>17</sup> According to the TEEB, ecosystems represent an attractive area for high return investment, which is particularly important in the current economic climate.<sup>18</sup>

## 1.2. Why is 2010 so important?

2010 has been announced as the International Year of Biodiversity. This decision stems from the fact that 2010 was agreed upon by Governments and Heads of States, worldwide, as the year by which efforts to reduce biodiversity loss would see real successes. 2010 should be a landmark year in the plight to prevent biodiversity loss however, none of the Governments that signed up to the original agreement have succeeded in meeting their biodiversity commitments.

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<sup>10</sup> ibid p7

<sup>11</sup> Convention on Biological Diversity, [Global Biodiversity Outlook 2](#), March 2006 [Accessed 30 March 2010]

<sup>12</sup> ibid

<sup>13</sup> Millennium Ecosystem Assessment, [Ecosystems and human well-being, Biodiversity Synthesis](#), 2 005 [Accessed 30 March 2010]

<sup>14</sup> European Commission, [Options for an EU vision and target for biodiversity beyond 2010](#), January 2010 [Accessed 30 March 2010]

<sup>15</sup> The Economics of Ecosystems and Biodiversity, [TEEB for Policy Makers](#), 13 November 2009 [Accessed 30 March 2010]

<sup>16</sup> European Commission, [Options for an EU vision and target for biodiversity beyond 2010](#), January 2010 [Accessed 30 March 2010]

<sup>17</sup> Benn, Hilary, [Biodiversity nears 'point of no return'](#), BBC News Website 17 January 2010 [Accessed 30 March 2010]

<sup>18</sup> The Economics of Ecosystems and Biodiversity, [Climate Issues Update](#) September 2009 [Accessed 30 March 2010]

In 2001, the EU set itself the target to halt the decline of biodiversity [in the EU] by 2010 and to restore habitats and natural systems.<sup>19</sup> In April 2002, the Parties to the **Convention on Biological Diversity (CBD)**<sup>20</sup> committed themselves to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national levels as a contribution to poverty alleviation and to the benefit of all life on Earth.<sup>21</sup>

The Welsh Government has committed itself to both the EU and global targets, which have been incorporated into national schemes and strategies. In particular, the *Environment Strategy for Wales* Outcome 21 and Target 32 aim for 95 per cent of sites of international importance in Wales to be in favourable condition by 2010.<sup>22</sup> In addition, the Welsh Government, along with all public bodies, has a specific duty to have regard to the purpose of conserving biodiversity, under Section 40(1) of the *Natural Environment and Rural Communities Act 2006 (the NERC Act)*.<sup>23</sup>

However, there is growing awareness and concern that actions taken to protect biodiversity have not been sufficient to prevent its loss. Over the last 25 years, major changes have taken place in the abundance of wildlife and in the nature and health of habitats in Wales.<sup>24</sup> It is a mixed picture, but many species have declined dramatically and the condition of many habitats has deteriorated.<sup>25</sup> The Welsh Government has acknowledged that it will not meet the 2010 biodiversity target.<sup>26</sup> This paper aims to evaluate the progress of the Welsh Government in meeting the targets set for protecting biodiversity.

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<sup>19</sup> Commission of the European Communities, [Halting the loss of biodiversity by 2010 – and beyond. Sustaining ecosystem services for human well-being.](#), 22 May 2006 [Accessed 30 March 2010]

<sup>20</sup> [The Convention on Biological Diversity](#) is an international treaty to sustain the rich diversity of life on Earth. It entered into force on 29 December 1993 and has three main objectives: 1. The conservation of biological diversity; 2. The sustainable use of the components of biological diversity; 3. The fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

<sup>21</sup> [2010 Biodiversity Target](#), Convention on Biological Diversity website [Accessed 30 March 2010]

<sup>22</sup> Welsh Assembly Government, [Environment Strategy for Wales](#) 17 May 2006, p36 [Accessed 30 March 2010]

<sup>23</sup> [Natural Environment and Rural Communities Act 2006](#), (not consolidated)

<sup>24</sup> Welsh Assembly Government, [Environment Strategy for Wales](#) 17 May 2006, p36 [Accessed 30 March 2010]

<sup>25</sup> *ibid*

<sup>26</sup> Welsh Assembly Government, Jane Davison (Minister for the Environment, Sustainability and Housing), [Biodiversity](#), Cabinet Written Statement, 18 January 2010 [Accessed 30 March 2010]

## 2. Targets

Targets for preventing biodiversity loss have been set at a number of levels. This chapter considers targets set at International, EU and national levels, and how they relate to each other.

### 2.1. International

In June 1992, 150 Government leaders, including the UK Prime Minister, signed the CBD at the United Nations (UN) Conference on Environment and Development in Rio de Janeiro.<sup>27</sup> This committed them to take action to conserve and enhance biodiversity within their national boundaries.

Ten years after the CBD was agreed at the Rio Earth Summit in 2002, it acquired a firm, binding target – to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national levels as a contribution to poverty alleviation and to the benefit of all life on Earth.<sup>28</sup> This target was subsequently endorsed by the Heads of State and Government at the World Summit on Sustainable Development and the UN General Assembly,<sup>29</sup> and was incorporated as a new target under the Millennium Development Goals.<sup>30</sup>

### 2.2. European

In 1995, the wider European community responded to the CBD with more than 50 countries, endorsing the *Pan-European Biological and Landscape Diversity Strategy* (PEBLDS).<sup>31</sup> The European Community, as a contracting party to the CBD, responded comprehensively with the adoption of a *Biodiversity Strategy* in 1998 and related *Action Plans* in 2001.<sup>32</sup>

In addition, in 2001, EU Heads of State and Government agreed to halt the decline of biodiversity in the EU by 2010 and to restore habitats and natural systems.<sup>33</sup> In 2002, they signed up to the global target of significantly reducing biodiversity loss worldwide by 2010.<sup>34</sup>

Recognising that progress was too slow to meet the 2010 target, on International Biodiversity Day, 22 May 2006, the European Commission published a communication

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<sup>27</sup> [The Convention on Biological Diversity](#), Convention on Biological Diversity website [Accessed 30 March 2010]

<sup>28</sup> [2010 Biodiversity Target](#), Convention on Biological Diversity website [Accessed 30 March 2010]

<sup>29</sup> *ibid*

<sup>30</sup> The eight [Millennium Development Goals](#) were developed by the United Nations following the adoption of the United Nations Millennium Declaration by world leaders in September 2000, which committed nations to a new global partnership to reduce extreme poverty and to set out a series of time-bound targets. The Goals range from halving extreme poverty to halting the spread of HIV/AIDS and providing universal primary education.

<sup>31</sup> [The Pan-European Biological and Landscape Diversity Strategy](#), Council of Europe website [Accessed 30 March 2010]

<sup>32</sup> [EU Biodiversity Policy Development](#), Europa website [Accessed 30 March 2010]

<sup>33</sup> Commission of the European Communities, [Halting the loss of biodiversity by 2010 – and beyond. Sustaining ecosystem services for human well-being.](#), 22 May 2006 [Accessed 30 March 2010]

<sup>34</sup> *ibid*

on biodiversity, *Halting the Loss of Biodiversity by 2010 – and Beyond*.<sup>35</sup> The accompanying Action Plan (the *EU Biodiversity Action Plan* or *BAP*) listed over 150 actions, across ten objectives, to be implemented by the Community Institutions and Member States in order to achieve the 2010 targets.<sup>36</sup>

The *EU BAP* includes the target for the Natura 2000 network to be established, safeguarded, designated and under effective conservation management by 2010 and 2012 in the marine environment.<sup>37</sup> The Natura 2000 network<sup>38</sup> is made up of Special Areas of Conservation designated under the 1992 *Habitats Directive*<sup>39</sup> and Special Protection Areas designated under the 1979 *Birds Directive*.<sup>40</sup> The Birds and Habitats Directives are at the heart of the EU's policy response to halting biodiversity loss by 2010, setting common standards for nature conservation, and enabling coordination of conservation efforts, across 27 countries.<sup>41</sup>

Whilst Natura 2000 focuses on specific sites, the *EU BAP* also recognises that much biodiversity resides outside of these areas. Since the publication of the *EU BAP* (2006) there has been an increased focus in EU biodiversity policy on the protection and sustainable use of overall ecosystems.<sup>42</sup> This includes securing ecosystem integrity, functioning and resilience while also maintaining or restoring the services that ecosystems provide to humans.<sup>43</sup> Linked to this is the recognition within the *EU BAP* of the need to integrate biodiversity policy needs into other policy areas, such as agriculture and fisheries.<sup>44</sup>

This approach is also reflected in the renewed 2006 EU *Sustainable Development Strategy (EU SDS)*.<sup>45</sup> Biodiversity objectives are integrated in the *EU SDS*, which sets out a single, coherent strategy on how the EU will more effectively live up to its long standing commitment to meet the challenges of sustainable development. As well as the targets to halt biodiversity decline in the EU and to significantly reduce the rate of biodiversity loss globally, the *EU SDS* also includes aims to improve management and

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<sup>35</sup> Commission of the European Communities, [Halting the loss of biodiversity by 2010 – and beyond. Sustaining ecosystem services for human well-being.](#), 22 May 2006 [Accessed 30 March 2010]

<sup>36</sup> Commission of the European Communities [Halting the loss of biodiversity by 2010 – and beyond. Sustaining ecosystem services for human well-being. Technical Annex.](#), 22 May 2006 [Accessed 30 March 2010]

<sup>37</sup> *ibid* p2

<sup>38</sup> [Natura 2000 network](#), Europa website [Accessed 30 March 2010]

<sup>39</sup> The [Habitats Directive](#) is built around the Natura 2000 network of protected sites and the strict system of species protection. It protects over 1,000 animal and plant species and over 200 so-called “habitat types”, for example special types of forests, meadows and wetlands, which are of European importance.

<sup>40</sup> [The Birds Directive](#) places great emphasis on the protection of habitats for endangered as well as migratory bird species (listed in Annex I), especially through the establishment of a coherent network of Special Protection Areas comprising of all the most suitable territories for these species. The Birds Directive bans activities that directly threaten birds, with a few exceptions. It recognizes hunting, for example, as a legitimate activity and provides a comprehensive system for the management of hunting.

<sup>41</sup> European Commission, [The European Union's Biodiversity Action Plan](#), Halting the loss of biodiversity by 2010 – and beyond, 2008 [Accessed 30 March 2010]

<sup>42</sup> WWF, [Biodiversity and the EU Budget](#), *Making the case for conserving biodiversity in the context of the EU Budget Review*, November 2009 [Accessed 30 March 2010]

<sup>43</sup> *ibid*

<sup>44</sup> Commission of the European Communities, [Halting the loss of biodiversity by 2010 – and beyond. Sustaining ecosystem services for human well-being.](#), 22 May 2006 [Accessed 30 March 2010]

<sup>45</sup> Council of the European Union, [Reviewed EU Sustainable Development Strategy](#) 26 June 2006 [Accessed 30 March 2010]

avoid overexploitation of resources such as fisheries, biodiversity, water, air, soil and atmosphere and to restoring degraded marine ecosystems by 2015.<sup>46</sup>

Biodiversity is now higher on the EU political agenda than ever before. The spring 2008 European Council restated its commitment to strengthen efforts aimed at halting biodiversity loss by 2010 and beyond, and highlighted the essential role of Natura 2000 in achieving this objective.<sup>47</sup> The EU White Paper (2009) *Adapting to Climate Change* emphasised the relationship between biodiversity and climate change, and identified the need for integrated policy development.<sup>48</sup>

### 2.3. National targets

The UK and Welsh Governments have committed themselves to both the CBD target to significantly reduce the current rate of biodiversity loss by 2010 and the EU target to halt the loss of biodiversity by 2010. The *UK Biodiversity Action Plan (UK BAP)* process presents a key mechanism by which biodiversity objectives are delivered within the UK. The Welsh Government is responsible for its delivery within Wales.

The Welsh Government has also set targets relating to biodiversity at a national level, such as targets to get protected sites into favourable conservation status. In order to deliver these targets the Welsh Government has incorporated them into a number of Welsh Government strategies. These strategies contain lists of actions that need to be delivered in order for the targets to be achieved. The outcomes that delivery of these actions will have on the status of the Welsh environment are also detailed by the Welsh Government within the strategies. Progress towards reaching these outcomes is assessed by a suite of indicators. Summaries of the key strategies and actions are provided below.

In order to decide which of the strategies and actions to include in this research paper reference was made to the 2008 *Biodiversity Framework for Wales* which provides an overarching guide to the Welsh Government's targets and strategies relating to biodiversity. The key strategies and action that are identified as being of importance within this Framework are reported on in this research paper.

#### 2.3.1. Biodiversity Action Plan

The *UK Biodiversity Action Plan (UK BAP)* represents a key over-arching approach to biodiversity conservation within the UK. The *UK BAP* was published in 1994, and sets out the UK's legal commitment to Article 6A of the CBD.<sup>49</sup> Structures and processes for

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<sup>46</sup> Council of the European Union, [Reviewed EU Sustainable Development Strategy](#) 26 June 2006 [Accessed 30 March 2010]

<sup>47</sup> Commission of the European Communities, [A mid-term assessment of implementing the EC Biodiversity Action Plan](#) 16 December 2008 [Accessed 30 March 2010]

<sup>48</sup> POST, [Biodiversity and Climate Change](#), Postnote Number 341 October 2009 [Accessed 30 March 2010]

<sup>49</sup> Wales Biodiversity Partnership, [The Delivery of UK Biodiversity Priority Habitats and Species Actions in Wales](#), August 2009 [Accessed 30 March 2010]

delivery of the *UK BAP* at a country level have since been developed,<sup>50</sup> and the responsibility for delivery of the *UK BAP* within Wales resides with the Welsh Government.

The *UK BAP* process brings together existing work and expertise on biodiversity to set out a partnership approach to achieving goals.<sup>51</sup> The focus for delivery is on agreed actions and targets, with measurable outcomes, for priority species and habitats.<sup>52</sup> The current list of *UK BAP* priority species and habitats was published in August 2007, and contains 1,150 species and 65 habitats.<sup>53</sup>

Section 42 of the *NERC Act 2006* contains the list of habitats and species of principal importance in Wales.<sup>54</sup> It is the definitive list, superseding the Section 74 list of the *Countryside and Rights of Way Act 2000*, and is a key requirement of the *NERC Biodiversity Duty*.<sup>55</sup> The list contains all *UK BAP* priority habitats and species known to occur in Wales, in addition to habitats and species of particular conservation significance in Wales.<sup>56</sup> 51 of the 65 UK priority habitats occur in Wales, and an additional three marine habitats not on the UK list are included in the Section 42 list, making a total of 54 priority habitats in Wales.<sup>57</sup> In total, 538 species are listed in the Section 42.

The conservation of priority species and habitats is translated into local action by the production of **Local Biodiversity Action Plans (LBAPs)**, produced by local authorities in partnership with other integrated parties, including the Countryside Council for Wales (CCW), local Wildlife Trusts, and the Environment Agency Wales (EAW).<sup>58</sup> In Wales there are 24 LBAP partnerships, one in each local authority area and two in National Park areas. In Pembrokeshire the National Park and local authority are part of the same LBAP Partnership.<sup>59</sup> See Section 3.12 below for further details.

The **Wales Biodiversity Partnership (WBP)** provides the overall steer for the BAP process in Wales.<sup>60</sup> There are also a number of Wales BAP groups that are required to provide annual updates on progress in order to identify problems with delivery. The WBP Support Team is committed to produce an annual paper for the WBP Steering Group, with action then taken to address issues raised.<sup>61</sup> The Biodiversity Action

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<sup>50</sup> *ibid*

<sup>51</sup> *ibid*

<sup>52</sup> *ibid*

<sup>53</sup> [UKBAP Priority Species and Habitats](#), UK Biodiversity Action Plan website [Accessed 30 March 2010]

<sup>54</sup> Wales Biodiversity Partnership, [Natural Environment and Rural Communities Act 2006: Section 42 List of Species of Principal Importance for Conservation of Biological Diversity in Wales](#), [Accessed 31 March 2010]

<sup>55</sup> [Habitats](#), Wales Biodiversity Partnership website [Accessed 30 March 2010]

<sup>56</sup> [Priority Species](#), CCW website [Accessed 22 February 2010]

<sup>57</sup> [Habitats](#), Wales Biodiversity Partnership website [Accessed 30 March 2010]

<sup>58</sup> [Local Biodiversity Action Plans](#), UK Biodiversity Action Plan website [Accessed 30 March 2010]

<sup>59</sup> [Local Biodiversity Action Plans \(LBAP's\)](#), CCW website [Accessed 30 March 2010]

<sup>60</sup> Wales Biodiversity Partnership, [The Delivery of UK Biodiversity Priority Habitats and Species Actions in Wales](#), August 2009 [Accessed 30 March 2010]

<sup>61</sup> *ibid*

Reporting System (BARS) is used to monitor achievement towards Wales-level species and habitat targets.<sup>62</sup> The BAP is reported on a three-yearly basis.

### 2.3.2. Sustainable Development Scheme

Under Section 79 of the *Government of Wales Act 2006*, the Welsh Government has a statutory duty in relation to sustainable development.<sup>63</sup> In line with this duty, the Government published in May 2009 the Sustainable Development Scheme (SDS), *One Wales: One Planet*.<sup>64</sup> It states that sustainable development is the central organising principle for the Welsh Government and sets out the Government’s new vision of a sustainable Wales.

The SDS encompasses biodiversity enhancement and protection, with recognition of the need to develop a sustainable and strong economy that operates within environmental and financial limits. It is organised according to the Welsh Government’s five headline indicators of sustainable development. Under each headline indicator, a vision is set out, along with the policy outcomes that are necessary for the vision to be realised.

One of these headline indicators is entitled **Sustaining the Environment**. This aspect of the scheme deals with the issue of better managing land and seas so that they can sustain a wide variety of ecosystem services. The table below shows the vision, main outcomes, and the headline and supporting indicators for this theme

**Table 1. The vision, main outcomes and sustainable development indicators for Sustaining the Environment**

<b>Vision</b>	For Wales to have “healthy, functioning ecosystems that are biologically diverse and productive and managed sustainably”.
<b>Main outcomes</b>	“Our land, freshwater and marine environment is best managed to provide the services of food, wood, water, soil, habitats and recreation”.
<b>Headline indicator</b>	Percentage of Biodiversity Action plan habitats and species (see Section 2.3.1) that are recorded as stable or increasing.
<b>Supporting indicators</b>	<ul style="list-style-type: none"> <li>▪ Trends in bird populations</li> <li>▪ Ecological impacts of air pollution</li> <li>▪ Air quality</li> <li>▪ River quality</li> <li>▪ Soil quality</li> <li>▪ Sustainable water resource management</li> </ul>

<sup>62</sup> [Biodiversity Action Reporting System](#), BARS website [Accessed 30 March 2010]

<sup>63</sup> [Sustainable development](#), Welsh Assembly Government website [Accessed 30 March 2010]

<sup>64</sup> Welsh Assembly Government, [One Wales: One Planet, a new Sustainable Development Scheme for Wales](#), 22 May 2009 [Accessed 30 March 2010]



The headline indicator for assessing sustainable development of the environment is the percentage of Biodiversity Action Plan habitats and species that are recorded as stable or increasing. There are also a number of supporting indicators which allow progress towards the Government's vision for the environment to be assessed. In terms of specific actions taken, **Action 9** of the SDS is of particular relevance to the issue of biodiversity:

**Action 9:** Following a review of Axis II of the Rural Development Plan for Wales, we will set in place a structure of support for environmentally sustainable land management, including support for land-based carbon management through best practice management of soils, and management for water quantity and quality, biodiversity, woodland, landscape, heritage and access.<sup>65</sup>

### 2.3.3. *Environment Strategy for Wales*

The *Environment Strategy for Wales* (hereafter the Strategy) constitutes a key delivery mechanism for the Welsh Government's objectives for biodiversity.<sup>66</sup> The Strategy was published in May 2006, and is the Government's long term strategy for the Environment of Wales, setting the strategic direction for the next 20 years. The Strategy provides the framework for 39 Environment Strategy outcomes within which to achieve an environment which is clean, healthy, biologically diverse and valued by the people of Wales.

Whilst the Strategy contains the general outcomes the Welsh Government wishes to achieve, the specific actions that aim to deliver the Government's long term strategy are listed in two Action Plans, published in 2006 and 2008. The second Action Plan covering the period 2008-2011 was intended to build on the work of the first, and sets out rolling actions until 2010. It aims to facilitate a more strategic approach to environmental improvement, and to recognise the longer-term nature of environmental action and change.

The Strategy has five main environmental themes, with some overlapping content. One of these themes is dedicated wholly to the issue of biodiversity, **Distinctive biodiversity, landscapes and seascape**, which covers biodiversity, the marine environment, landscapes and seascapes and their historic component. A key aim stated by the Welsh Government in the Strategy is to halt the loss of biodiversity and see a definite recovery from the losses that have already occurred.

In support of this aim, a key outcome listed in the Strategy is that of **Outcome 21**, for sites of international, Welsh and local importance to be in a favourable condition to support the species and habitats for which they have been identified. In Wales, Sites of Special Scientific Interest (SSSIs) are the most important sites for Wales' natural heritage.<sup>67</sup> SSSIs support designated features, such as a special habitat or rare species.

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<sup>65</sup> This action is of particular importance to biodiversity as it looks at the review of agri-environment land management schemes in Wales which play a significant role in supporting farmers to protect and enhance biodiversity on their farms.

<sup>66</sup> Welsh Assembly Government, [Environment Strategy for Wales](#) 17 May 2006, p36 [Accessed 30 March 2010]

<sup>67</sup> [Sites of Special Scientific Interest](#), CCW Website [Accessed 30 March 2010]

Achieving favourable status of a SSSI means that all of these features must be judged to be in favourable condition when assessed, whereby their conservation objectives are being met.<sup>68</sup>

As well as focusing on individual sites, the Strategy also acknowledges the need for protection of the wider environment. It highlights the need for an integrated approach to the sustainable management and use of the land and sea, to ensure that they can support environmental, economic and social needs, while retaining their essential character, cultural significance and ecosystems functions. The need for a strong focus on delivering environmental benefits within policies and programmes relating to land use planning, agriculture, forestry and fisheries, is highlighted, along with the importance of delivering connectivity between habitats and sites and environmental improvement at a landscape scale.

Within this theme, the importance of marine ecosystems, as distinct to other landscapes, is also stressed. The range of pressures that the marine environment faces and the significant impacts that climate change will have are highlighted. The importance of mitigating and adapting to climate change is also recognised in the theme **Addressing climate change**, including the impact that it will have on biodiversity. The need for a more dynamic and flexible approach to biodiversity conservation as a result of climate change, for example with regards to designated sites, is also acknowledged.

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<sup>68</sup> CCW, [Sites of Special Scientific Interest in Wales](#). Current state of knowledge Report for April 2005-Mar 2006, 31 March 2010 [Accessed 30 March 2010]

The Wales Biodiversity Framework lists the following Environment Strategy outcomes as relating to biodiversity:

**Table 2. Environment Strategy for Wales outcomes listed as relevant to biodiversity within the Wales Biodiversity Framework**

<b>Outcome 8</b>	Wales has improved resilience to the impacts of climate change. A clear flexible programme of measures is in place to enable Wales to respond and adapt to climate change.  <b>Timeline:</b> By 2007
<b>Outcome 16</b>	Soil is managed to safeguard its ability to support plants and animals, store carbon and provide other important ecosystem services.  <b>Timeline:</b> By 2026.
<b>Outcome 19</b>	The loss of biodiversity has been halted and we can see a definite recovery in the number range and genetic diversity of species, including those species that need very specific conditions to survive.  <b>Timeline:</b> International commitment to halt biodiversity by 2010. Recovery to be underway by 2026.
<b>Outcome 20</b>	The wider environment is more favourable to biodiversity through appropriate management, reduced habitat fragmentation and increased extent and interconnectivity of habitats.  <b>Timeline:</b> 2010.
<b>Outcome 21</b>	Sites of international, Welsh and local importance are in a favourable condition to support the species and habitats for which they have been identified.  <b>Timeline:</b> By 2010, 95 per cent of international sites in favourable condition; by 2015, 95 per cent of Welsh SSSIs in favourable condition and by 2026, all sites to be in favourable condition (Target 32).
<b>Outcome 22</b>	Our seas will be clean support healthy ecosystems that are biologically diverse, productive and managed sustainably.  <b>Timeline:</b> To be defined following the publication of the Marine Bill.
<b>Outcome 23</b>	The quality and diversity of the natural and historic character of our landscape and seascape is maintained and enhanced.  <b>Timeline:</b> To be defined following completion of CCW landscape characterisation work.
<b>Outcome 27</b>	There is easy, equitable access to ample high quality green space.  <b>Timeline:</b> By 2023.

### 3. Delivery

The Welsh Government does not have a single biodiversity strategy. Instead, targets for preventing biodiversity loss are delivered through a number of policies, and there are a number of bodies which are responsible for the delivery of these policies. Much work on the delivery of biodiversity objectives is therefore undertaken in partnership between different organisations.

#### 3.1. *The Wales Spatial Plan*

*People, Places, Futures: The Wales Spatial Plan*<sup>69</sup> aims to deliver sustainable development through its Area Strategies in the context of the Welsh Government's Sustainable Development Scheme. Its purpose is to ensure that what is done in the public, private and third sectors in Wales is integrated and sustainable, and that actions within different areas support each other and jointly move towards a shared vision for Wales and for the different parts of Wales.<sup>70</sup> It achieves this through collaborative working and the integration of policies nationally and regionally.

The Spatial Plan should have the potential to improve the integration of biodiversity objectives into other policy areas, and for delivery and coordination of actions to conserve biodiversity at local, regional and national levels. For example, in South East Wales, the Government is developing the concept of a **Networked Environment Region**, through the work of the Spatial Plan.<sup>71</sup> This approach focuses on improving the connectivity of habitats and allowing wildlife to adapt to climate change, on making the landscape more accessible for people and on the provision of ecosystem services, such as clean water, soil and air.<sup>72</sup>

#### 3.2. *Farming, Food and Countryside – Building a Secure Future*

*Farming, Food and Countryside – Building a Secure Future (FFC)* is the Welsh Government's overarching strategy outlining how it will contribute to the sustainable development of the farming, food and land based production industries in Wales and the Welsh countryside environment, through to 2020.<sup>73</sup> Its overall objective is to achieve a sustainable and profitable future for farming families and businesses while safeguarding the environment, mitigating climate change and maintaining the vitality and prosperity of Wales' rural communities.

*FFC* is important for the delivery of biodiversity targets, given the role that farmers and rural land managers play in helping to deliver *Environment Strategy for Wales* land

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<sup>69</sup> Welsh Assembly Government, [People, Places, Futures. The Wales Spatial Plan](#), November 2004 [Accessed 30 March 2010]

<sup>70</sup> Welsh Assembly Government, [People, Places Future – The Wales Spatial Plan 2008 Update](#), 8 July 2008 [Accessed 30 March 2010]

<sup>71</sup> Welsh Assembly Government, [One Wales: One Planet, a new Sustainable Development Scheme for Wales](#), 22 May 2009 [Accessed 30 March 2010]

<sup>72</sup> *ibid*

<sup>73</sup> Welsh Assembly Government, [Farming, Food and Countryside. Building a secure future](#), May 2009 [Accessed 30 March 2010]

management outcomes. The need to adopt a more focused approach to restoring biodiversity and strengthening ecosystem services than current schemes allow is highlighted within FFC, and to broaden this by involving collaborative action from land managers at a landscape and catchment scale. By applying these approaches, the Government claims that agri-environment schemes will help the achievement of wider environmental objectives, such as improved soils, water quality and carbon retention, to help adapt to and mitigate the impacts of climate change.

### *3.3. Rural Development Plan 2007-2013*

The *Wales Rural Development Plan (WRDP) 2007-2013*, is the mechanism by which the Welsh Government, under the Common Agricultural Policy, delivers financial support to programmes which support the countryside and rural communities, encouraging the sustainable management of agriculture and the environment.<sup>74</sup> The WRDP describes an approach under which land will be managed in an integrated way, providing food and fibre at the same time as providing a wider range of ecosystem services.<sup>75</sup>

The WRDP consists of four Axes, and Axis II covers **Improving the environment and countryside**. Although set to change over the next two years, Axis II currently includes a number of agri-environment schemes: Tir Gofal, Tif Cynnal, Tir Mynydd, the Organic Farming Scheme and the Better Woodlands scheme. Some of these schemes have direct objectives for biodiversity improvement.

The objectives of the Tir Cynnal and Tir Gofal schemes were to prevent loss of biodiversity on farms by protecting wildlife habitats and important landscape features, as well as safeguarding the historic environment and helping to improve the quality of water, soil and air by reducing pollution.<sup>76</sup> Efforts to conserve and enhance biodiversity through these schemes included establishment of hedges, woodland, walls and ponds. The Government also introduced species packages under Tir Gofal, which are combinations of particular prescriptions that create a favourable environment for a particular species, allowing the scheme to be tailored to local requirements.<sup>77</sup>

Subsequently, in 2008 the Welsh Government undertook a review of the land management options available under Axis II of the WRDP, and has made the decision to introduce a new agri-environment scheme, **Glastir**, from 2012. Future policy will be focused on tackling the Welsh Government's key environmental objectives including those in the *Wales Environment Strategy* covering biodiversity loss, and soil, carbon and water management.

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<sup>74</sup> Welsh Assembly Government, [The Rural Development Plan for Wales 2007-2013](#), 20 February 2010 [Accessed 30 March 2010]

<sup>75</sup> Welsh Assembly Government, [One Wales: One Planet, a new Sustainable Development Scheme for Wales](#), 22 May 2009 [Accessed 30 March 2010]

<sup>76</sup> [Axis 2 –Glastir](#), Welsh Assembly Government website [Accessed 30 March 2010]

<sup>77</sup> Audit Committee, [Tir Gofal](#), 17 September 2008

### 3.4. Woodlands for Wales

The *Woodland for Wales* strategy<sup>78</sup> aims to expand Wales' native woodlands, and to improve the management of existing native woodlands and species. It aims to place increased emphasis on protecting biodiversity and on adapting woodlands to climate change, with focus on designated sites and ancient woodland. The Strategy has been revised<sup>79</sup>, partly to take account of the ecosystem services that woodlands can provide, and it aims for a stronger link between woodland and other land use to deliver more benefits through integrated land management.

### 3.5. Welsh Soils Action Plan

Soils deliver a range of vital functions for human activities, including food and fibre production, support for ecosystems and habitats, and environmental services. The ability to adapt biodiversity to the impacts of climate change will depend heavily on soil management.<sup>80</sup>

The need for a Soils Action Plan was identified in the *Environment Strategy for Wales*, with Action 42 committing the Government to developing such an Action Plan. The Soils Action Plan focuses on good soil management in agriculture and forestry, and the integration of soil protection into guidance on land-use planning policy and its implementation.<sup>81</sup> Consultation on the Welsh Government's proposed Welsh Soils Action Plan closed in March 2008, but the Action Plan has not yet been published.

### 3.6. Marine and Coastal Access Act 2009

The *Marine and Coastal Access Act* received Royal Assent in November 2009.<sup>82</sup> The Act aims to ensure clean, healthy, safe, productive and biologically diverse oceans and seas, by putting in place better systems for delivering sustainable development of the marine and coastal environment.<sup>83</sup> According to the Welsh Government, having this piece of legislation in place gives it the ability to plan more strategically, protect important conservation areas and update fisheries management and licensing systems.<sup>84</sup>

The creation of a system of marine planning is central to the Act, with the aim of balancing the economic, social and environmental impacts and objectives of marine activities in a way that promotes sustainable development.<sup>85</sup> *A UK Marine Policy*

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<sup>78</sup> Welsh Assembly Government, [Woodlands for Wales. The Welsh Assembly Government's Strategy for Woodlands and Trees](#) 2001 [Accessed 30 March 2010]

<sup>79</sup> [Woodland for Wales – our strategy for Welsh woodlands and trees](#), Welsh Assembly Government website [Accessed 30 March 2010]

<sup>80</sup> Welsh Assembly Government, [The Welsh Soils Action Plan](#) March 2008 [Accessed 30 March 2010]

<sup>81</sup> *ibid*

<sup>82</sup> [Marine and Coastal Access Act 2009](#), Defra website [Accessed 30 March 2010]

<sup>83</sup> Members' Research Service Research Paper 09/025, [Marine and Coastal Access Bill](#), July 2009

<sup>84</sup> Welsh Assembly Government, [Environment Strategy Action Plan 2008-2011](#), October 2008 [Accessed 30 March 2010]

<sup>85</sup> Welsh Assembly Government, [Environment Strategy Action Plan 2008-2011](#), October 2008 [Accessed 30 March 2010]

*Statement* will provide the high level policy context for marine plans and set the direction for marine licensing and other authorisation systems. The Welsh Government has published a pre-consultation on the draft UK Marine Policy Statement.<sup>86</sup>

A network of Marine Conservation Zones will also be created, which will have clear conservation objectives to protect habitats and species of national importance, ensuring that some types of fishing, dredging or other forms of development do not damage them. In Wales, the Welsh Government proposes to use the marine conservation zone mechanism to establish a number of Highly Protected Marine Reserves (HPMRs), which will contribute to an ecologically coherent network of marine protected areas.<sup>87</sup>

### *3.7. Integrated Coastal Zone Management Strategy for Wales*

In March 2007, the Welsh Government produced *Making the Most of Wales' Coast – the Integrated Coastal Zone Management Strategy for Wales*.<sup>88</sup> The document provides an overview of the actions that will bring together coastal policies and activities in Wales. It outlines the eight principles described in the European Union recommendations on Integrated Coastal Zone Management (ICZM), and how these principles are being applied in Wales.<sup>89</sup>

Wales' coastal zone faces a range of pressures, including tourism, development, fisheries and pollution. On top of this, climate change brings threats such as sea level rise and increased incidence of coastal flooding. ICZM should help to address these challenges, bringing together all those involved in the development, management and use of the coast to help ensure future management takes place in an integrated and informed manner. In this way, ICZM should help to secure an appropriate balance between development and environmental protection, and thus help to protect biodiversity.<sup>90</sup>

### *3.8. Wales Fisheries Strategy*

In 2008, the Welsh Government launched the *Wales Fisheries Strategy*, which aims to support the development of viable and sustainable fisheries in Wales as an integral part of coherent policies for safeguarding the environment.<sup>91</sup> It is the Welsh Government's long term strategy for the management and development of fisheries in Wales across all sectors of aquaculture, commercial fisheries, and recreational fisheries for 2020.

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<sup>86</sup> [Pre-consultation on the draft UK Marine Policy Statement: A paper for discussion](#), Welsh Assembly Government website [Accessed 1 April 2010]

<sup>87</sup> Welsh Assembly Government, [Environment Strategy Action Plan 2008-2011](#), October 2008 [Accessed 30 March 2010]

<sup>88</sup> Welsh Assembly Government, [Making the Most of Wales' Coast – the Integrated Coastal Zone Management Strategy for Wales](#), March 2007 [Accessed 30 March 2010]

<sup>89</sup> [A Welsh Integrated Coastal Zone Management Strategy](#), Welsh Assembly Government website [Accessed 30 March 2010]

<sup>90</sup> *ibid*

<sup>91</sup> Welsh Assembly Government, [Wales Fisheries Strategy 2008](#) [Accessed 30 March 2010]

The Strategy is accompanied by an Implementation Plan for achieving its goals, which endorses an ecosystem-based approach to managing Welsh fisheries. This approach aims to ensure that the benefits from fishing are high, while its direct and indirect impacts on aquatic ecosystems are low, so that biodiversity and ecosystem functions are not detrimentally affected.<sup>92</sup>

### 3.9. River Basin Management Plans

On the 22 December 2009, Defra, the Environment Agency and the Welsh Government published *River Basin Management Plans (RBMPs)* for ten river basin districts in England and Wales under the Water Framework Directive.<sup>93</sup> The plans set out how good water quality status will be achieved for each lake, stretch of river, estuary or coastline. They contain the main issues for the water environment and the actions that are needed to address them.

Improving water quality confers benefits to biodiversity, as demonstrated by the return of otters and other wildlife to rivers as a result of decreased contamination.<sup>94</sup>

According to Defra, delivering these plans will require contribution from farmers, water companies and groups such as the Rivers Trust and the Royal Society for Protection of Birds (RSPB).<sup>95</sup>

### 3.10. Shoreline Management Plans

A second generation of *Shoreline Management Plans (SMP2s)* are currently being produced around the whole coastline of England and Wales.<sup>96</sup> They are key strategic documents which aim to identify sustainable coastal risk management policies for Wales, and will set the direction of how the risk of coastal flooding and erosion should be managed in the long term.<sup>97</sup> The SMP2s will attempt to balance the different issues relating to coastal risk management, including the impact that such activities have on biodiversity.<sup>98</sup>

### 3.11. National Parks

National Parks are local planning authorities and have had a duty to conserve and enhance the natural beauty, wildlife and cultural heritage of their areas for over 50 years, under the 1949 *National Parks and Access to the Countryside Act*.<sup>99</sup> Each National Park Authority (NPA) is required to prepare and publish a National Park

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<sup>92</sup> Welsh Assembly Government, [Wales Fisheries Strategy: Implementation plan](#), 2008 [Accessed 30 March 2010]

<sup>93</sup> [River basin management plans published](#), Defra New release 305/09, 22 December 2009, Defra website [Accessed 30 March 2010]

<sup>94</sup> [Clean rivers prompts wildlife growth](#), BBC News Website 1 February 2003 [Accessed 30 March 2010]

<sup>95</sup> [River basin management plans published](#), Defra New release 305/09, 22 December 2009, Defra website [Accessed 30 March 2010]

<sup>96</sup> [Shoreline Management Plans \(SMPs\)](#), Environment Agency website [Accessed 30 March 2010]

<sup>97</sup> Welsh Assembly Government, [Cardigan Bay and Ynys Enlli to Great Orme Shoreline Management Plan](#), 5 June 2009 [Accessed 30 March 2010]

<sup>98</sup> [Lost at Sea? Shoreline Management Plans and Coastal Defences](#), Friends of the Earth website [Accessed 30 March 2010]



Management Plan for their area, which set out the strategic policies for the management of each NPA.<sup>100</sup> Within these Management Plans the central concern of conserving and enhancing biodiversity within the Parks is stated.

NPAs are responsible for the delivery of LBAPs for their areas. The aim of these LBAPs is to secure the sustainable use of natural resources within National Parks, with emphasis placed on the intrinsic role of landowners and local communities in managing and utilising their natural environment in a sustainable way.<sup>101</sup> The NPA's role in this process is to assist local groups and individuals to develop and implement projects and initiatives that incorporate the targets of the LBAP.<sup>102</sup>

The NPAs also deliver the Welsh Government's **Sustainable Development Fund**.<sup>103</sup> This operates in the three Welsh National Parks and the five Welsh Areas of Outstanding Natural Beauty, and supports innovative community based sustainable development projects, through which the local characteristics of culture, wildlife, landscape, land use and community are conserved and enhanced.

### *3.12. Community Strategies and the Local Area Biodiversity Network*

Community strategies are intended to bring together all those who can contribute to the future of communities within a local authority area, to agree on the key priorities for the area and pursue them in partnership.<sup>104</sup> The statutory purpose of community strategies is to promote economic, social and environmental well-being.<sup>105</sup>

The preparation and implementation of community strategies involves the local authority and a wide range of organisations in the public, private, voluntary and community sectors, as well as local people.<sup>106</sup> At a local level, biodiversity objectives are delivered through both LBAP Partnerships and Local Record Centres (LRCs), which hold, process and disseminate the biodiversity data needed to support this work.<sup>107</sup> All LBAP Partnerships are supported by local authorities and National Park Authorities.

Wales also has 'Biodiversity Champions' at Cabinet level in each local authority and National Park Authority, who lead and champion a range of biodiversity actions.<sup>108</sup> The WBP Steering Group has developed 'biodiversity checklists' for Biodiversity Champions

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<sup>99</sup> [National Parks and Access to the Countryside Act 1949](#),

<sup>100</sup> CCW, [National Park Management Plans Guidance](#), 2007 [Accessed 30 March 2010]

<sup>101</sup> Brecon Beacons National Park Local Biodiversity Action Plan Steering Group, [Our Natural World – a Local Biodiversity Action Plan for the Brecon Beacons National Park](#), May 2002 [Accessed 30 March 2010]

<sup>102</sup> *ibid*

<sup>103</sup> [The Sustainable Development Fund](#), Welsh Assembly Government website [Accessed 30 March 2010]

<sup>104</sup> [Community strategies](#), Welsh Assembly Government website [Accessed 30 March 2010]

<sup>105</sup> Welsh Assembly Government, [Local Vision Statutory Guidance from the Welsh Assembly Government on developing and delivering community strategies](#), March 2008 [Accessed 30 March 2010]

<sup>106</sup> [Community strategies](#), Welsh Assembly Government website [Accessed 30 March 2010]

<sup>107</sup> Welsh Assembly Government, Jane Davison (Minister for the Environment, Sustainability and Housing), [Biodiversity](#), Cabinet Written Statement, 18 January 2010

<sup>108</sup> Welsh Assembly Government, [Proposals for taking forward the role of biodiversity champions within Local Government](#), 6 February 2007

and for local authority and public authority staff in Wales.<sup>109</sup> They are also endorsed by the Partnership Against Wildlife Crime in Wales.

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<sup>109</sup> [Legislation and Guidance](#), Wales Biodiversity Partnership website [Accessed 30 March 2010]

## 4. Progress

This chapter considers progress made towards protecting biodiversity at an International, EU and national level. To assess progress made in Wales, progress towards both the biodiversity actions and outcomes contained in Welsh Government strategies are considered. Progress in completing actions is evaluated and consideration is given to the impact that these actions have had on the outcomes for biodiversity, when the outcomes are measured against their indicators.

### 4.1. International Progress

Ahmed Djoghlaif, the Executive Secretary of the Convention on Biological Diversity, has stated that despite the significant progress achieved, the promise to substantially reduce the rate of loss of biodiversity adopted eight years ago by the 110 Heads of State and Government has not been fulfilled.<sup>110</sup> The more than 100 national reports produced by Parties to the Convention have demonstrated that biodiversity continues to be lost at an unprecedented rate.<sup>111</sup>

### 4.2. EU Progress

In 2009, the European Environment Agency (EEA) produced the first indicator-based assessment of progress towards the European target of halting biodiversity loss by 2010.<sup>112</sup> The report indicated that European biodiversity remains under serious pressure and the EU's policy responses have been insufficient to halt its general decline. The target of halting biodiversity loss in Europe by 2010 will not be achieved.

The assessment concluded that the conservation status of the species and habitats covered by EU legislation remains unsatisfactory, with 40-85 per cent of habitats and 40-70 per cent of species of European interest in the terrestrial biogeographical regions remaining in an unfavourable conservation status. The overall extinction risk for birds in Europe has further increased. European grassland butterflies continue to decline dramatically, and genetic diversity of livestock remains at risk. Land cover data show a further decline in the extent of grasslands and wetlands with an increase in urban, woodland and open water habitats.<sup>113</sup>

According to the EEA's assessment, progress has been made in reducing some pressures on biodiversity through specific legislation on atmospheric emissions, freshwater quality and waste water treatment. Pressures from the agricultural sector

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<sup>110</sup> Convention on Biological Diversity, [Statement by Mr. Ahmed Djoghlaif Executive Secretary of the Convention on Biological Diversity](#), on the occasion of informal expert workshop on the updating of the strategic plan of the convention for the post-2010 period, 18 January 2010 [Accessed 30 March 2010]

<sup>111</sup> *ibid*

<sup>112</sup> European Environment Agency, [Progress towards the European 2010 biodiversity target](#), EEA Report No 4/2009, 22 May 2009 [Accessed 30 March 2010]

have been addressed directly by reducing nitrogen losses and indirectly by increasing organic farming, with varying success. Fisheries is considered to remain a problematic sector needing wider recognition of sustainability issues.

In its conclusions on biodiversity post-2010, the Council of the European Union stated that the main reasons for not achieving the EU target are:

- incomplete integration of certain legal instruments;
- incomplete and poor integration of biodiversity into sectoral policies;
- insufficient scientific knowledge and data gaps;
- insufficient funding;
- lack of additional effectively-targeted instruments to tackle specific problems, such as invasive non-native species and;
- shortcomings in communication and education to enhance awareness.<sup>114</sup>

### *4.3. National Progress*

The Minister for the Environment, Sustainability and Housing, Jane Davidson, has stated that

it is clear that the work to date has not been enough to enable us to reach the important and challenging targets set for biodiversity.<sup>115</sup>

In order to assess the progress that has been made by the Welsh Government towards the 2010 biodiversity target, each Welsh Government strategy is examined in turn. Progress made towards carrying out actions within these strategies that address biodiversity is assessed, along with the outcomes these actions have had in terms of the status of biodiversity in Wales and when measured against their more specific indicators.

#### *4.3.1. Biodiversity Action Plan*

##### *Actions carried out*

The Wales Biodiversity Partnership has developed a new approach for the delivery of UK Biodiversity Priority Habitats and Species Actions in Wales.<sup>116</sup> Whilst the devolution of responsibility over this policy area has been an important driver behind the

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<sup>113</sup> *ibid*

<sup>114</sup> [EU Council conclusions on biodiversity post-2010](#), Europa website [Accessed 30 March 2010]

<sup>115</sup> Welsh Assembly Government, Jane Davison (Minister for the Environment, Sustainability and Housing), [Biodiversity](#), Cabinet Written Statement, 18 January 2010

<sup>116</sup> Wales Biodiversity Partnership, [The Delivery of UK Biodiversity Priority Habitats and Species Actions in Wales](#) August 2009 [Accessed 30 March 2010]

adoption of this new delivery mechanism, the challenges that climate change presents have also required a step-change in the approach to biodiversity conservation.<sup>117</sup>

According to the WBP, this new Wales approach to BAP delivery introduces new Welsh groups that will pool expertise and close the gap between those who deliver action in Wales and those who are able to provide strategic advice, guidance and support. The new groups are nine Ecosystems groups, a Species Expert Group and a Wales Biodiversity Policy Group. The Wales approach also recognises the need to plan strategically and to bring in new partners in order to respond to pressures such as climate change and non-native species.<sup>118</sup>

The Wales approach aims to improve the integration of habitat and species-based work, securing the adoption of an integrated ecosystem approach and achieving biodiversity enhancements across whole landscapes and larger sea-scale. In line with this aim, it highlights the need to strengthen support for UK, national and local levels of delivery. It also stresses the need for climate change adaptation principles in conservation action and to ensure that the mitigation impacts of conservation management are considered.<sup>119</sup>

The Wales approach is a combination of:

- Protecting the best wildlife sites and surrounding areas;
- Halting biodiversity loss and promoting recovery of priority species and habitats;
- Embedding biodiversity in relevant sectors of policy and decision-making;
- Enthusing people and;
- Developing the evidence base.<sup>120</sup>

The new BAP delivery mechanism also recognises the need to identify and carry out the actions that are most urgent and will have the greatest benefit for biodiversity. The original 436 UK Habitat and Species Action Plans contained over 6,300 published actions, and more than 38,000 additional actions are published in the LBAPs across the UK. The most important of these actions for biodiversity conservation were not identified, however, which would have helped to ensure that they were carried out. In light of this, the new delivery mechanism will be action and outcome-focussed, enabling the development of delivery and policy priorities, at different geographic scales, and with different stakeholders assigned different accountabilities.<sup>121</sup>

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<sup>117</sup> Wales Biodiversity Partnership, [The Delivery of UK Biodiversity Priority Habitats and Species Actions in Wales](#), August 2009 [Accessed 30 March 2010]

<sup>118</sup> *ibid*

<sup>119</sup> *ibid*

<sup>120</sup> *ibid*

<sup>121</sup> *ibid*

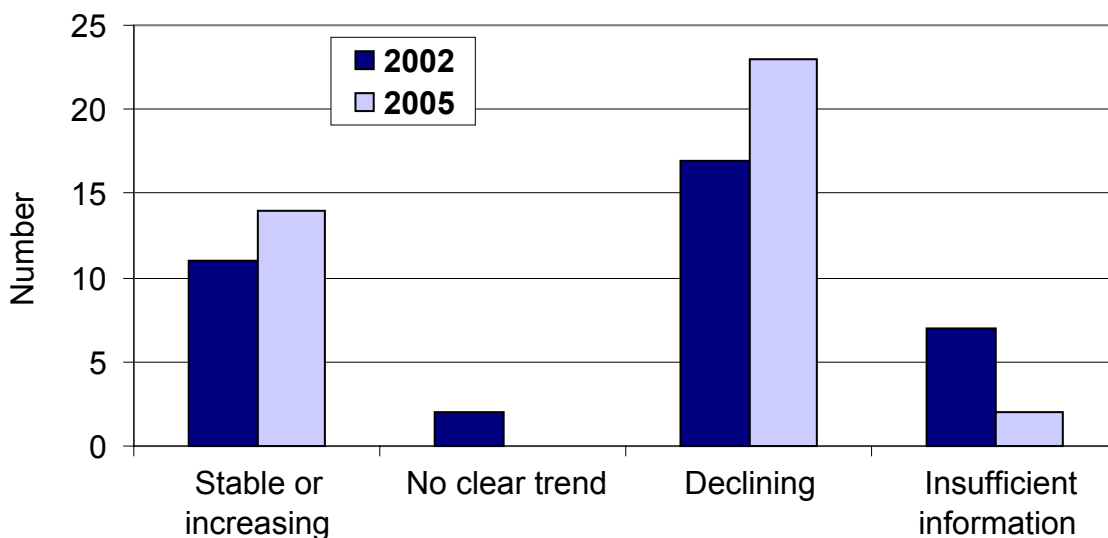
### Outcomes in terms of indicators

Trends for BAP priority species and habitats are used to measure progress towards the 2010 biodiversity target. Within Welsh Government strategies, these trends are also listed as specific indicators of progress for certain biodiversity outcomes.

The percentage of BAP habitats and species that are recorded as stable or increasing is the headline indicator of the **Sustaining the Environment** theme of the *Sustainable Development Scheme*, and trends in BAP species and habitats is also the indicator for Outcome 19a of the *Environment Strategy for Wales*.

In assessing progress using this indicator, data from the 2005 BAP reporting round has been compared to data from the 2002 round. This data is available through StatsWales.<sup>122</sup> The figures below show trends for BAP habitats and species in Wales for these years.

**Figure 1. Trends in Biodiversity Action Plan habitats in Wales, 2002 and 2005. The total number of priority habitats was 37 in 2002 and 39 in 2005**



Overall, the total number of priority habitats in Wales has increased by 5 per cent, from 37 habitats in 2002 to 39 in 2005. This is compared with no change in the UK, with the number of priority habitats remaining at 45 in both years.

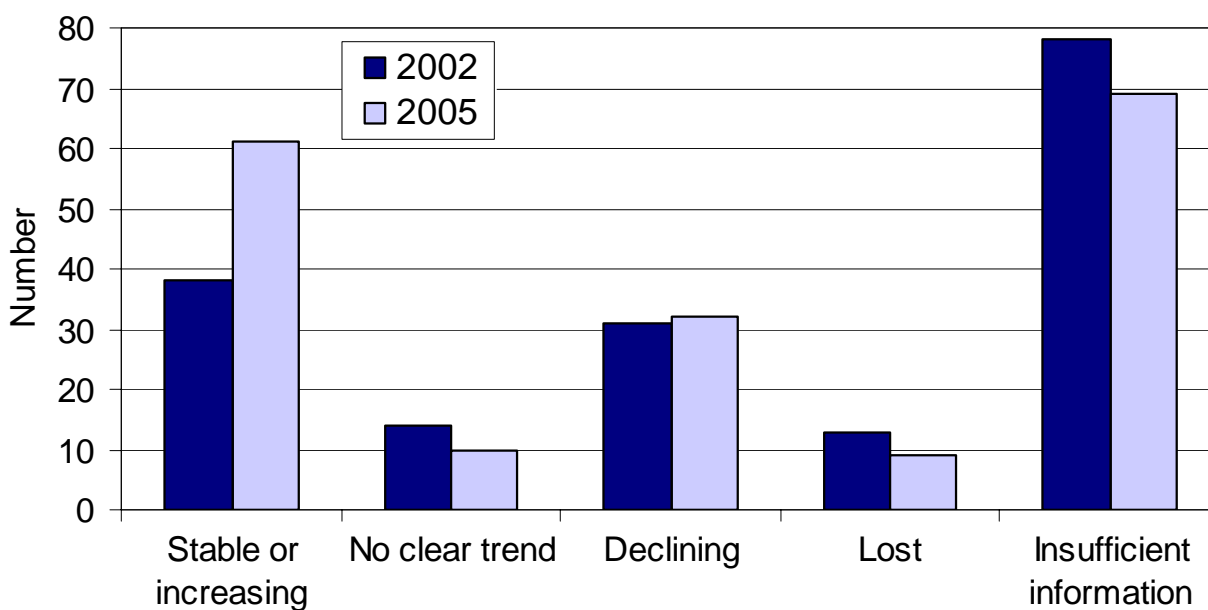
In 2005, the majority of BAP priority habitats in Wales were declining. The percentage of priority habitats declining has also gone up since 2002, with 59 per cent of priority habitats declining in 2005, compared with 46 per cent in 2002. This value is also higher than the percentage of the 45 priority habitats in the UK that were recorded as declining in 2005, with 38 per cent of the UK priority habitats declining.

<sup>122</sup> [State of the Environment](#), Indicator 19a Trends in Biodiversity Action Plan species and habitats, Statistics for Wales website [Accessed 1 April 2010]

However, the percentage of priority habitats in Wales recorded as stable or increasing has gone up since 2002, with 36 per cent of priority habitats stable or increasing in 2005, compared with 30 per cent in 2002. 36 per cent of UK priority habitats were also recorded as stable or increasing in 2005.

Since 2002, the percentage of priority habitats for which there was insufficient information to assess status in Wales has decreased, with insufficient information to assess the status of 5 per cent of the habitats in 2005, compared with 19 per cent in 2002. In the UK, the percentage of habitats for which there was insufficient information to assess status was higher than in Wales, with 24 per cent of habitats having insufficient information in 2005. In addition, 2 per cent of UK priority habitats showed no clear trend in 2005, whilst no habitats were recorded with this status in Wales for 2005.

**Figure 2. Trends in Biodiversity Action Plan species in Wales, 2002 and 2005. The total number of priority species was 174 in 2002 and 181 in 2005**



Overall, the total number of priority species in Wales has increased by 4 per cent, from 174 species in 2002 to 181 in 2005. This is compared to an increase of 18 per cent in the UK, from 391 species in 2002 to 474 in 2005.

In both 2002 and 2005, the status showing the highest percentage for priority species in Wales was that of insufficient information. The percentage of species for which there was insufficient information to assess status did however decrease in 2005, with 38 per cent of the species having insufficient information in 2005 compared with 45 per cent in 2002. Of the 474 priority species in the UK, there was insufficient information to assess the status of 23 per cent of species in 2005.

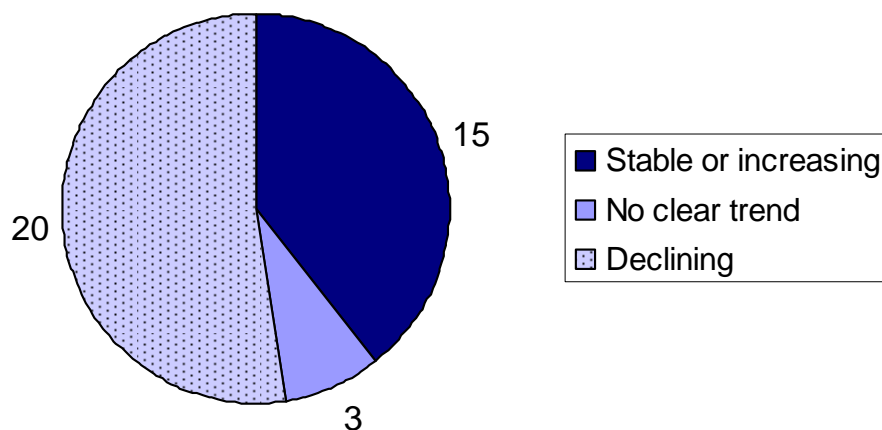
The next highest category in both years was the percentage of species that were recorded as stable or increasing. The percentage of priority species in Wales that were recorded as stable or increasing has increased since 2002, with 34 per cent of priority species in Wales recorded as stable or increasing in 2005, compared to 22 per cent in 2002. The percentage of the priority species in the UK that were recorded as stable or increasing in 2005 was higher than in Wales, with 43 per cent stable or increasing.

The percentage of priority species in Wales recorded as declining has remained stable, with 18 per cent in both 2002 and 2005. The percentage of priority species in Wales that were recorded as lost<sup>123</sup> has decreased since 2002, with 5 per cent of priority species recorded as lost in 2005, compared with 8 per cent in 2002. Of the 474 priority species in the UK, 24 per cent were declining and 2 per cent had been lost pre or since BAP publication in 2005.

In 2005, the percentage of priority species in Wales recorded as showing no clear trend decreased, with 6 per cent of priority species in 2005, compared with 8 per cent in 2002. Of the UK priority species, in 2005 9 per cent of species showed no clear trend.

More recent data on the trends for BAP habitats and species is available from BARS,<sup>124</sup> and is shown in the figures below.

**Figure 3. Wales trend for priority BAP habitats, using 2008 reporting trend estimates. The total number of priority habitats was 38**

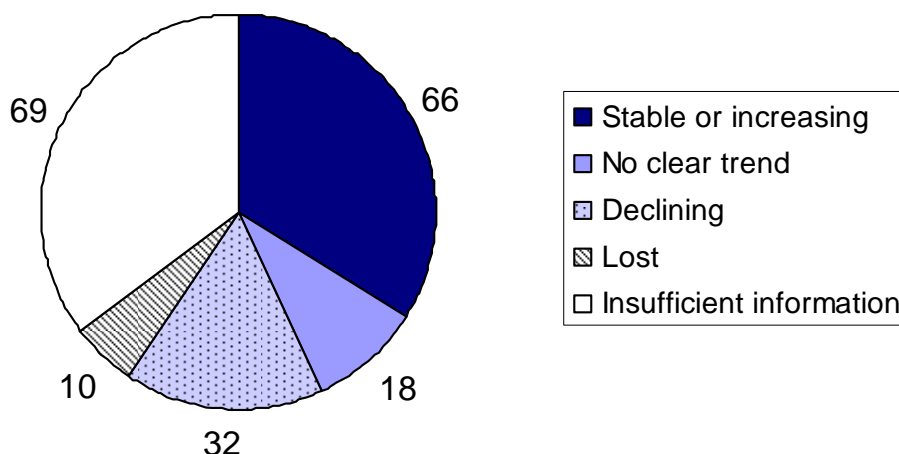


<sup>123</sup> Species 'lost' are those that are no longer reported as found within Wales.

<sup>124</sup> [UK & Country trend overviews](#), BARS website [Accessed 30 March 2010]



**Figure 4. Wales trend for priority BAP species, using 2008 reporting trend estimates. The total number of priority species was 195**



The 2008 BAP data shows that the majority of priority BAP habitats in Wales are declining (53 per cent), with only 39 per cent of habitats recorded as stable or increasing. However, this data does show an improvement from 2005, when 59 per cent of habitats were recorded as declining and 36 per cent were stable or increasing.

A lower percentage of priority BAP species in Wales were recorded as stable or increasing (34 per cent) compared with the priority habitats (39 per cent) but this value has remained stable since 2005, when 34 per cent was also recorded as stable or increasing.

Over a third of priority species in Wales were recorded as having insufficient information to assess their status in 2008 (36 per cent), although this is a slight decrease since 2005 when 38 per cent of species were recorded as having insufficient information. 16 per cent of priority species were recorded as declining in 2008, which is also a decrease since 2005, when 18 per cent were declining. 9 per cent of species were recorded as lost in 2008 compared to 6 per cent in 2005.

For both priority species and habitats there was a similar proportion showing no clear trend (9 and 8 per cent respectively) with both of these values having gone up since 2005 (6 and 0 per cent).

The 2005 Wales BAP report stated that the major constraint to UK species action plan progress in Wales was inadequate research and survey information.<sup>125</sup> There has been no apparent improvement in the situation. Baseline survey data is inadequate for a large number of priority Welsh species. In contrast, status data for Welsh habitats is particularly good due to the full Phase 1 habitat survey for Wales. The BAP report stated that whilst the main constraint to UK habitat action plan progress were

<sup>125</sup> The 2005 Wales BAP report is available from CCW.

problems with policy, legislation or designation, in Wales the major constraint to LBAP progress was the lack of funding or incentives.

The 2005 BAP report stated that loss of suitable habitat is a significant threat for a high proportion of priority species in Wales. The most common cause of habitat loss or degradation for species in Wales is due to agriculture. Whilst planning documents such as community strategies, unitary and local development plans and supplementary planning guidance were stated as successfully incorporating local biodiversity policies, difficulties in influencing corporate planning and agri-environment schemes were reported.

#### 4.3.2. Sustainable Development Scheme

##### *Actions carried out*

The Welsh Government's vision for the environment under the SDS encompasses biodiversity objectives. Progress towards this vision will be achieved through the various actions listed within the SDS. Progress towards **Action 9** on reviewing the WRDP, which specifically relates to biodiversity, is assessed here, but this action alone does not deliver the outcomes stated in the SDS for the Welsh environment.

In September 2008, Elin Jones, Minister for Rural Affairs, announced a review of the land management measures provided under Axis II of the Wales Rural Development Plan.<sup>126</sup> The review was driven by the adoption of the Common Agricultural Policy (CAP) Health Check proposals, originally outlined by the European Commission in November 2007, which require Member States to address new challenges such as climate change, carbon capture, water regulation and biodiversity in their Rural Development Plans from 2014.<sup>127</sup>

As a result of this review, a new sustainable land management scheme for Wales is being introduced, called **Glastir**. The new scheme will be introduced from January 2012, with transitional arrangements in place until 2014. Glastir will pay farmers to deliver specified environmental goods and services and will replace the existing agri-environment schemes (see Section 5.3).<sup>128</sup>

Concerns have been raised regarding Glastir by several stakeholders, and as a result the Rural Development Sub-Committee decided to undertake a short inquiry into the scheme.<sup>129</sup> The inquiry found that lack of information is a clear issue, with much uncertainty remaining among stakeholders regarding the new scheme and how it is to be implemented. The Sub-Committee called on the Welsh Government to address a

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<sup>126</sup> Welsh Assembly Government, Elin Jones (Minister for Rural Affairs), [Wales Rural Development Plan: Axis 2 Review](#), Cabinet Oral Statement, 5 May 2009

<sup>127</sup> Welsh Assembly Government, [Glastir. A guide to frequently asked questions](#) 1 March 2010 [Accessed 30 March 2010]

<sup>128</sup> Welsh Assembly Government, [Glastir, New Sustainable Land Management Scheme for Wales](#) 11 January 2010 [Accessed 30 March 2010]

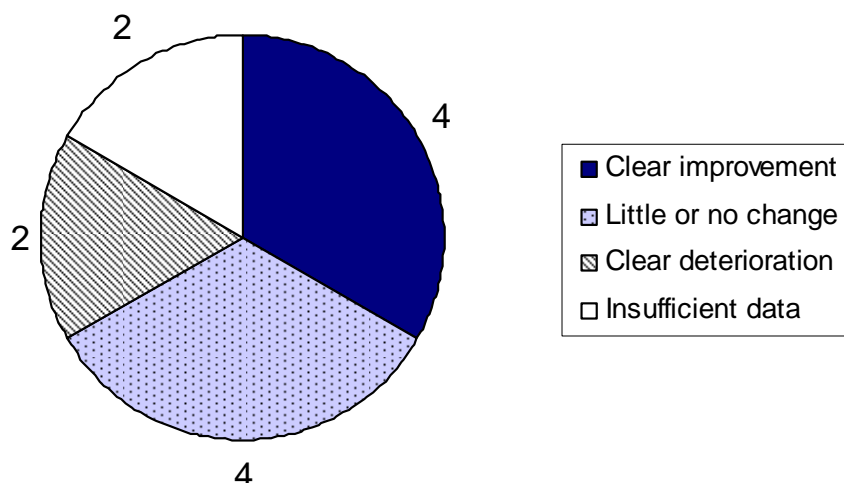
number of issues relating to accessibility of the scheme, resources and capacity, dual land use, capital works and common land, before introducing the new scheme.

### *Outcome in terms of indicators*

Progress made towards achieving the Welsh Government's vision for the environment under the SDS is measured using sustainable development indicators.<sup>130</sup> Data for each indicator is available through the Welsh Government's StatsWales website.<sup>131</sup> Using these indicators, Wales' individual progress is measured, along with a comparison of Wales' progress against that of the UK or England.

The progress of each individual indicator is shown in Annex B, and more detailed information on the indicator assessment is provided in Annex C.

**Figure 5. Wales' individual progress against the sustainable development indicators for the environment**



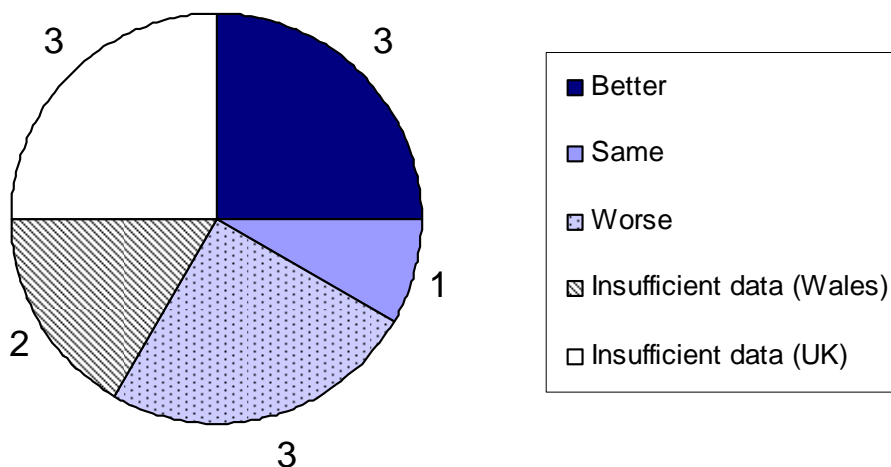
In terms of Wales' individual progress against the sustainable development indicators for the environment, four out of twelve indicators are showing clear improvement. However, four out of twelve indicators are also recorded as showing little or no change. Two indicators are recorded as showing clear deterioration, and two are also recorded as having insufficient data to assess progress.

<sup>129</sup> Rural Development Sub-Committee, *Inquiry into Glastir*, 2 March 2010

<sup>130</sup> Statistic for Wales, *Sustainable Development Indicators, 2009* 7 August 2009 [Accessed 30 March 2010]

<sup>131</sup> *Sustainable Development Indicators*, StatsWales website [Accessed 1 April 2010]

**Figure 6. Wales' progress against the sustainable development indicators for the environment when compared to the UK or England**



\* Explanation of categories. Better = clear improvement compared to little or no change/clear deterioration, or little or no change compared to clear deterioration. Worse = little or no change/clear deterioration compared to clear improvement, or clear deterioration compared to little or no change.

When comparing Wales' progress against the sustainable development indicators for the environment to the progress of a comparable region i.e. the UK or England, Wales shows better progress for three indicators. However, Wales is also showing worse progress than the UK or England for three indicators. One indicator is showing equivalent status for Wales and the comparable region. For two indicators there was insufficient data to assess Wales' progress, and for three indicators, a comparison of Wales' progress with that of the UK or England could not be made due to insufficient comparable data for the UK or England.

### 4.3.3. *Environment Strategy for Wales*

#### *Actions carried out*

There are a number of actions listed in both the First and Second Environment Strategy Action Plans that are particularly relevant for biodiversity (Annex D). In order to assess the progress of these actions, documents and statistics demonstrating the completion of these actions, or describing their outputs, were sought. Information on the progress of actions relating to biodiversity within the First Action Plan is reported on the BARS website, but this information is not up-to-date.<sup>132</sup>

Progress made towards the *Environment Strategy for Wales* was assessed in a Members' Research Service research paper published in July 2009, which included detailed information on the progress made towards all actions under the First Action

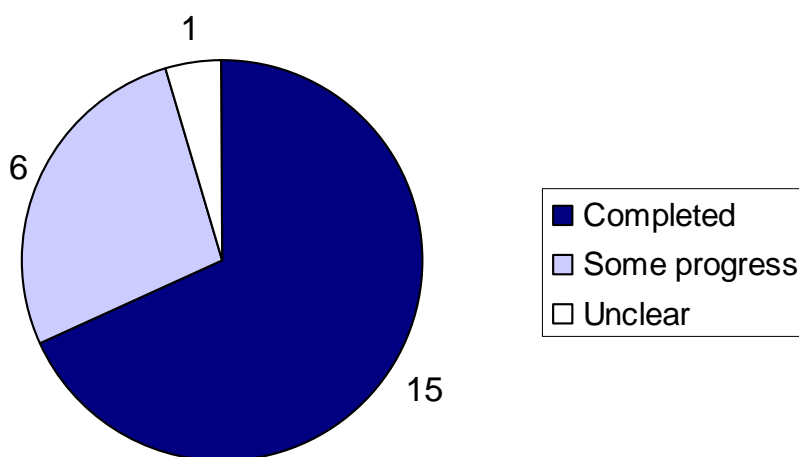
<sup>132</sup> [Wales Biodiversity Strategy Actions - 19 actions](#), BARS website [Accessed 1 April 2010]

Plan.<sup>133</sup> Progress reported in this research paper, represents an update of progress made towards actions relating to biodiversity in both the First and Second Action Plans. Detailed information on the progress of these actions is provided in Annex D.

Progress made towards actions has been classified as:

- Complete - where a tangible output has resulted according to the milestones listed within actions.
- Some progress - where some milestones have been achieved whilst others remain unfulfilled, or where work has begun towards milestones but is ongoing or delayed.
- Unclear - where evidence for assessing progress towards actions is difficult to acquire, leading to uncertainty as to whether or not relevant action has been completed.

**Figure 6. Progress made towards actions relating to biodiversity listed in the First Action Plan of the Environment Strategy for Wales**

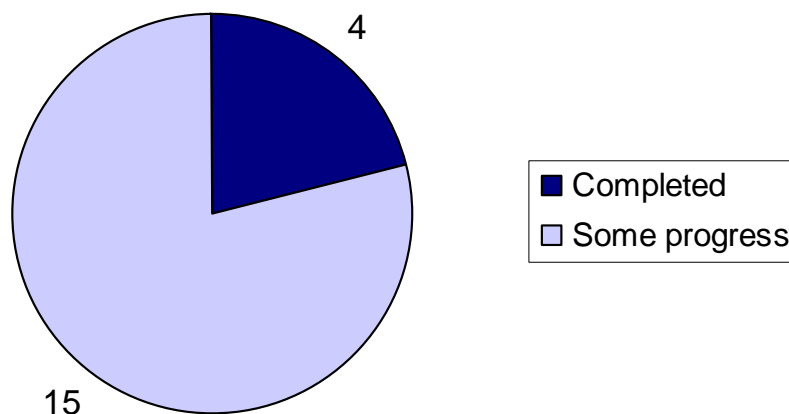


The majority of the actions set under the First Action Plan that relate to biodiversity have been completed (15 actions or 68 per cent). However, there are still actions which are not complete (6 actions or 27 per cent), and for one action, it was not possible to assess progress.

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<sup>133</sup> Members' Service Research Paper 09/024, [Environment Strategy and Action Plans: Progress Made](#), July 2009

**Figure 7. Progress made towards actions relating to biodiversity listed in the Second Action Plan of the Environment Strategy for Wales**



For the majority of Second Action Plan actions related to biodiversity progress has been incomplete (15 actions or 79 per cent). Four actions (21 per cent) have reached completion.

Where actions are designated as showing ‘Some progress’ in some cases this is because work has begun but has been delayed, for example the consultations on GM crops and the Welsh Soils Action Plan, or because work is yet to be applied nationwide, for example the development of the Networked Environment Region in South East Wales (see Section 3.1).

Many of the actions under the First Action Plan have, however, been designated as showing ‘Some progress’ because work is ongoing and is being continued under the Second Action Plan. Details of such actions are provided below.

Target 32 of the First Action Plan, which aimed to bring designated sites into favourable or recovering condition, constitutes a key piece of ongoing work, and there are a number of key actions under the Second Action Plan (action 1.1 (a), (b), (c) and (d)) which support this Target. These actions relate to the establishment by the Welsh Government of an Actions Database, which holds information for designated sites (Natura 2000 and SSSI), divided into management units, with proposals for action which would lead to appropriate conservation management and ultimately favourable condition of the habitats, species or geological features of those sites.<sup>134</sup> Further information is provided in Annex D.

Ensuring that designated sites and priority species and habitats within Wales are protected, along with all other biodiversity objectives, requires that public bodies and local authorities are aware of their duty to biodiversity and that there is cooperation

<sup>134</sup> Wales Biodiversity Partnership, [Wales Environment Strategy Outcome 21 – ‘Sites...in favourable condition...’. Achievements and future issues](#), WBPSG9 Paper 1 12 November 2009 [Accessed 30 March 2010]

between bodies in achieving biodiversity objectives. A number of actions under the Second Action Plan that are ongoing involve the provision of guidance to planning authorities, local authorities and police services, reflecting the Wales Biodiversity Partnership checklist, and communication to public bodies, local authorities, National Parks and Welsh Government departments of their *NERC Biodiversity Duty*.

Other key actions under the Second Action Plan relate to Target 46 of the First Action Plan, which covers the development of a framework for the management of sea around Wales and the implementation of the *Marine and Coastal Access Act*. This framework will take the form of a *UK-wide Marine Policy Statement*, and the Welsh Government has published a pre-consultation on the draft of the *Policy Statement*. More detailed information regarding management of the marine environment is provided in Annex D

Much of the outstanding ongoing work under the Second Action Plan relates to the integration of the ecosystem approach into the management of both land and sea. The Cambrian Mountains project is underway to test ways to optimise ecosystem services spatially. CCW is also supporting a range of activities to aid in the implementation of the ecosystem approach.

#### *Outcomes in terms of indicators*

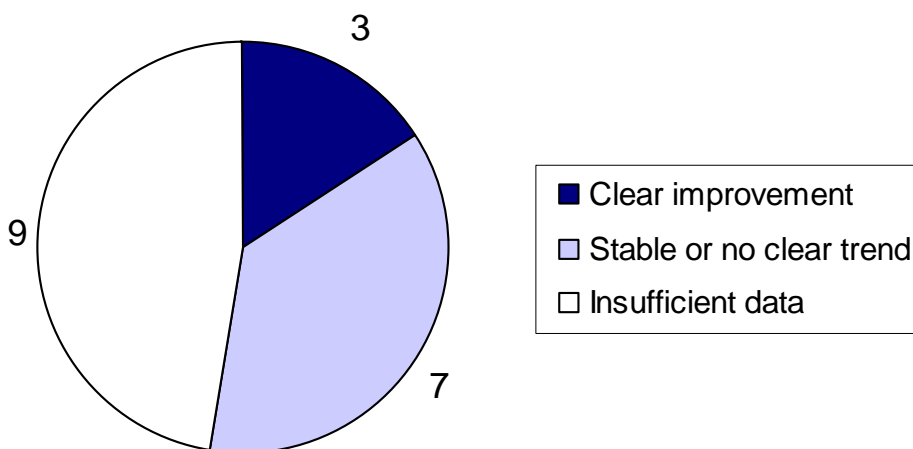
There are a number of outcomes relating to biodiversity that are supported by actions under both the First and Second *Environment Strategy for Wales* Action Plans. Progress against these outcomes is measured using Environment Strategy indicators. Data for each indicator is available through StatsWales.<sup>135</sup>

The progress of each individual indicator for the outcomes relating to biodiversity is shown in Annex E, and more detailed information on the indicator assessment is provided in Annex F.

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<sup>135</sup> [State of the Environment](#), Statistics for Wales website [1 April 2010]

**Figure 8. Progress made towards outcomes of the Environment Strategy relating to biodiversity when measured against their indicators**



For nine indicators of the *Environment Strategy for Wales* (47 per cent), there is insufficient data to assess progress, with indicators still not developed. Seven indicators (37 per cent) are stable or showing no clear trend, whilst only three indicators (16 per cent) are recorded as showing a clear improvement.

Indicator development is clearly an issue for the *Environment Strategy for Wales*. In particular, indicators have not yet been developed for assessing Wales' resilience to the impacts of climate change and to illustrate range and genetic diversity of species. Additional indicators are also yet to be developed to assess how favourable the wider environment is to biodiversity and the health of marine ecosystems. The only indicator that has been developed since its proposal in the *Environment Strategy for Wales* is the **trends in seabird population index**.

There are also issues relating to soils, with either insufficient data or no clear trend being detected by the indicators. In July 2009, the Countryside Survey of Wales reported no significant change in carbon concentrations in soils (0-15cm) between 1978, 1998 and 2007. However, this result does not match the findings of a previous study which showed a large decrease in soil carbon concentration, and the reasons for this difference are currently being investigated.

With regards to outcomes for which there is sufficient data to assess progress, there are important issues relating to the indicators that should be borne in mind:

- Trends in key Biodiversity Action Plans species and habitats are recorded as showing a clear improvement, yet 2002, 2005 and 2008 BAP reporting data show that the majority of BAP habitats in Wales are declining (see Section 4.3.1.).
- The trend in wild birds population index is recorded as stable or showing no clear trend, but the less abundant species, including some key birds of farmed habitats,



could not be included in the assessment because of statistical considerations. Therefore, this data is not representative of all birds in Wales. In addition, at the start of the British Bird Survey (BBS) in 1994, populations of many farmland and some woodland bird species had already shown steep declines in abundance at the UK-level and Wales-level over the previous 25 years. Short-term trends should thus always be interpreted with reference to this historic context.

- The percentage of features on Natura 2000 sites in favourable or recovering condition is recorded as stable or showing no clear trend, but the majority of species and habitats in Wales are in unfavourable condition (see Figure 9. and 10.)
- 54 per cent of species in Wales were in unfavourable condition in assessments made from 2000 to 2008. However, there is also large variation between species groups. 80 per cent or more of marine mammals and birds, for example, were in favourable or recovering condition. In contrast, 80 per cent or more of amphibians, butterflies and fish were recorded as in unfavourable condition.
- Within most habitat groups, between 40 and 50 per cent of features were in favourable or recovering condition in the assessments from 2000 to 2008. Again, variation occurred between habitats, with 100 per cent of caves and 75 per cent of reefs and sea caves in favourable or recovering condition, but 76 per cent of lowland grasslands and 69 per cent of coastal features were in unfavourable condition.
- The trends in seabird population index is recorded as showing clear improvement. Data produced from the Joint Nature Conservation Committee (JNCC) Seabird Monitoring Programme provides an annual update on the progress of Welsh seabirds from a network of sites around the Welsh coast. Guillemot, fulmar and kittiwake are used to provide trend indices. Variation among the different bird species' population trends does occur. For example, although the northern fulmar population index increased sharply to 152 in 1991, since 2005 the index has been falling, with a value of 123 in 2008. And whilst the population of common guillemots was in 2008 nearly treble that seen in 1986, the population of black-legged kittiwake has generally decreased since 1994, with an index value of 88 in 2008. The JNCC does suggest, however, that the three species seem to be faring better in Wales than in the UK as a whole.
- Input of hazardous substances to the marine environment is reported as showing a clear improvement. Data for 5-year average inputs of List I hazardous substances show a general downward trend for a range of industrial organic chemicals, pesticides, and metals since 1997. However, there were increases in inputs for tetrachloroethylene, chloroform, mercury and cadmium in 2008.

Figure 9. Percentage of species in favourable, recovering or unfavourable condition in Wales, 2000 to 2008.

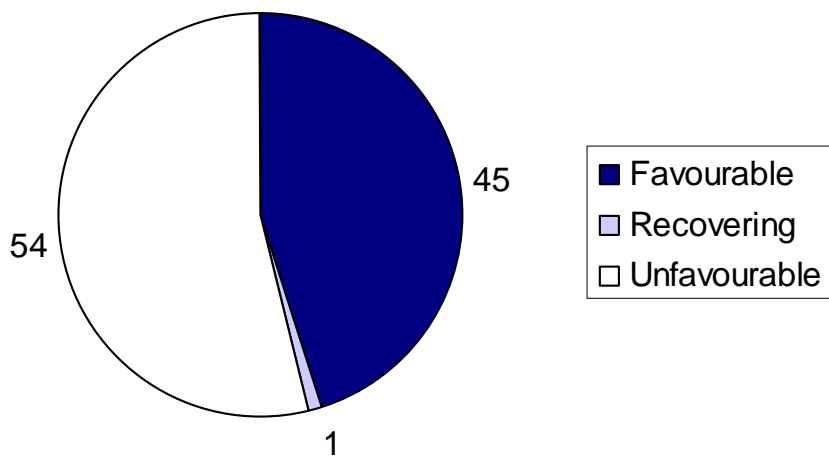
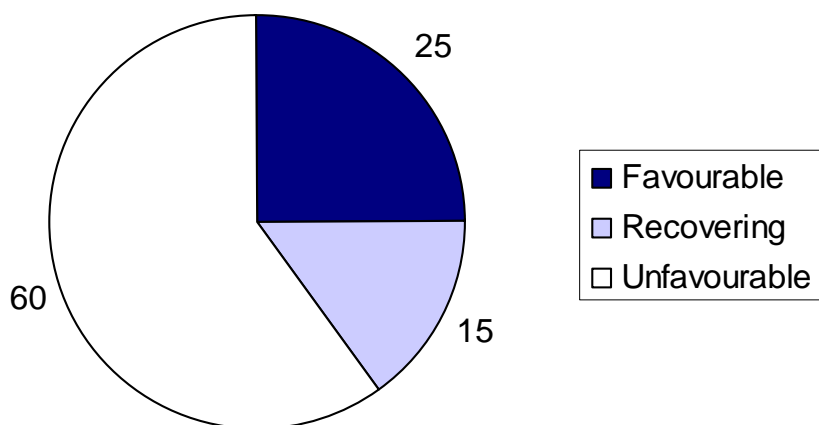


Figure 10. Percentage of habitats in favourable, recovering or unfavourable condition in Wales, 2000 to 2008.



## 5. Stakeholder views

A number of non-governmental organisations were contacted to ask for their views on the progress made to date on biodiversity targets in Wales, why the 2010 targets were not achieved and what the future of biodiversity policy in Wales should be. Four non-governmental organisations responded in detail and therefore while the information submitted by these organisations provides a useful insight into stakeholder views on this issue it should not be read as providing a comprehensive view of all non-governmental organisations with an interest in biodiversity policy in Wales.

### *5.1. Progress made*

There is a clear consensus among the stakeholders contacted that the 2010 biodiversity target has not been met. Despite this failure, it is recognised that some progress has been made.

According to the National Trust, to date, the area in which the Welsh Government has made the most concerted effort to meet biodiversity targets has been the Environment Strategy Outcome 21 and Target 32. Progress made includes:

- A project, database and stakeholder group has been established to drive delivery of Outcome 21. Through the Outcome 21 project, the condition of SACs and SPAs is much better understood, and there is a much better system for monitoring changes in condition. However, there is still a significant gap in knowledge of the condition of SSSI features, and there is at present no monitoring system in place which allows assessment of progress towards targets with confidence.
- The National Trust is the single largest owner of designated sites in Wales and has been working closely with CCW to ensure that sites under the National Trusts responsibility are appropriately managed. The **Special Sites Project** is a three-year partnership project which began in May 2008 and has been part funded by CCW. 154 actions are currently attributed to the National Trust, of which 33 per cent are either underway or completed.

According to the National Trust, progress has also been made through changes to the WBP, with the creation of species and habitat sub-groups allowing greater coordination and targeting of efforts.

With regards to Wales' woodland and trees, the Woodlands Trust is very positive about the Forestry Commission's First Steps Scheme, which is a simplified scheme for farmers for small areas of planting, and unlike the Better Woodland for Wales scheme, does not require a full environmental impact assessment.

## 5.2. Why has the 2010 target not been met?

Input from stakeholders highlights a number of key high-level issues regarding the Welsh Government's failure to meet the 2010 biodiversity target.

- Lack of political ownership and leadership.

The Woodland Trust stated that it is disappointed that the 2010 biodiversity target has not been met, but it is not surprised. The Woodland Trust feels that the target was imposed by Europe and does not feel that the Welsh Government took ownership of it. A recurring issue raised by stakeholders is that of the lack of political leadership and ownership, with the view that the 2010 biodiversity target was not given the priority that it deserved.

- Inconsistent and conflicting government policy.

The RSPB Cymru believes that the Welsh Government has continued to promote policies that prioritise development over biodiversity, and that Wales is still not developing sustainably within environmental limits. The RSPB Cymru highlights the issue of the trade-off approach, whereby wildlife loses out in the face of development. It presents the Cardiff Bay Barrage as an example, where the mudflats were protected as SSSI but the Barrage went ahead on economic grounds. The RSPB Cymru states that while Newport Wetlands were provided as part of the compensation for the loss of the Cardiff mudflats a significant number of birds that were displaced from Cardiff died over the first winter after the Barrage was built.

- Lack of shared understanding of the importance of wildlife.

Wildlife can deliver many benefits, but according to the RSPB Cymru, there has been little success in connecting the different agendas, such as health and education, and in appreciating the societal benefits that wildlife and biodiversity confer. It refers to *The Economics of Ecosystems and Biodiversity* study as an important piece of work, which demonstrates the value of biodiversity in an economic sense.

- Focus on process rather than action and outcomes.

Many partnerships and structures have been set up to deliver biodiversity targets, and there is a great deal of information on the conservation needs of different species and habitats, but the RSPB Cymru believes that there has been a real lack of outcomes and practical work on the ground. This is thought to be often linked to lack of resources and a lack of strategic view. The RSPB Cymru also raised the issue of clarity of responsibility for delivery of actions.

Further insight can be gained from stakeholders into issues relating to the delivery of action on the ground. A key issue raised is that there has been too much focus on individual sites and species. A number of issues have been raised regarding designated sites. A key aspect of this relates to the assessment of these sites and the potential for conflict over their management.

According to the Woodland Trust the need to achieve favourable status may dominate the management of sites, so that certain designated features are focused on. The Woodland Trust stated for example that on one of its designated sites it was required to focus on one species in order to bring the site into favourable condition rather than consider the conservation needs of the whole site. The Woodland Trust stated that a more flexible approach where wildlife isn't pinned down to particular areas will be particularly important considering the impacts of climate change and the need for species to adapt.

The National Trust states, in relation to designated sites, that there has been:

- A lack of funding for Section 15<sup>136</sup> management agreements to support management of designated sites and;
- A shortage of resource to increase the number of CCW staff on the ground who can invest the time required to establish management agreements.

CCW is responsible for the delivery of Section 15 management agreements in Wales, which are monetary agreements offered to landowners of SSSIs to support protection of the special qualities and important features of the site. Landowners may be offered payment, for example, to change grazing patterns or conduct conservation work. Section 15 management agreements therefore assist the achievement of favourable status of sites.

- Lack of legislation, tools and resources to tackle the needs of common land.

The *Commons Act 2006*<sup>137</sup> consists of two Parts. Part one requires local authorities in Wales to develop and maintain electronic Commons Registers to ensure that there is an up-to-date record of what grazing rights are in operation over different areas of common land in Wales. Part two makes provisions for the establishment of Commons Councils where interested commoners can form a council to take collective agreements on the management of common land.

In response to the Rural Development Sub-Committee's inquiry into the Future of the Uplands in Wales,<sup>138</sup> several stakeholders stated that the UK Government, the Devolved Administrations and nature conservation agencies struggle to obtain environmental management agreements on common land due to the complications in establishing who has grazing rights on the land and in getting a large number of graziers to come to an agreement over management options. However, without these environmental management agreements, they state that it is difficult to get designated sites on commons into favourable condition.

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<sup>136</sup> Section 15 of the Countryside Act and Rights of Way Act 2000 relates to areas of special scientific interest (SSSI) and states that the Nature Conservancy Council may enter into an agreement with owners, lessees and occupiers of any such land which imposes restrictions on their rights over the land, in order to conserve its flora, fauna, geological or physiological features.

<sup>137</sup> [The Commons Act 2006](#).

<sup>138</sup> [Inquiry into the Future of the Uplands in Wales](#), National Assembly for Wales website [Accessed 30 March 2010]

- Tir Gofal was poorly targeted or not suitably designed to deliver appropriate conservation management of special sites.

In order for designated sites to reach favourable conservation status, a certain grazing or land management regime may be required. However, the National Trust states that under Tir Gofal, there has not been a good match between what the scheme supports and what is required of a site in order to reach favourable condition. Particular management options were available under Tir Gofal, which might not have been appropriate to the biodiversity needs of an individual site. The National Trust states that greater flexibility in the options offered by agri-environment schemes is needed, and an increased focus on outcomes rather than on managing action.

The Farming and Wildlife Advisory Group (FWAG) is also of the opinion that there has not been enough support to help farmers reach biodiversity targets, and that there is need for greater recognition of the huge input that farmers have with regards to the issue of biodiversity.

A more general issue raised by other stakeholders in response to the Rural Development Sub-Committee's inquiry into Glastir<sup>139</sup> is that of:

- Inadequate monitoring of the condition of biodiversity, lack of accessible data, and failure to assess the impacts of activity such as agri-environment schemes on biodiversity.

### *5.3. What is the future direction of biodiversity policy?*

The input provided by some non-governmental stakeholders as to why the 2010 biodiversity target has not been met suggests areas which need addressing if Wales is to meet future biodiversity targets. Many of these issues relate to the achievement of practical work on the ground, but the target of halting and significantly reducing biodiversity loss also requires high-level changes.

The RSPB Cymru argues that the Welsh Government can encourage biodiversity conservation through a mix of regulation, financial investments, persuasion and the market, with all of these areas needing to be strengthened if future targets are to be met. The National Trust states that there is a need for cross-sector activity to promote the importance of biodiversity and to encourage people to connect with and value nature.

In terms of practical action, a key recurring theme raised by stakeholders is that of the need for increased focus on improving and protecting the wider environment, rather than focusing solely on individual sites and species. Much biodiversity exists outside of

designated sites, and efforts should be focused on making the wider landscape more supportive to biodiversity nationwide. Connectivity is a key aspect of this, with the need to consider the impacts of climate change.

The National Trust states that there is a need to augment the existing protected area network by expanding and buffering existing sites to increase functional connectivity. The importance of large landscape-scale habitat restoration and creation projects is advocated by the RSPB Cymru in order to make habitats and species more resilient to climate change. The National Trust also states that more joined-up large scale initiatives are needed so that resources and effort are targeted to ensure efficiency.

The Woodland Trust argues that in terms of future biodiversity policy, it is necessary to focus on Habitat Action Plans, providing viable habitats for species survival. The Woodlands Trust states its aim for the restoration of Planted Ancient Woodland Sites (PAWs). Ancient woodland provides habitats for many species that cannot be created elsewhere, yet these woodlands are not necessarily designated and so may not be protected. The Woodland Trust provide the example of improvements to the A470 are currently going ahead despite the fact that the trees that are currently being felled provide habitat for rare lichen, listed as a Section 42 species.<sup>140</sup>

The Woodlands Trust states that a shortage of resources means that prioritisation is needed, with the result that designated sites may be focussed on and that biodiversity found outside of these areas is not protected. More specifically, the National Trust states that further resources should be provided for monitoring, coordinating actions and tackling difficult issues.

The Woodland Trust also advocates the need to double the area of native woodland in Wales, which they state will not only support biodiversity by providing habitat for many species, but also confer other benefits such as carbon sequestration and social benefits.

Land management on farms has an important impact on biodiversity. RSPB Cymru told the Western Mail that the decline in bird species in Wales was largely because the birds' requirements were not widely integrated or consistent with modern food production methods.<sup>141</sup> They said that:

Many species are dependent on livestock grazing to create suitable habitat conditions which do not fit with the management practices the majority of modern farms need to employ to remain a viable business.

The widespread use of herbicides and fertilisers rather than targeting injurious crop weeds is impacting on the yellowhammer. The use of pesticides reduces invertebrate populations and this impacts on corn bunting.

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<sup>139</sup> Rural Development Sub-Committee Paper RDC(3) 04-10 Paper 1, [Inquiry into Glastir: Evidence from Wales Environment Link](#), 16 February 2010

<sup>140</sup> Woodland Trust Press Release, [Gone Forever for the Sake of three minutes](#), 11 March 2010 [Accessed 12 April 2010]

<sup>141</sup> Williams, Sally, [Biodiversity pledge is looking extinct](#), Wales Online, 19 January 2010 [Accessed 30 March 2010]

Bracken habitats are no longer managed through grazing, which damages numbers of pearl-bordered fritillary and high-brown fritillary (butterflies). And the stock reductions have led to changes in vegetation composition of habitats, particularly in the uplands for golden plover and curlew.

RSPB also told the Western Mail that:

The new agri-environment scheme Glastir is urgently needed and must have a strong focus on recovering wildlife. However, much more is needed, as many policies and projects fail to fully address their environmental impacts.<sup>142</sup>

The National Trust stated the need for agri-environment investment to be targeted on biodiversity needs, and to ensure that a clear majority of agricultural land is within the scheme.

However, the FWAG are concerned as to whether alteration to Glastir's points system by the Welsh Government, following the trials held in December, will be sufficient to increase the accessibility of the scheme. The FWAG states that another trial is needed.

The FWAG also stated, however, that it should be recognised that agri-environment schemes are only one part of the tool-kit, and that not every farmer was a member of Tir Cynnal and Tir Gofal. The FWAG argues that there is need for more small grants available more widely across Wales, not just for farmers.

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<sup>142</sup> *ibid*



## 6. Future

### 6.1. UN

At its tenth meeting in Nagoya, Japan, in October 2010, the Conference of the Parties to the Convention on Biological Diversity is due to adopt a revised and updated Strategic Plan for the CBD, including post-2010 biodiversity target(s).<sup>143</sup> An informal expert consultation on the revision and updating of the Strategic Plan for the CBD for the period 2011-2020 was held from 18 to 20 January 2010 in London.<sup>144</sup> The new Strategic Plan discussed will include a 2050 biodiversity vision, as well as 2020 targets and sub-targets, along with a means of implementation and monitoring and evaluating mechanisms.<sup>145</sup>

Work on the new Strategic Plan has attempted to improve on the previous plan in two key areas, namely:

- Providing a mission and targets for 2020 that are both achievable and more measurable, and with a clearer logic linking the vision, mission and targets with the available scientific evidence, including a scientific review of biodiversity projections prepared for the third edition of the Global Biodiversity Outlook.
- Providing a more effective framework for national implementation of the three objectives of the Convention including through national targets, with appropriate support mechanisms and a more robust approach to monitoring and review, at national and global levels, including an enhanced role for the Conference of the Parties in reviewing and implementation and learning from experience.<sup>146</sup>

Other proposed key components of the post-2010 Strategic Plan are:

- Drawing strong linkages between biodiversity, ecosystem services and human well-being;
- Addressing the economic value of biodiversity and ecosystem services;
- Making explicit the importance of biodiversity preservation for poverty eradication and the achievement of the Millennium Development Goals;
- Addressing both the direct and indirect drivers of biodiversity loss, in particular the latter. Indirect drivers include excessive consumption, for example of fossil

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<sup>143</sup> Convention on Biological Diversity, [Expert consultation on the revision and updating of the Strategic Plan of the Convention](#), Notification 28 October 2009 [Accessed 30 March 2010]

<sup>144</sup> *ibid*

<sup>145</sup> Convention on Biological Diversity, [Statement by Mr. Ahmed Djoghlafl Executive Secretary of the Convention on Biological Diversity](#), on the occasion of informal expert workshop on the updating of the strategic plan of the convention for the post-2010 period. 18 January 2010 [Accessed 30 March 2010]

<sup>146</sup> Convention on Biological Diversity, [Statement by Mr. Ahmed Djoghlafl Executive Secretary of the Convention on Biological Diversity](#), on the occasion of informal expert workshop on the updating of the strategic plan of the convention for the post-2010 period. 18 January 2010 [Accessed 30 March 2010]

fuels and meat, population growth, environmentally harmful subsidies, and a lack of public awareness about the harmful consequences of biodiversity loss;

- Promoting concerted action by all sectors of government and society in addressing biodiversity loss and;
- Linking such action with efforts to combat and adapt to climate change.<sup>147</sup>

## 6.2. EU

Discussions on a new biodiversity policy target for the EU post-2010 have taken place. It has been argued that the new target(s), up to 2050, should be specific, measurable, ambitious yet realistic, time-bound, and developed on the basis of rigorous scientific criteria.<sup>148</sup>

In April 2009 the European Commission conference on biodiversity in Athens issued a forward looking message regarding the future of biodiversity.<sup>149</sup> Key issues highlighted by the message were the need to improve communication about the loss of biodiversity and its consequences, the importance of thinking about ecosystem protection rather than species protection, and the need to ensure that available funds are channelled towards nature protection projects.

The importance of avoiding irreversible damage to ecosystems and their functions is also highlighted in the Council of the European Union's (hereafter the Council) conclusions on biodiversity post-2010.<sup>150</sup> In particular, the importance of biodiversity and ecosystems for securing social and economic stability and mitigating and adapting to climate change is highlighted. Moreover, the Council stresses that the frequent undervaluation of ecosystem services is a key issue underlying today's biodiversity crisis. The need to advance work on the economic valuation of biodiversity and ecosystem services, taking the TEEB study as a starting point, is stressed, and to incorporate this work into policy making and implementation.<sup>151</sup>

In line with this, the Council states the need to step up efforts to integrate biodiversity concerns into other policies, such as agriculture, food security, forestry, fisheries and energy, as well as spatial planning, transport, tourism, trade and development. In the Message from Athens, the need for biodiversity and other policies to be coherent and to mutually reinforce each other is emphasised. The importance of establishing **Green Infrastructure**<sup>152</sup> is highlighted, given the potential contributions to climate adaptation

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<sup>147</sup> *ibid*

<sup>148</sup> European Environment Agency, [Progress towards the European 2010 biodiversity target](#), EEA Report No 4/2009 22 May 2009 [Accessed 30 March 2010]

<sup>149</sup> [Environment: Commission calls for a shakeup in EU biodiversity policy](#), Europa website 28 April 2009 [Accessed 30 March 2010]

<sup>150</sup> [EU Council conclusions on biodiversity post-2010](#), Europa website [Accessed 30 March 2010]

<sup>151</sup> *ibid*

<sup>152</sup> Green Infrastructure is an interconnected network of natural areas, including agricultural land, greenways, wetlands, parks, forest reserves, native plant communities and marine areas that naturally regulate storm flows., temperatures, flood risk and water, air and ecosystem quality.

and mitigation objectives, preventing habitat fragmentation, increasing connectivity and maintaining species evolution processes.<sup>153</sup>

Thus whilst the importance of the Natura 2000 network and the need to fully implement the Birds and Habitats Directives are stressed, it is clearly recognised that the protection of biodiversity and the maintenance of ecosystem services goes well beyond protected areas and ecological networks. Along with the need to integrate biodiversity into other policy areas, the Message from Athens also highlights the need to develop specific policies on soils and invasive species.<sup>154</sup>

The Council has agreed on a long-term vision that, by 2050, EU biodiversity and the ecosystem services it provides 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.<sup>155</sup>

For this vision to be achieved, the Council has decided on the most ambitious headline target of the four that were proposed, of halting the loss of biodiversity and ecosystem 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.<sup>156</sup>

Action and implementation will be needed at multiple levels: international, EU, national and sub-national.<sup>157</sup>

### *6.3. National*

In response to the fact that the 2010 biodiversity targets for Wales will not be met, the RSPB submitted a petition to the National Assembly for Wales' Petitions Committee in November 2009 on halting biodiversity loss.<sup>158</sup> The petition called on the Welsh Government to take immediate action to prevent further biodiversity loss and to take proactive steps to restore important habitats and species. It also called on the National Assembly for Wales to conduct an inquiry into why the 2010 biodiversity target had been missed and make clear recommendations to the Welsh Government on what actions are needed to restore lost biodiversity.

The Minister for the Environment, Sustainability and Housing, Jane Davidson, responded to the petition by stating that, in light of the failure to meet the 2010 biodiversity target, the Welsh Government launched a review in September 2009 to identify the challenges and opportunities for achievement, and that the inquiry called for is underway.

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<sup>153</sup> [EU Council conclusions on biodiversity post-2010](#), Europa website [Accessed 30 March 2010]

<sup>154</sup> [Environment: Commission calls for a shakeup in EU biodiversity policy](#), Europa website 28 April 2009 [Accessed 30 March 2010]

<sup>155</sup> [EU Council conclusions on biodiversity post-2010](#), Europa website [Accessed 30 March 2010]

<sup>156</sup> *ibid*

<sup>157</sup> [Environment: Commission calls for a shakeup in EU biodiversity policy](#), Europa website 28 April 2009 [Accessed 30 March 2010]

The Minister also stated that the Welsh Government is reviewing and refreshing its overall approach to biodiversity policy, and that the development of a new **Natural Environment Framework** will take this work forward, and will complement the *Environment Strategy for Wales*. In order to carry out this work, she stated that the Government will be building on existing partnerships by working closely with the public, business and voluntary sector in Wales. The framework will take into account findings of the review, and will consider whether additional legislative powers would be helpful in securing further positive progress.

In terms of the future direction of biodiversity policy within Wales, the Minister stated in her written statement on biodiversity that, in light of the challenges facing Welsh habitats, including that of a changing climate, the Government's traditional focus on small sites and species protection will need to develop to look at the wider habitat as a whole. Whilst this will be important in helping biodiversity to adapt to climate change, the Minister also highlighted the importance of managing land to maintain ecosystem services, and the potential value of these services in helping to adapt to the effects of climate change.<sup>159</sup>

**The Land Use and Climate Change Group** was set up in January 2009 by the Minister for Rural Affairs, with the goal of identifying ways in which agriculture and rural land use can reduce the impacts of climate change and help adapt to it. The Group presented its findings, *The Land Use Climate Change Report*,<sup>160</sup> to the Welsh Government in March 2010. The report recommends an expansion of woodland over 20 years by about 100,000 hectares (ha) from the current 284,000 ha, whilst ensuring that the carbon stores in upland peats and lowland fens and mires are not undermined. It also recommends that woodland be managed to provide a sustainable source of fuel-wood and timber, as well as other services and products, including the long-term net carbon sink. This will help woodland biodiversity.

Within her statement on biodiversity, Jane Davidson also touched on the point that biodiversity is an issue that falls under many policies areas, stating that almost all actions that need to be taken to keep carbon in soil or arrest flood pressures will also benefit biodiversity. Indeed, Defra stated in its *Ecosystem Approach Action Plan 2007* that implementing an ecosystem approach to conserving, managing and enhancing the natural environment of the UK will be achieved by moving away from sector specific policies and towards a more integrated approach.<sup>161</sup>

Whilst there is a dedicated theme to biodiversity within the *Environment Strategy for Wales*, there are also many actions within the Strategy that relate to biodiversity but

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<sup>158</sup> P-03-264, [Help stop the alarming loss of wildlife and habitats](#), 4 November 2009

<sup>159</sup> Welsh Assembly Government, Jane Davison (Minister for the Environment, Sustainability and Housing), [Biodiversity](#), Cabinet Written Statement, 18 January 2010

<sup>160</sup> The Land Use and Climate Change Group, [Land Use and Climate Change Report](#) March 2010 [Accessed 30 March 2010]

<sup>161</sup> Defra, [Securing a healthy natural environment: An action plan for embedding an ecosystems approach](#) 2007 [Accessed 30 March 2010]

fall under other themes. The Welsh Government's *ICZM Strategy* and *Shoreline Management Plans*, for example, consider the impact of coastal activities on biodiversity. Work done to achieve Water Framework objectives under the *River Basin Management Plans* will also benefit biodiversity, and the Welsh Government's 2008 *Fisheries Strategy* encompasses the ecosystem approach. The Minister also presents the proposals under the new agri-environment scheme, Glastir, as a particular example of the Government's holistic approach to biodiversity conservation.

### *Ecosystem approach*

As highlighted by Jane Davidson's statement, a key aspect of future biodiversity policy will be the application of the ecosystem approach<sup>162</sup> in the management of land and sea. Whilst it is important to recognise the value of biodiversity in providing ecosystem services, scientists have argued that the application of the ecosystem approach should not be seen as a simple solution to the biodiversity crisis.<sup>163</sup> Workshops have been held between the British Ecological Society (BES) and the UK Biodiversity Research Advisory Group (UK BRAG), in which a number of issues relating to application of the ecosystem approach were raised. A key concern is that focusing solely on securing the maintenance of ecosystem services will not provide sufficient protection for individual species or habitats.<sup>164</sup>

Very high productivity in the delivery of a particular service, such as the delivery of food, fuel or fibre, can be achieved, for example, through intensive management and low biodiversity.<sup>165</sup> Furthermore, biodiversity enhancement may mean that the delivery of certain ecosystem services is reduced. The restoration of lowland heath, for example, may mean the removal of pine trees, which will increase the biodiversity value of the heath, but carbon values will be negatively affected.<sup>166</sup> A key issue raised at the workshops was how to manage the delivery of multiple services, and to protect biodiversity that ecosystem arguments cannot reach.

Concern was also raised that economic valuation is not the only basis on which to make choices or trade-offs, and that there are other ways in which the worth of the environment can be measured. The idea of mixing and matching value definitions was suggested, with focus on particular societal priorities, such as poverty alleviation,

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<sup>162</sup> The Ecosystem Approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.

<sup>163</sup> JNCC, [Ecosystem Services and the Ecosystem Approach](#), Notes of a joint workshop between the British Ecological Society (BES) and the UK Biodiversity Research Advisory Group (UK BRAG) 4 September 2008 [Accessed 30 March 2010]

<sup>164</sup> WWF, [Biodiversity and the EU Budget](#), Making the case for conserving biodiversity in the context of the EU Budget Review November 2009 [Accessed 30 March 2010]

<sup>165</sup> JNCC, [Ecosystem Services and the Ecosystem Approach](#), Notes of a joint workshop between the British Ecological Society (BES) and the UK Biodiversity Research Advisory Group (UK BRAG) 4 September 2008 [Accessed 30 March 2010]

<sup>166</sup> JNCC, [Developing the National Ecosystem Assessment \(NEA\)](#) Report of a joint workshop between the British Ecological Society (BES) and the UK Biodiversity Research Advisory Group (UK BRAG) 9 September 2009 [Accessed 30 March 2010]

delivery of water and mitigation of disease, providing a possible means by which biodiversity and ecosystems could be given value.<sup>167</sup>

Work is currently being carried out to help resolve these issues. The **UK National Ecosystem Assessment (NEA)**, for example, is currently being taking place, coordinated by the UN Environment Programme World Conservation Monitoring Centre and involving a number of Government, academic, NGO and private sector institutions.<sup>168</sup> The NEA began in mid-2009 and is the first analysis to look at the UK's natural environment in terms of the benefit it provides to both society and the economy.<sup>169</sup> The NEA looks at the current state and value of the UK's ecosystem services, with the intention to raise awareness of the importance of ecosystems and to influence policy making to ensure effective management in the future. This work should help to illuminate the way in which policy-makers reach decisions that involve trade-offs, where both biodiversity value and the value of ecosystem services will have to be weighed-up.<sup>170</sup> CCW is contributing to this work, and the production of an assessment for Wales is being coordinated by the Wales Environment Research Hub.<sup>171</sup>

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<sup>167</sup> JNCC, [Ecosystem Services and the Ecosystem Approach](#), Notes of a joint workshop between the British Ecological Society (BES) and the UK Biodiversity Research Advisory Group (UK BRAG) 4 September 2008 [Accessed 30 March 2010]

<sup>168</sup> [UK National Ecosystem Assessment](#), Living with Environmental Change website [Accessed 31 March 2010]

<sup>169</sup> Living with Environmental Change, [UK National Ecosystem Assessment, Progress and Steps Towards Delivery](#) February 2010 [Accessed 30 March 2010]

<sup>170</sup> JNCC, [Developing the National Ecosystem Assessment \(NEA\)](#) Report of a joint workshop between the British Ecological Society (BES) and the UK Biodiversity Research Advisory Group (UK BRAG) 9 September 2009 [Accessed 30 March 2010]

<sup>171</sup> Sustainability Committee Paper SC(3) 05-10 Paper 1 Annex A, [Evidence from the Countryside Council for Wales](#), 11 February 2010

## Annexes

### A. Abbreviations

AGAP	Anglesey Grazing Animals Partnership
BAP	Biodiversity Action Plan
BARS	Biodiversity Action Reporting System
BBS	British Bird Survey
CAIP	Coastal Access Improvement Programme
CAP	Common Agricultural Policy
CBD	Convention on Biological Diversity
CCW	Countryside Council for Wales
CPS	Crown Prosecution Services
Defra	Department for Environment, Food and Rural Affairs
EA	Environment Agency
EAW	Environment Agency Wales
EEA	European Environment Agency
EIA	Environmental Impact Assessment
EU	European Union
EU SDS	<i>EU Sustainable Development Strategy</i>
FCW	Forestry Commission Wales
FFC	<i>Farming, Food and Countryside – Building a Secure Future</i>
FSC	Forest Stewardship Council
FWAG	Farming and Wildlife Advisory Group
GAEC	Good Agricultural and Environmental Conditions
GDP	Gross Domestic Product
GM	Genetically Modified
HPMR	Highly Protected Marine Reserve
ICZM	Integrated Coastal Zone Management
JNCC	Joint Nature Conservation Committee
LBAP	Local Biodiversity Action Plan
LRC	Local Record Centre
MEA	Millennium Ecosystem Assessment
NEA	National Ecosystem Assessment
NERC	<i>Natural Environment and Rural Communities Act 2006</i>
NGO	Non-Governmental Organisation
NPA	National Park Authority
OSPAR	Oslo-Paris Convention for the Protection of the Marine Environment of the North-East Atlantic
PAWs	Planted Ancient Woodland Sites
PEBLDS	<i>Pan-European and Landscape Diversity Strategy</i>
RBMP	River Basin Management Plan
RIW	Rural Inspectorate Wales
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SDS	<i>Sustainable Development Scheme Wales</i>
SMP	Shoreline Management Plan
SMR	Statutory Management Agreement
SPA	Special Protection Area
SSSI	Sites of Special Scientific Interest

TEEB	The Economics of Ecosystems and Biodiversity
UN	United Nations
UKCIP	UK Climate Impacts Programme
WAG	Welsh Assembly Government
WBP	Wales Biodiversity Partnership
WFD	Water Framework Directive
WRDP	<i>Wales Rural Development Plan 2007-2013</i>



**B. Wales' individual progress against the sustainable development indicators for the environment under the Wales Sustainable Development Scheme, and a comparison of Wales' progress against progress in the UK or England**

Indicators	Wales' progress since (reference year)	Progress of comparable region
<b>Headline indicator</b>		
1. Percentage of BAP habitats and species recorded as stable or increasing	(a) Priority species status: clear improvement (2002)	No comparable data
	(b) Priority habitat status: little or no change (2002)*	No comparable data
<b>Supporting indicators</b>		
2. Trends in bird populations	(a) Short term changes: clear deterioration (2000)	UK: little or no change
	(b) Long term changes: insufficient data	UK: little or no change
3. Ecological impacts of air pollution – area of sensitive habitats exceeding critical loads for acidification and eutrophication	(a) Acidity: little or no change (1999-01)	UK: little or no change
	(b) Nutrient nitrogen: clear deterioration (1999-01)	UK: little or no change
4. Air quality – days when air pollution is moderate or higher	(a) Urban: clear improvement (1999)	UK: clear deterioration
	(b) Rural: clear improvement (1999)	UK: little or no change
5. River quality - the percentage of river lengths of good quality	(a) Biological: clear improvement (2000)	England: little or no change
	(b) Chemical: little or no change (2000)	England: clear improvement
6. Soil quality – soil organic carbon	(a) Insufficient data	N/A
7. Sustainable water resource management – the percentage of resource zones reporting target headroom deficits	(b) Little or no change (2001-02)	UK: no comparable data.

## C. Information on the sustainable development indicators for the environment of the Sustainable Development Scheme.

This information is available from the Statistics for Wales, [Sustainable Development Indicators 2009](#) document.

### Notes on indicators

The numbers below refer to indicator numbers.

1. Biodiversity Action Plan priority habitats are categorised as 'little or no change' for Wales because both the number of habitats 'stable or improving' and the number of habitats 'declining' have increased from 2002 to 2005. The UK assessment of progress for this indicator assesses priority species status and habitats together rather than separately.

2 (a). All groups in Wales are assessed as deteriorating. The UK assessment measures different categories of birds – farmland birds are assessed as deteriorating and woodland birds and seabirds show little or no change.

4 (a) & (b). UK assessments are shown for urban and rural ozone concentrations.

7. The UK Sustainable Development 'In Your Pocket' (SDIYP) 2009 measures total abstractions from non-tidal surface and groundwater and leakage losses.

### How progress is measured?

- **Progress for Wales** is determined by comparing the measure in the latest year available with its position in an earlier base year of 2000, or the nearest year to 2000 where data is available. Between these two years the measure may have deteriorated and then improved or vice versa. However, the measure of progress given in the table only reflects the overall change in the measure from the base year to its latest position and does not reflect fluctuations during the intervening years.
- **Progress against the indicator status for a wider region**, normally the UK, is taken from the UK SDIYP 2008 published by Defra where possible. The measure of progress for the comparable region has been calculated using 2003 or the nearest year to 2003 where data is available as the base year. In the previous edition Defra used a base year of 1999.
- As a basic rule of thumb, where an indicator measure has changed by less than 3 per cent, the measure of progress is set at 'little or no change'. The choice of 3 per cent as the threshold is arbitrary but has proven to be helpful in deciding on the most appropriate measure of progress. There are a few exceptions to this rule, where for example the indicator measure has been historically stable and/or almost at the level it can be expected to achieve. In such cases a smaller amount of change may be regarded as indicating an improvement or deterioration. In one or two cases the level of change may be greater than 3 per cent but the traffic light is nevertheless set at little or no change. This will apply where the limits of data collection imply that a larger percentage change is necessary for it to be regarded as showing a clear change. These rules are also adopted by Defra in the UK SDIYP and therefore allow the ease of comparisons.
- Most of the data used to compile the indicators come from Government sources and are National Statistics. The UK SDIYP booklet contains details of sources and notes for data relating to each indicator.

- National Statistics are produced in accordance with the National Statistics Code of Practice. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.

**D. Progress against actions relating to biodiversity listed within the First and Second Environment Strategy for Wales Action Plans.**

The progress of actions is recorded as either completed, showing some progress, or unclear.

Code	Action	Status	Details relating to milestones
<b>FIRST ACTION PLAN</b>			
19	Rollout CCW's Green Space Toolkit to increase the quality and quantity of public green space in Wales.	<b>Completed</b>	The <a href="#">Toolkit</a> has been published. It recommends that two hectares of greenspace are needed per 1,000 population, and no person should live more than 400 metres from their nearest area of natural greenspace.
25	We will establish a Water Framework Directive stakeholder group to support the implementation of the Directive in Wales.  The <a href="#">Water Framework Directive</a> aims to achieve good water status, which will confer benefits to biodiversity.	<b>Completed</b>	In 2007 the <a href="#">group</a> was established.
26	We will seek to manage increased access to the countryside effectively and develop best practice through supporting pilot projects on sustainable public recreation which can be replicated elsewhere.  Management of access and recreation is important given the potential negative impact that related activities could have on biodiversity.	<b>Completed</b>	<a href="#">Pilot studies</a> are in place, a <a href="#">Strategic Plan for Water Related Recreation in Wales</a> was published in 2008, and in July 2008 the <a href="#">Splash</a> water recreation challenge fund for Wales was launched. Funding is available for projects that secure new or improved public access to Wales' coasts and waters and for recreational and educational activities.
27	We will work with key partners – including CCW, National Parks and local government – to increase public access to the coast of Wales.	<b>Completed</b>	<a href="#">£1.5 million funding</a> has been allocated to all coastal local authorities for the new coastal access improvement programme. CCW are managing the programme on the ground by assisting the local authorities in the delivery of their local implementation plans.
28	We will ensure that delivering environmental outcomes is a key component of the new Rural Development Plan (RDP) and the provision of good quality advice on environmental issues will be a key priority of the Farm Advisory Service.	<b>Completed</b>	Axis II of the <a href="#">Rural Development Plan 2007-2013</a> is entitled 'Improving the Environment and Countryside' and covers measures targeting the sustainable use of agricultural land and forestry land.  The WRDP states that 'the objective of the Farm Advisory Service is to effectively empower farmers with the skills required to improve the sustainable management of their holdings in order to implement the requirements of SMR's [Statutory Management Requirements] and GAEC's [Good Agricultural and Environmental Conditions]'.

29	We will seek to ensure that European standard structural funds are used to deliver environmental outcomes that are compatible with the outcomes in the Environment Strategy.	<b>Unclear</b>	<a href="#">European Structural Funds programmes for 2007-2013</a> in Wales are delivered through the Welsh European Funding Office and are focused on creating sustainable jobs and growth in line with the European Union's Lisbon and Gothenburg agendas, and the policies and strategies of the Welsh Government. Whilst there are environmental objectives within these projects, it is not clear how many projects have delivered Environment Strategy outcomes.
31	We will use the opportunity of the revised Rural Development Plan to refocus and ensure greater targeting of our agri-environment and land management schemes to deliver our environmental priorities, in particular adaptation to climate change, tackling diffuse pollution from agriculture and enhancing biodiversity.	<b>Some progress</b>	The Farm Improvement Grant and Farm Enterprise Grant are no longer available under the WRDP for 2007-2013. The Woodland Grant Scheme was replaced by the Better Woodland for Wales Scheme in Spring 2006. Moderate alterations were made to Tir Mynydd in order to improve delivery of environmental priorities.  Further progress has been made under the action 5.18(c) of the Second Action Plan (see below).
32	We will bring designated sites into favourable or recovering condition through a suite of measures aimed at delivering more sympathetic management. Measures will include:  (i) Identifying land owned by the public sector, conservation charities and other organisations  (ii) Management agreements  (iii) Sharing best practice  (iv) Targeting of agri-environment schemes	<b>Some progress</b>	A <a href="#">detailed report</a> on progress in this action for 2007-2008 is available.
33	We will set priorities for landscape scale projects in order to build up the resilience of biodiversity to adapt to climate change, including habitat restoration and review the mechanisms that support this.	<b>Some progress</b>	The Wales Spatial Plan has been developed to enable integrated service delivery and there are opportunities to embed an approach based on the ecosystem approach.  The concept of a Networked Environment Region is being piloted in South East Wales, but this approach is yet to be applied to other Spatial Plan Areas.  CCW's proposals on planning and connectivity have been published and are available from CCW.
34	We will assess Woodland for Wales, the Welsh Government strategy for woodlands and	<b>Complete</b>	A <a href="#">five-year progress report</a> for the original

	trees, against the Environment Strategy and prepare an action plan setting out how we will address the issues.	<b>d</b>	2001 strategy was published in 2006.  The <a href="#">Woodland for Wales Action Plan</a> has been published and is available from the FCW website.
35	We will review the application of EIA (Semi-Natural areas and Uncultivated Land) regulation, seeking to ensure that they effectively deal with environmental issues relating to agricultural intensification.	<b>Completed</b>	<i>The Environment Impact Assessment (Uncultivated Land and Semi natural Area) (Wales) Regulations 2002</i> was transposed in 2007 to bring in the rural restructuring component. The new regulations are called <i>The Environmental Impact Assessment (Agriculture) (Wales) Regulations 2007</i> . They came into force on 31 October 2007 dealing with the environmental issues relating to agricultural intensification.
36	The Wales Biodiversity Partnership will be reconfigured to provide a leadership role and an expert steer on priorities for action on biodiversity in Wales.	<b>Completed</b>	Increased number and broadened range of representatives on the steering group.  Further progress has also been made under action 1.4 of the Second Action Plan (see below).
37	We will develop a Biodiversity Framework for Wales explaining the roles, remits and processes essential to biodiversity protection and enhancement in Wales.	<b>Completed</b>	In 2008 the <a href="#">Wales Biodiversity Framework</a> was published and is available online.
38	We will bring together standardised guidance to the development of local wildlife site systems.	<b>Completed</b>	The <a href="#">Wildlife Site Guidance Wales</a> was published in February 2008 and is available online. This guidance provides a common point of reference for the most effective selection of Local Wildlife Sites within Wales. By providing essential support between and around designated sites, these Local Wildlife Sites should help to create a more resilient network for nature within Wales.
39	We will develop GM crop coexistence arrangements, which will take account of the potential impact of GM crops and associated herbicide regimes on biodiversity.	<b>Some progress</b>	The <a href="#">consultation</a> on Proposals for Managing the Coexistence of GM, Conventional and Organic Crops in Wales is available online.
40	We will reduce the environmental impacts of pesticides on farm biodiversity and promote the sustainable use of pesticides through regulatory and voluntary measures.	<b>Completed</b>	The <a href="#">UK Pesticides Strategy</a> and the <a href="#">Code of Practice for Using Plant Protection Products</a> have been published. In 2007, the Environment Agency <a href="#">reported</a> a reduction in the percentage of samples from rivers containing pesticide concentrations above the threshold of 0.1ug/l in England and Wales.
42	We will develop a soil action plan focused on:  (i) good soil management in agriculture and forestry	<b>Some progress</b>	The <a href="#">Welsh Soils Action Plan</a> consultation closed on 13 June 2008.

	<p>(ii) integration of soil protection into guidance on land-use planning policy and its implementation</p> <p>(iii) developing an appropriate set of indicators for soils in Wales</p> <p>(iv) working with CCW and the Environment Agency to ensure wastes and pollutants deposited on land historically or currently do not impair long-term soil functions</p> <p>(v) a risk-based approach to managing soil functions</p> <p>(vi) promoting education and access to information on soil</p>		
43	We will use CCW's landscape characterisation work as the potential basis for assessing the impacts of different land management choices on our landscape. This information will be used to develop broad visions and priorities for different landscapes in Wales and will inform our priorities particularly for agri-environment and forestry.	<b>Completed</b>	CCW has developed <a href="#">LANDMAP</a> which is the main source for landscape assessment information. In 2008, CCW won a Landscape Institute Strategic Landscape Planning Award for developing this map of Wales that shows character areas, capturing geology, landform, biodiversity and other features. It is being used in all local authorities and will eventually cover the whole of Wales.
46	We will seek broadly defined powers within the proposed Marine Bill so that Wales can develop a distinct approach to marine issues. We will develop proposals for, and consult widely on, a detailed framework for the management of sea around Wales based on an ecosystem approach following publication of the Bill.	<b>Some progress</b>	<p>A draft Marine Bill was published on 3 April 2008 for public consultation.</p> <p>The Bill received Royal Assent on 12 November 2009 and is now an Act of Parliament.</p> <p>Work on developing a framework for the management of Welsh seas is taking place under action 2.6 of the Second Action Plan (see below).</p>
47	Integrated Coastal Zone Management – we will publish a new Wales strategy on ICZM in the Spring of 2006 and report annually on progress against the key targets it contains.	<b>Completed</b>	The <a href="#">ICZM Strategy</a> was published in March 2007 and <a href="#">progress reports</a> for 2007-2008 and 2008-2009 are available online.
48	We will develop a Fisheries Strategy to support a viable and sustainable fishing industry in Wales, which minimises its impact on the environment.	<b>Completed</b>	The <a href="#">Fisheries Strategy</a> was published in July 2008. <a href="#">Implementation plans</a> have also been published. CCW has stated that it will continue to provide advice on emerging issues, such as scallop dredging.
59	We will provide guidance to enable community strategy partnerships to address the issues in the Environment Strategy.	<b>Completed</b>	<a href="#">Updated guidance</a> was published in March 2008.

<b>SECOND ACTION PLAN 2008-2011 (all of these are amber)</b>			
1.1	Work towards the Environment Strategy target to bring designated sites into favourable condition by:		
	(a) Completing the remaining data collection within the Actions Database for international sites by 2009 and for the remaining Sites of Special Scientific Interest (SSSI) by early 2010 (as a baseline for the 2015 SSSI target) and notifying the responsible parties of the action required.	<b>Some progress</b>	From 19 November 2009, <a href="#">actions data</a> for Natura 2000 sites and those SSSIs in voluntary and public sector ownership had been entered. A web based view of this data has been developed and will be available for partners via an extranet login.
	(b) Producing a programme for 2009-2012 which will establish an appropriate liaison and management regime to ensure effective management of international sites.	<b>Completed</b>	In 2007-2008, <a href="#">Management Plans</a> for all Natura 2000 sites (SACs and SPAs) were written and published on CCW's website.  SACs and SPAs were divided into practical 'management units' (e.g. landholdings, or marine units) to enable more precise communication about the needs of different parts of these often large sites. All this data was captured in CCW Actions database.  Partners will be able to communicate directly to the CCW officer responsible for any unit and report the status of that action, including when planned and completed.
	(c) All organisations (including relevant Welsh Government departments) to engage with CCW actions lists (produced by CCW from the Actions Database noted above), produce own costed plans and milestones, and commence implementation where they can be delivered within available resources, by December 2008.	<b>Some progress</b>	Spreadsheets with the data for individual organisations have been shared with the National Trust, EAW, FCW, National Parks, RSPB, Wildlife Trusts and a number of Welsh Government departments. Local authorities and other Welsh Government departments will follow shortly. Data has been discussed, prompting action on the ground. Data has also been used to inform strategy and policy making, including the development of <b>Glastir</b> and <b>River Basin Management Plans</b> . CCW staff are now using the database to plan and monitor annual works plans and report achievements to the Welsh Government.  Unable to find information on costed plans and milestones.
	(d) Alongside this, Welsh Government to consider the need and potential for policy, financial and legislative change by end of 2009 to provide additional mechanisms to get sites into favourable condition.	<b>Some progress</b>	A number of policy changes have been implemented. The Welsh Government has issued improved guidance, reflecting the Wales Biodiversity Partnership checklist, to planning authorities, local authorities and police services. The Government has also held meetings to provide a clear role to the Crown Prosecution Services (CPS) and the Rural Inspectorate Wales (RIW) when dealing with



			designated sites. Improvements have been made to the habitats regulations and a list of more general future legislative changes has been developed.
1.2	Integrate the Natural Environment and Rural Communities Act (NERC) Biodiversity Duty into all aspects of Public Sector Spending as an ongoing activity.	<b>Some progress</b>	<p>Engagement with other Public Sector organisations is ongoing. All Welsh Government Departments have been contacted regarding their response to the Biodiversity Duty.</p> <p>The <i>NERC</i> duty is stated in <a href="#">CCW's remit letter 2009-2010</a>. <a href="#">EAW's 2009-2010</a> remit letter states that the EAW has biodiversity duty, but the <i>NERC</i> duty is not explicitly mentioned.</p> <p>The <a href="#">WBP website</a> has case studies of how Local Authorities and National Parks, FCW, Welsh Government and Welsh Water are complying with the <i>NERC</i> duty.</p> <p>The Department for the Economy and Transport has updated its Biodiversity Guidelines for Infrastructure and Regeneration activity, and integrated biodiversity into its sustainable development scheme.</p> <p>Meetings were held with Biodiversity Champions for all Local Authorities in 2008-2009 to ensure that they fulfil their obligations. Goals were set and further meetings arranged for 2009-2010.</p>
1.3	Provide increased policy protection for wildlife habitats and sites around and between international and national sites (including linking through green connectivity and other mechanisms), addressing the priorities identified in Section 42 of the <i>NERC</i> Act (2006): ongoing.	<b>Some progress</b>	<p>Specific guidance on dealing with Section 42 species of has been provided for Local Planning Authorities and Section 42 guidance for others is currently in production.</p> <p>The Glamorgan Biodiversity Advisory Group and the Gwent Biodiversity Action Group have developed a protected species planning guidance '<a href="#">Think Wildlife, Think Protected Species</a>' for planning officers in South East Wales, based on initial work by the Avon Wildlife Trust. The guide only deals with the protected species found in the Glamorgan and Gwent areas.</p> <p>Improved arrangements for monitoring and surveillance are currently being developed. All local authorities are expected to implement use of the Green Space Tool Kit during 2009-2011.</p>
1.4	The Wales Biodiversity Partnership (WBP) will develop and implement structures and	<b>Completed</b>	The WBP has developed and implemented these <a href="#">structures and processes</a> and this

	processes to identify actions to meet its new BAP targets for Wales (post UK BAP review), by March 2020, sharing this information with BARS.		information is being shared with BARS.  Nine new ecosystem groups have been established, with involvement of a wide range of stakeholders, supported by specialist groups for Species, Policy and Non Native Invasive Species. A number of organisations are improving their use of BARS and LRC services including FCW, CCW and EAW.
1.5	We will continue to support the efforts of the Partnership Against Wildlife Crime, the Police, CCW, EAW and other stakeholders such as RSPB in enforcing the law against wildlife crime, for habitats, fisheries and species.	<b>Some progress</b>	Wildlife Crime Secondments continue within CCW, FCW and EAW. The Police and the four CPS regions within Wales have established a joint forum on Wildlife Crime within Wales. A joint seminar involving representatives from all four CPS regions, Police officers and representatives from the Magistrates Association was held in February 2009.  On 21 July 2009 Defra and the Welsh Government launched a consultation on the <a href="#">Fairer and Better Environmental Enforcement Project</a> to improve environmental enforcement, which ended on 14 October 2009. The proposals include introducing new regulator-imposed civil sanctions to help create a better graduated system of enforcement; and initial proposals to strengthen the role of the criminal courts in sentencing the work cases, which would continue to be prosecuted. It is proposed that the EA, Natural England and CCW should be able to use the civil sanctions. Civil sanctioning powers would be made available by the Regulatory Enforcement and Sanctions Act 2008.  The <a href="#">Marine and Coastal Access Act 2009</a> also creates offences relating to the protection of wildlife. As part of the argument towards the necessity of a new Marine Act, issues were raised regarding the complexity and out-datedness of much marine legislation in the <a href="#">Twelfth Report of Session 2003-2004 on Environmental Crime: Wildlife Crime</a> .
2.6	Develop a framework for management of seas and coasts around Wales in a collaborative way: ongoing.  Specifically:  (a) Set out an appropriate time how the proposals in the Marine Act will be implemented in Wales, and will contribute towards sustainable development, the ecosystem approach and the protection and	<b>Some progress</b>	The <i>Marine and Coastal Access Bill</i> is now an Act and the Welsh Government are making progress with regards to its implementation.  The Marine Consents Unit (MCU) has taken over responsibility from the Marine and Fisheries Agency (MFA) for the administration and issuing of licenses in Wales under Part II of the <i>Food and Environment Protection Act 1985</i> (FEPA) and for <i>Coast Protection Act 1949</i> (CPA) applications. In future the MCU

	recovery of biodiversity.		<p>will also have responsibility for Marine European Protected Species Licensing and the new licensing regime under the <i>Marine and Coastal Access Act 2009</i>.</p> <p>The Welsh Government published its consultation paper '<a href="#">Protecting Welsh Seas – a draft strategy for marine protected areas in Wales</a>' in 2009. The strategy explains how the Government will use Marine Protected Areas (MPAs) to help protect and improve ecosystems in Welsh waters and fulfil international and legal obligations. The Government plans to identify sites for MPA creation by 2012.</p> <p>A <a href="#">pre-consultation on the draft UK Marine Policy Statement</a> has been published by the Welsh Government. The Marine Policy Statement will provide the high level policy context for Marine Plans and set the direction for marine licensing and other authorisation systems. A formal consultation on the Policy Statement will be held in summer 2010.</p>
2. 7	<p>Ensure that a new system of marine spatial planning takes full account of environmental interests and is consistent with an ecosystem approach. Specifically:</p> <p>(a) Develop and use other tools (marine objectives, zoning and sensitivity mapping) to develop our approach to the use of marine plans in Welsh seas.</p>	<b>Some progress</b>	<p>Work is underway to introduce Marine Spatial Plans by 2013-2014. In support of this work, CCW is developing tools including marine sensitivity mapping for zoning, which will assist, for example, the identification of HPMRs and fisheries management.</p>
2. 8	<p>Designate Highly Protected Marine Reserves (HPMR) by 2012 to support ecosystem recovery and meet International, European and UK commitments to develop an ecologically coherent, representative and well managed network of marine protected areas.</p>	<b>Some progress</b>	<p>The Welsh Government and CCW are working to deliver HPMRs by 2012. This is being supported by a Steering, Technical Advice and Stakeholder Group. The proposed areas of designation are expected to be ready for consultation in late 2011 or early 2012.</p> <p>CCW has produced the report '<a href="#">Selecting and implementing Highly Protected Marine Reserves in Wales</a>'. This report sets out a framework for a process to establish HPMRs in Welsh seas. This includes a suggested timeline for the process.</p>
3.11	<p>Continue to develop the Coastal Access Improvement Programme, including delivery of the All Wales Coast Path.</p> <p>(a) By end March 2009 deliver, for coast path, 35km of new access for walkers, 10km for cyclists, 15km of new bridleway and 15kms of new access which meets least restrictive</p>	<b>Some progress</b>	<p>Work on the Coastal Access Improvement Programme (CAIP) is continuing with £2m allocated for 2009-2010. This Welsh Government funding will be matched over the next five years by £3.9 million in convergence funding following a successful bid for funding under the Environment for Growth theme by CCW.</p>

	access standards.		Details on the lengths of route delivered (new routes, access for cyclists etc) will be confirmed at the mid-term review of the CAP, which began in Summer 2009.
3.13	By end of march 2010 – all local authorities to have completed green space assessment using CCW toolkit and grant aid from CCW.	<b>Some progress</b>	<p>At the end of March 2009, nine local authorities had completed green space improvements using grant aid from CCW, six had assessments due for completion by March 2010, one had delayed starting work and a further two had information sent to them from CCW about Greenspace improvements.</p> <p>The Green Flag Award Scheme is a complimentary activity and does not represent the main assessment of progress towards this action. The Awards provide an independent quality standard for parks and green spaces with 32 sites across Wales judged as reaching that standard in 2008-2009.</p>
4.15	Ensure that the Water Framework Directive river basin planning process delivers an integrated approach to the management of pressures on the water environment and the sustainable management of water resources by December 2009.	<b>Completed</b>	The WFD places an emphasis on partnership working and engagement. To gain this engagement the EA (competent authority for implementing WFD) have run a series of workshops and the Water Policy Branch have facilitated internal workshops to engage with key cross-cutting Welsh Government policy leads. The <a href="#">River Basin Management Plans</a> have been published.
4.16	In support of this, develop a revised Water Resources Strategy for Wales by December 2008, accounting for climate change.	<b>Completed</b>	The Water Policy Branch have worked closely with the EAW in the development of their <a href="#">Water Resources Strategy for Wales</a> , published in July 2009. The Strategy sets out how water resources should be managed in Wales to 2050 and beyond. The Strategy takes into account climate change and uses the UKCIP scenarios as the basis for its planning. Following the publication of the 2009 UKCIP scenarios, the EA will be reviewing the scenarios and making any adjustment to the strategy as required.
5.18	A technical project group will be established to set out leads to deliver the following actions in 2008 -09:		
	(a) The ecosystems assessment framework will be developed by CCW/EA/FCW and Welsh Government to identify conflicts and test tools to resolve these.	<b>Some progress</b>	CCW, EAW, FCW and the Welsh Government have worked on agreeing the principals of applying the <b>ecosystem assessments framework</b> and mapping out ecosystems related projects in Wales, identifying links with UK strategic projects. The project plan is currently being drafted.

	<p>(b) The Cambrian Mountains' project will be used to test ways to optimise ecosystem services options spatially, supported by Ceredigion, Gwynedd and Powys Local Authorities, the Princes Trust, CCW/EA/FCW and Welsh Government and backed up by modelling analyses.</p>	<p><b>Some progress</b></p>	<p>Baseline data has been collated to establish the current condition of ecosystem services. The draft pilot area has been proposed within the <a href="#">Cambrian Mountains</a> to test effects of land use change. The economic analysis is being undertaken and carbon footprint exercises are currently underway on a selection of farms.</p>
	<p>(c) The requirements on ecosystem services delivery will be reflected in the land management options that are consulted on as part of the review of Axis II of the Rural Development Plan for Wales 2007-13.</p>	<p><b>Some progress</b></p>	<p>The review of Axis II of the WRDP has resulted in the development of <a href="#">Glastir</a>. Glastir which will be implemented from 2012, encompasses the concept of ecosystems services delivery and will be focused upon delivering climate change, water management and biodiversity outcomes.</p> <p>CCW is supporting work towards the development of Glastir, and also the work of the Land Use and Climate Change Group (see Section 6.3), by providing appropriate advice on ecosystem services and landscape management.</p>
	<p>(d) Further work is to be done on developing management actions and planning for delivering an ecosystems approach to the coastal/marine environment (from 2009).</p>	<p><b>Some progress</b></p>	<p>CCW is working closely with the Welsh Government and other stakeholders to deliver an ecosystem approach to managing the marine environment. The <i>Marine and Coastal Access Act 2009</i> is now in place, and work is ongoing to develop new regimes for marine planning, including marine nature conservation. CCW also worked with the Welsh Government on the <a href="#">Wales Fisheries Strategy 2008</a>.</p> <p>A CCW report outlines the measures needed to carry out the <a href="#">ecosystem approach</a> in Welsh waters.</p> <p>CCW is undertaking a Wales-wide vulnerability assessment of climate change impacts on Welsh habitats, including the marine environment, by March 2011.<sup>172</sup></p>

<sup>172</sup> Sustainability Committee Paper SC(3) 05-10 Paper 1 Annex A, [Evidence from the Countryside Council for Wales](#), 11 February 2010

**E. Progress made towards outcomes of the Environment Strategy relating to biodiversity when measured against their indicators.**

Outcome	Indicator	Progress
8. Wales has improved resilience to the impacts of climate change. A clear flexible programme of measures is in place to enable Wales to respond and adapt to climate change.	(a) Adaptation plan prepared, published and updated regularly.	Insufficient data. This work is currently under development.
	(b) Further indicators to be identified following the conclusion of Defra's work on adaptation targets.	Insufficient data. These indicators are still to be developed.
16. Soil is managed to safeguard its ability to support plants and animals, store carbon and provide other important ecosystem services.	(a) Change in soil carbon.	Stable/no clear trend.
	(b) Further indicators to be selected when the UK Soil Indicator Consortium reports.	Insufficient data.
19. The loss of biodiversity has been halted and we can see a definite recovery in the number range and genetic diversity of species, including those species that need very specific conditions to survive.	(a) Trends in key Biodiversity Action Plan species and habitats.	Clear improvement
	(b) Trends in wild birds population index.	Stable/no clear trend
	(c) Indicators to illustrate range and genetic diversity to be developed.	Insufficient data. These indicators are still to be developed.
20. The wider environment is more favourable to biodiversity through appropriate management, reduced habitat fragmentation and increased extent and interconnectivity of habitats.	(a) Proportion of land under agri-environment agreement (by scheme), or which is organic or which is in conversion organic.	Stable/no clear trend.
	(b) Proportion of woodland that is certified.	Stable/no clear trend.
	(c) Additional indicators to be identified following completion of research into biodiversity indicators.	Insufficient data. These indicators are still to be developed.
21. Sites of international, Welsh and local importance are in a favourable condition to support the species and habitats for which they have been identified.	(a) Percentage of features on Natura 2000 sites in favourable or recovering condition.	Stable/no clear trend.
22. Our seas will be clean and support healthy ecosystems that are biologically diverse, productive and managed sustainably.	(a) Indicators including coastal zone indicators, to be reviewed in the light of the Marine Bill.	Insufficient data. These indicators are still to be developed
	(b) Number of Marine Stewardship Council certified sustainable fisheries in Welsh waters.	Baseline.
	(c) Number of fisheries assessed by ICES and Sea Fisheries Committees to be in safe biological condition – based on stock assessments, fish catches per unit effort.	Insufficient data. Data not currently available for this indicator.

	(d) Input of hazardous substances to the marine environment.	Clear improvement.
	(e) Additional indicators to be identified following completion of UK and CCW research on marine ecosystems and work to investigate possibility of developing a seabird indicator: trends in seabird population index.	Indicator developed: Clear improvement.
23. The quality and diversity of the natural and historic character of our landscape and seascape is maintained and enhanced.	(a) Indicators, measuring quality and diversity, to be selected on completion of CCW landscape characterisation work.	Insufficient data. These indicators are still to be developed.
27. There is easy, equitable access to ample high quality green space.	(a) Percentage of people stating that they could access a park easily in the Living in Wales survey.	Baseline.
	(b) Additional indicator to be developed from rollout of CCW's green space toolkit.	Insufficient data. This indicator is to be developed and reported on from 2010.

## F. Information on Environment Strategy for Wales indicators relating to biodiversity

The following information is available from [StatsWales](#).

### Outcome 20 (a)

As of November 2008, there were:

- 754 Environmentally Sensitive Area agreements covering a total area of around 65,000 hectares – 3.9 per cent of agricultural land. This figure will decrease annually as individual agreements complete their 10-year time span.
- 2,900(r) Tir Gofal agreements covering a total area of around 328,000 hectares(r)\* or 19.5 per cent(r) of agricultural land.
- 210 Habitat agreements covering a total area of around 2,000 hectares or 0.1 per cent of agricultural land. This figure will decrease annually as individual agreements complete their 10-year time span.
- 926(r) Organic Farming/Organic Maintenance agreements covering a total area of around 118,000 hectares(r) or 7.0 per cent of agricultural land.
- 575 Tir Cynnal agreements covering a total area of around 41,000 hectares or 2.4 per cent of agricultural land.

\*(r) = data revised on 10 December 2008.

Total agricultural area in Wales is 1,680,000 hectares (Agricultural Land Census, 2006). Some agricultural land may fall under more than one agri-environment scheme.

### Outcome 20 (b)

- The percentage of woodland under certification management schemes in Wales has remained fairly stable over the last few years, peaking at 43.7 per cent at 31 March 2009.
- This is slightly less than the percentage of UK forests certified at 31 March 2009 (45.2 per cent).
- Within the UK in 2009, the percentage of woodlands certified in England was 30.8 per cent, 55.7 per cent in Scotland and 74.2 per cent in Northern Ireland.

Forest certification is based on assessing forest management practices against agreed environmental standards. A label is awarded to forests and forest products that meet those standards. Certification ensures that forest management does not put the forest's natural heritage at risk, and assures that areas of important wildlife habitat are not negatively affected. Furthermore, certification requires that the management activities are appropriate, that wood harvesting is legal and that the benefits of forests are protected for future generations.

Total woodland area is defined as land under stands of trees with a canopy cover of at least 20 per cent (25 per cent in Northern Ireland), or having the potential to achieve this, including integral open space, and including felled areas that are awaiting restocking.

Forest Management certification is based on an inspection of the forest management unit by an independent Forest Stewardship Council (FSC) accredited certification body to check that the forest complies with the internationally-agreed FSC Principles of Responsible Forest Management. If the forest complies with FSC standards, then the operation can be certified. Certified forest operations can claim that the forest products they produce come from a responsibly managed forest. Before a certified forest operation can sell their products as FSC certified, they must also obtain a chain of custody certification.



## **Outcome 21**

The Natura 2000 sites in Wales include the 90 Special Areas for Conservation designated under the Habitats Directive and the 19 Special Protection Areas designated under the Birds Directive. Each site is designated for one or more conservation features, and the condition of these features is monitored on an approximate six-year cycle, in line with the **UK Common Standards Monitoring Framework**. Under this framework, features are assigned a condition category reflecting whether or not they are in a desired state (favourable condition) or are recovering towards it.

In this presentation, the term 'favourable' is an amalgam of the Common Standards Monitoring categories 'favourable: maintained' and 'favourable: unclassified'; 'unfavourable' is an amalgam of 'unfavourable: no change', 'unfavourable: unclassified' and 'unfavourable: declining'; and 'recovering' is 'unfavourable: recovering'.

The figures are based on percentages and are sensitive to the number of assessments in each group. Most of the groups have ten or more assessments but some have fewer (marine mammals; dragonflies; other invertebrates; amphibians; caves; reefs and sea caves; estuaries; and intertidal mud and sands).

The number of feature types included in each grouping varies: several groupings include just a single feature type while a few include twenty or more types.

## **Outcome 22(b)**

There is one Marine Stewardship Council (MSC) certified sustainable fishery in Welsh waters which is located near Llanelli. The Burry Inlet Cockles Fishery was first certified as sustainable in April 2001 and recertified in February 2007.

The North Menai Strait mussel fishery is currently going through the MSC accreditation process and the fishing industry is also in the early stages of pursuing accreditation for prawn, crab, lobster and sea bass fisheries.

## **Outcome 22(d)**

The Dangerous Substances Directive (76/464/EEC) and its 'daughter' directives control discharges that are liable to contain dangerous substances that have contact with inland, coastal and territorial surface waters. Dangerous substances are toxic substances that pose the greatest threat to the environment and human health.

The Directive specifies two lists of Dangerous Substances. List I covers those which are particularly toxic, persistent, and which may tend to accumulate in the environment. List II covers substances whose effects are still toxic, but less serious.

The Directive requires that pollution by List I substances is eliminated and pollution by List II substances is minimised. To do this, all discharges that are liable to contain dangerous substances must be authorised. The Directive also specifies some requirements for environmental monitoring.

The UK is signatory to two conventions on contaminants to the sea - the North Sea Conference and the Oslo-Paris (OSPAR) Convention for the Protection of the Marine Environment of the North-East Atlantic. The objective of these conventions is to reduce the load of contaminants discharged to the North Sea from the member states that border this area. The UK aims to meet similar objectives for all seas surrounding it.

The total loads and sources of contaminants vary each year and around the coasts of England and Wales. The Environment Agency measures the levels of each contaminant entering the sea every year. The total loads of all List I substances (within the OSPAR programme) entering the sea around Wales

have reduced due to industries changing the way they operate and restrictions on the use and availability of some of the most hazardous substances.

Heavy rain causing higher than normal river flows and fluctuating effluent rates from outflow pipes can affect the amounts of these substances entering the sea. Annual loads will therefore appear to vary significantly. Loads are expressed as 5-year averages to even out seasonal effects.

#### **Outcome 22(e)**

- The northern fulmar population index increased sharply to 152 in 1991, before fluctuating around this value until 2005. Over the last 3 years, the index has been falling with a value of 123 in 2008.
- The population of common guillemots has generally increased since 1986, with the population in 2008 nearly treble that seen in 1986.
- The population of black-legged kittiwake has generally decreased since 1994, with an index value of 88 in 2008.
- JNCC suggest that the 3 species seem to be faring better than the UK as a whole.

Data produced from the [JNCC Seabird Monitoring Programme](#) provides an annual update on the progress of Welsh seabirds from a network of sites around the Welsh coast. Guillemot, fulmar and kittiwake are used to provide trend indices.

These are species for which there are representative datasets for Wales, which enabled a trend to be produced that is reasonably precise. These species are truly marine in their feeding habits and therefore are suitable for indicators of the 'health of the marine environment', compared with species that also feed inland, such as herring gull or black-headed gull and cormorant.

The three species represent a range of marine feeding niches. Guillemot is an offshore diver, kittiwake is an offshore surface feeder of small shoaling fish, and fulmar is an offshore surface feeder that feeds on small fish but also offal/discards and plankton.

Species such as little tern were not included because they occur in Wales in very few colonies, such that determinants of change were more likely to be to do with colony management, for example predator control or disturbance, than marine influenced.











