Evidence to Sustainability Committee 25 February 2010

Environment Agency Wales' performance April 2007 to December 2009

17 February 2010

We are an Executive Assembly Government Sponsored Body (AGSB) directly accountable to the Permanent Secretary for the regularity, propriety and value for money of expenditure. Environment Agency Wales is also part of the Environment Agency for England and Wales.

The Assembly Government directs our work through an annual remit letter, which sets out the Assembly's future priorities and targets for our delivery. In addition, we have our own corporate and operational planning processes that set out how we will best use our resources to deliver environmental outcomes. Our Corporate Plan 2006-11 Creating a better Wales outlines how we deliver our vision for a better place for people and wildlife for present and for future generations. Each year we develop and agree an annual operational plan with the Welsh Assembly Government, which sets out how we will deliver our lead roles in the Environment Strategy, the remit letter and our own Corporate Plan outcomes.

We report progress against our operational plan outcomes to Welsh Assembly Government each quarter. At the end of the year, we prepare an Annual Report and Accounts to demonstrate our progress and value for money. This evidence report highlights some of our outcomes delivered over the last three years.

Our budget is made up of Grant in Aid (63 per cent) and income generated through charging schemes (34 per cent) that includes environmental permits, water abstraction licences, rod licences, boat fees and other grants and contributions. We also use money from EU Structural Funds (3 per cent) in Wales. We spend around 43 per cent of our money on Flood and Coastal Risk Management, 27 per cent on Environmental Protection, 22 per cent on safeguarding Water resources and eight per cent on Fisheries, Recreation, Conservation and Navigation.

Our policy, strategy and operations are all underpinned by a commitment to the use of evidence – in part provided by the Environment Agency's internal science programme.

In this evidence we have reported our progress against the nine outcomes that we are working to achieve. Under each outcome we have: described the current situation through outlining key evidence; set out our role; and listed key outcomes from our recent work. This is in line with our objective to relate our work to the environmental and business outcomes we need to deliver.

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1 Greenhouse gas emissions are reduced and Wales is resilient to inevitable climate change

Climate Change is an example of the consequences of unsustainable development; how human activities are negatively impacting on natural systems and threatening the survival of species and habitats as well as our own society. Our work to help mitigate and adapt to climate change contributes to the broader sustainable development outcomes.

Greenhouse gases cause global warming, yet there has been no sustained downward trend in greenhouse gas emissions in Wales during the last ten years. However, a high proportion of these emissions are from power stations for which planning consent is not devolved.

Evidence

Between 1990 and 2007 greenhouse gas emissions from within Wales have fluctuated. Decreases have occurred due to the closure of Llanwern steelworks in 2001, the loss and rebuilding of Blast Furnace 5 at Port Talbot steelworks for 12 months in 2002, the preference for gas as a fuel for electricity generation in the 1990s, and installing Flue Gas Desulphurisation (FGD) at Aberthaw Power Station which temporarily reduced production while FGD was being installed from mid 2002 to the end of 2006.

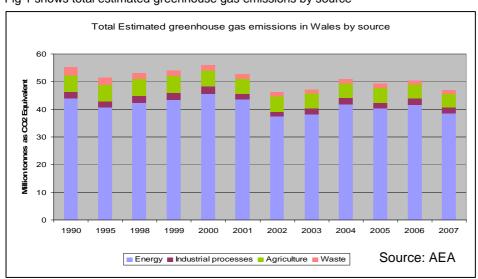


Fig 1 shows total estimated greenhouse gas emissions by source

Role

We administer the EU Emissions Trading Scheme (EU ETS) and we provide evidence on its effectiveness to Governments but we have no powers to regulate CO_2 emissions directly. We can indirectly reduce CO_2 emissions through the Environmental Permitting Regulations (EPR) by working with companies to improve energy efficiency and examples of where we have done this are listed below. We also regulate permitted landfills to ensure that methane emissions from landfills are reduced. We monitor the Landfill Allowances Scheme (LAS) to reduce the amount of biodegradable waste managed by local authorities that may be landfilled. We grant permits and consents to hydropower schemes to ensure that they do not increase flood risk, damage ecology, damage the fish population or obstruct fish migration. We are also responsible for ensuring that our own flood risk and water resource activities minimise the consequences of climate change. As part of our own mitigation efforts, we demonstrate leadership through driving down our own greenhouse gas emissions.

- Last year (2008-09), for the third consecutive year, every EU ETS permitted operator in Wales complied with the terms of the scheme and surrendered the correct numbers of allowances to cover their CO₂ emissions
- We have been involved in the work of the Climate Change Commission for Wales from the outset, contributing to each of its initial four sub-groups. This work is planned to help drive a 3% year on year reduction in greenhouse gas emissions in Wales, in areas of Welsh Assembly Government's devolved competence from 2011
- We helped Corus reduce its carbon dioxide emissions by 250,000 tonnes the biggest single CO₂ reduction in Wales equivalent to nearly 1 per cent of the total CO₂ produced by sites we regulate in Wales. We provided advice to Corus and helped in incorporating the necessary carbon-reducing changes into the Corus EPR permit
- The proposed Prenergy plant in Port Talbot the largest biomass power plant in the UK will produce 350 MW of electricity (enough to power four out of every ten homes in Wales) with between 50 to 80 per cent less CO₂ than gas or coal fired power stations emissions. We granted the permit following an evaluation process and discussions with a local pressure group and the public. We sought the advice of the Local Health Board and have set strict emissions limits to protect human health which is important considering the proximity of an Air Quality Management Area
- Approximately 4% of Wales' greenhouse gas emissions are attributed to landfills (methane having approximately 20 times the warming effect of CO₂). Through our regulation, auditing and advice, landfill operators have made improvements to landfill gas infrastructure, delivering methane savings of more than 40,000 tonnes of CO₂e in 2008-09
- We supported and provided our data and advice to the Department of Energy and Climate Change on the Severn Tidal Power Feasibility Study and to the Welsh Assembly Government on their Biomass Strategy and to Forestry Commission on their Woodland Strategy so that it considers biomass implications across Wales. This year we are producing a report on mapping hydropower opportunities and sensitivities in Wales
- All of our flood risk capital schemes with new assets are being designed according to climate change projections. We have developed our own long term Water Resources Strategy and we continue to work with water companies across Wales - to ensure climate change impacts and adaptation are addressed in their plans
- We worked jointly with a local landowner to build the first combined hydropower and fish pass scheme in the UK harnessing around 670,000 kWh electricity per year – enough to power 152 homes
- We continually reduce our own carbon emissions down 8 per cent between 2006-07 and 2008-09 (the public service average is 14 per cent between 1990 and 2007). We have achieved this principally through reducing our energy use at operational assets e.g. pumping stations

2 Flood risk is reduced to protect people and property

Currently, 220,000 properties are at risk of flooding from rivers and the sea and a further 137,000 are at risk from surface water flooding, which is a growing problem. Our work to reduce the risk of flooding from rivers and the sea aims to minimise the costs to society and the economy, e.g. from loss of life; damage to core infrastructure, homes and businesses; health impacts, particularly for areas suffering social deprivation. We also look to maximise the benefits to the community through provision of new green space; cycle/walkways etc as part of our schemes.

Since 2005, almost 3,000 properties in Wales are better protected from flooding because of our work.

Evidence

During the last five years, 244 properties have been flooded from main rivers and the sea – one twentieth of those that would have been flooded without our flood defence building and maintenance programme. As a result of schemes completed between April 2005 and 2009, we have reduced the flood risk to more than 2,800 properties.

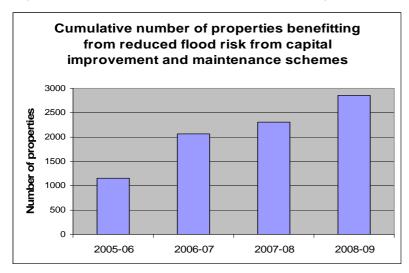


Fig 2 shows the cumulative number of properties benefiting from reduced risk from flood defence schemes

Role

Our role is to reduce the risk of flooding from rivers and the sea in Wales. To do this, we build, maintain and operate flood defences to reduce the risk of flooding to people and property. We cannot prevent all flooding impacts, but we can help others be better prepared - we issue flood warnings and we work with communities at risk of flooding to help them find appropriate solutions to flood risk. When a flood happens, we work with the emergency services and local authorities to minimise the harm to people and damage to property.

- Where we objected to planning application consultations and planning enquiries on flood risk grounds and where local planning authorities have advised us of the final outcome, 96.2 per cent of decisions were in line with our advice last year (96.7 per cent in 2007-08)
- Our mapping and modelling techniques (e.g. Light Detection and Ranging LIDAR an airborne laser mapping technique which produces accurate, high quality terrain maps) help us to maintain and update flood maps of Wales
- From March, we will automatically issue free flood warnings to an anticipated 40,000 extra properties in Wales at risk of river and sea flooding on top of the 47,000 already registered
- As a result of schemes completed between April 2005 and 2009, we have reduced the flood risk to more than 2,800 properties
- We are currently looking at the effect that changes in land management may have on flood peaks and the ability of soils to hold rainfall. We also have a programme of events, which started with a land management conference last year, to raise awareness of the benefits of sustainable land management
- Our focus this year has been to engage directly with communities at risk of flooding through our Awareness Plus project. We also continue to build trust with communities for example we have run "drop-ins" for a scheme in Newport - keeping residents updated, and getting their views. Feedback on this approach has been largely positive. Our consultation with the residents of Riverside will continue until the flood defences are repaired in 2012 our Awareness Plus project,
- We lead the production of multi-agency response plans which promote joined-up working by emergency responders. Our incident rooms have been opened 20 times between April 2009 and December 2010 – for incidents and exercises

November was one of the wettest on record with many rivers in Wales reaching warning levels at various times. We opened our incident room, responded to over 100 press calls and gave several media interviews. Our defences performed to expectations and in particular prevented flooding from exceptional flows in Aberystwyth, Abergwilli, St.Clears, Aberdulais, Llanrwst, Trefriw, Tregaron, Pwll and around the coast in Dale, Solva, Laugharne and Llanelli.

3 Good water quality and quantity in all inland and coastal waters

Tackling water quality and quantity issues in Wales ensures the resource is available to people, business and the environment to sustain life, the economy and the natural environment of Wales.

Water quality in Wales has steadily improved in recent years, but the new European Water Framework Directive sets new and tougher standards for all water bodies.

Evidence

There are significant pressures on the water environment in parts of Wales. 16 CAMS units are over licensed or over abstracted, meaning that existing abstractions could be causing unacceptable damage to the environment, particularly during times of low flow. We will reduce the number of unsustainable units over time by removing the impact of damaging abstractions and by finding ways to reduce the headroom in existing licences e.g. by voluntary licence reductions

Under the EU Bathing Waters Directive, all bathing waters in Wales passed the mandatory standard in the 2009 bathing season, with 88 per cent complying with the stricter Guideline standard. The revised Bathing Water Directive, to be introduced in 2015, will require even higher standards. Currently, on the 2009 results 95 per cent of Wales' beaches would be rated as sufficient or higher.

95 per cent of all length of classified river stretches were 'Good' or 'Very Good' under the General Quality Assessment (Chemical scheme) in 2008.

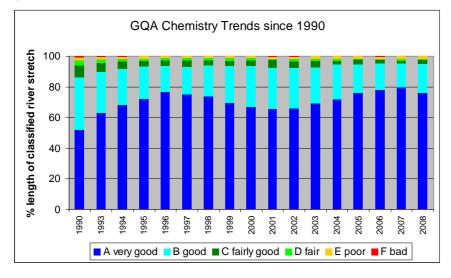


Fig 3 shows the General Quality Assessment (Chemistry) trends from 1990 to 2008

Under the new tougher Water Framework Directive (WFD) standards, 31 per cent of surface waters bodies in Wales are at good status or better in 2009.

Role

We manage over 20 billion litres of water per day through our licensing system. We are a Competent Authority for implementation of the Bathing Waters Directive and the Competent Authority for the Water Framework Directive (WFD). We regulate over 10,000 discharges to the water environment in Wales, and we ensure these discharges remain within their standards. We monitor and report on the water quality of over 4,700km of rivers and canals as well as the bathing waters that attract so many people to Wales.

- We have developed our own Water Resources Strategy which sets out how we need to plan for sustainable water provision to 2050 and considers future population growth, impacts of climate change and innovative ways to meet the demands in an uncertain future
- As a statutory consultee, we review water companies' Water Resources Management Plans. We provided technical advice to the Welsh Assembly Government on Welsh companies' plans to ensure climate change impacts and adaptation were adequately addressed
- We have completed three River Basin Management Plans (Dee, Severn and Western Wales) in line with Wales' WFD obligations and set out how we will achieved the WFD targets
- All bathing waters in Wales passed the mandatory standards in the 2009 bathing season with 88 per cent complying with the stricter Guideline standard. 38 Welsh beaches also achieved blue flag status for the 2009 season. Key improvements that helped bring about these results have included increased use of UV disinfection of storm discharges at Dwr Cymru Welsh Water's sewage treatment works and our promotion of sustainable drainage
- We have provided Governments with advice on proposals for implementation of the Marine Bill,
 Marine Policy Statements and the framework for port operations
- We are working with the Marine Fisheries Agency and the Marine Consents Unit to develop guidance to ensure the marine licence determination process reflects the needs of the WFD
- As part of a working group funded by Welsh Assembly Government, ourselves, CCW and the South Wales Sea Fisheries Committee, we have developed an integrated research programme to investigate the causes of the cockle mortalities in the Burry Inlet. The group have undertaken investigative sampling and have provided a series of fact sheets for the public to explain what is being done to address the different issues including water quality, surface water management and flood prevention in the area. A report into the findings of the investigation will be available for Government shortly.

4 Waste is managed sustainably

Our role in the management of waste directly contributes to sustainable development by reducing unsustainable use of resources, reducing the amount of waste sent to landfill (and therefore the amount of methane produced), influencing the mix and locations of waste management infrastructure, and helping ensure that business and organisations are resource efficient and manage their waste responsibly. Tackling illegal waste activity and reducing fly-tipping contributes to improved local environmental quality for communities.

While recycling rates have improved vastly, last year 2.9million tonnes of waste was still sent to landfill sites we regulate. If we continue at this rate, we will run out of landfill in the next eight years.

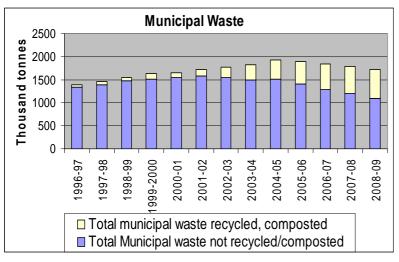
Evidence

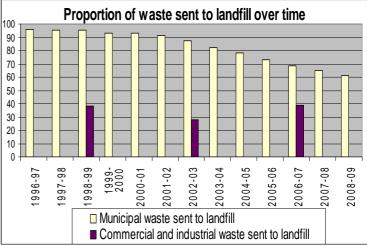
There are 7 million tonnes of waste handled by waste sites that we permit in Wales. Of this 2.9 million tonnes of waste was landfilled in Wales last year (1 per cent was hazardous waste (in a private landfill for Corus); 30 per cent was construction and demolition waste; 69 per cent was household, commercial and industrial waste). The total amount of municipal waste (waste collected

by local authorities) produced in Wales has been reducing since 2004-05, while the proportion of municipal waste recycled and composted has increased since 2001-02. Wales has no hazardous waste landfills, however, between 2007 and 2008, the amount of hazardous waste produced in Wales reduced by 14 per cent to 257,000 tonnes.

Fig 4 shows the total amount of recycled and composted municipal waste from 1996-97 to 2008-09

Fig 5 shows the proportion of waste (municipal and commercial) sent to landfill from 1996-97 to 2008-09. Commercial/ industrial waste figures are taken from waste surveys conducted every four years





Role

Through regulation of the waste management industry and waste producers, we ensure that they are resource efficient and manage their waste responsibly. We share our evidence and data on waste management and provide advice to Governments on waste management strategy and regulation. We signpost waste producers to the best sources of advice for better management of resources and strive to remove regulatory barriers to environmentally beneficial use of waste, encouraging reuse of wastes as an economic resource. We also actively pursue illegal waste activities to ensure they do not undermine legitimate operators. This also acts as a deterrent to others.

- We validate information needed to monitor Landfill Allowances Scheme (LAS) targets for reducing the amount of biodegradable municipal waste being sent to landfill. All local authorities have met their allowances since the scheme started in 2004
- From our commercial and industrial waste survey (every four years) we have shown that of the 3.6 million tonnes of commercial and industrial waste produced in 2007, 48 per cent was reused or recycled and 30 per cent was sent to landfill. More industrial waste is now being diverted from landfill than previous years
- Our construction and demolition waste survey 2005-06 set the baseline for the Welsh Assembly Government targets for these wastes. The survey showed that 65 per cent of construction and demolition waste was recycled/reused and 24 per cent was landfilled (excludes waste reused on site)
- We have shared our monitoring data and provided advice to Welsh Assembly Government to develop the Wales Waste Strategy - challenging all sectors to recycle 70 per cent of their waste for 2025 and achieve zero waste by 2050
- We undertook life cycle assessments in 2007, to help estimate and choose the best environmental waste technologies for the Regional Waste Groups (RWG) that include Welsh Assembly Government, local authorities and businesses. We will continue to support this work

- We have published seven quality protocols (e.g. for compost and flat glass), which explain what has to be done to produce a fully-recovered, non-waste, quality product. This diverts waste from landfill, preserves raw materials and reduces emissions of greenhouse gases
- We co-ordinate Flytipping Action Wales (Taclo Tipio Cymru, previously known as Pride in our Communities) a partnership initiative to help reduce fly-tipping in Wales. In 2009, we co-ordinated three events in Ebbw Vale, Holyhead and Rhymney to raise awareness of this issue. Evidence shows the number of recorded fly-tipping incidents in Wales has fallen to 55,300 incidents in 2008-09, compared to more than 62,500 in 2007-08
- We have been increasing use of an intelligence-led approach to identify the most effective interventions to prevent and deal with illegal activity. Since 2005, we ensured that 87 illegal waste sites have either closed or have gained an environmental permit. Between April 2007 and January 2010, there have been 170 prosecutions for illegal waste activities, with fines totalling over £360,000
- In 2008, we obtained the first Environment Agency conviction under the Proceeds of Crime Act (POCA) against a scrap metal dealer operating without a waste management licence and the necessary pollution prevention controls. The defendant was ordered to pay more that £188,000 and undertake 180 hours of unpaid work

5 Air quality is improved to protect people's health and wildlife sites

Through managing the emissions to air from the industrial processes we regulate, we help ensure that air quality is protected for wildlife and people. Many of these pollutants contribute to other environmental problems, such as water quality, so reducing their output provides additional environmental benefit.

Emissions from the sites we regulate are significantly lower than 1990 levels.

Evidence

In Wales, we are responsible for regulating releases to air from approximately 190 industrial sites, 56 farms and 32 landfill sites, as well as many smaller activities, such as waste transfer stations. We regulate activities responsible for 80 per cent of sulphur dioxide emissions, 60 per cent of carbon monoxide emissions, 36 per cent of nitrogen oxide emissions and 29 per cent of particulate emissions. Nitrogen oxide emissions show no clear trend, but emissions of sulphur dioxide and carbon monoxide are decreasing. Emissions of small particles (PM10) have fallen by two-thirds since the 1990s. There have been a number of closures of significant industries which have contributed to the reductions, for example BP Chemicals and steelmaking at Llanwern. The implementation of European Directives at large power stations and refineries are now delivering further reductions in sulphur dioxide.

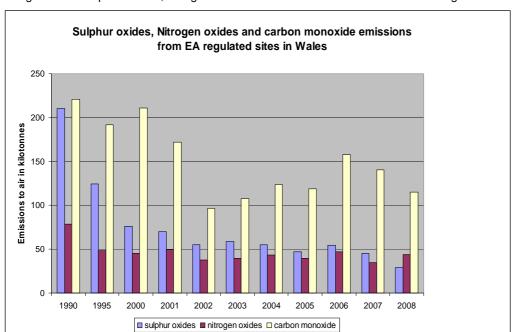


Fig 6 shows sulphur oxides, nitrogen oxide and carbon emissions from sites we regulate in Wales

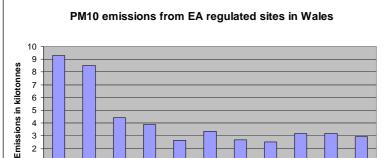


Fig 7 shows particulate emissions from sites we regulate in Wales

2001

2002

2003

2004

2005

Role

4 3 2

By regulating business – through Environmental Permitting Regulations (EPR) - we protect environmental quality and reduce emissions of key airborne pollutants. We work closely with and consult the communities that live alongside sites we regulate where there is any potential for concerns. We provide data and information to partners such as Public Health Wales so that they can provide advice on human health. We also provide a monitoring service which allows assessment of air quality at a local level. This, together with our air quality modelling service provides support to the work of the Welsh Air Quality Forum.

- We delivered the first phase of the Environmental Permitting Programme and are seeking to complete its extension to other regimes by April 2010. As a first step, it combined Pollution Prevention and Control (PPC) and Waste Management Licensing (WML) into the Environmental Permitting Regulations from 6 April 2008. Using this system we issue environmental permits to industrial processes to ensure that the environment is protected
- We helped RWE NPower reduce sulphur dioxide emissions by more than 95 per cent at Aberthaw power station (c.13 ktpa in 2008). We were involved in the pre-operational permitting, and agreement of commissioning protocols to ensure compliance as well as while keeping local residents and councillors informed and minimising the impact of noise and dust during these major construction works

- To ensure we issue permits which offer appropriate protection to human health and the environment we undertake periodic reviews. We recently completed a review in respect of PM10s (small particulates) of the Environment Agency regulated environmental permits that are in place for the Port Talbot Steelworks. This has led to a detailed action plan agreed with the Welsh Assembly Government with an aim to reduce the emissions of PM10 in the locality
- We liaise regularly with Public Health Wales (PHW) and Health Protection Agency (HPA) on shared matters and sites of 'high public interest'. We are working with partners such as PHW to ensure that our guidance and 'Working Together Agreements' are appropriate for Wales
- Our Mobile Monitoring Facility (MMF) is used to monitor air quality across Wales more recently it has been located at sites in Cardiff and Bridgend. We are also working with Health Professionals to provide an air quality monitoring and advice service in the event of a major industrial emergency in Wales

6 More people care for and enjoy the water environment

Delivering our responsibilities on water based recreation directly contributes to sustainable development; it links the water environment with opportunities for people and businesses. It contributes to the health and well-being of residents and visitors alike.

We increased rod licence sales by 10% in 2009

Evidence

Rod licence sales in Wales have been steadily increasing in the last 12 years. Recreational fishing generates expenditure of £148 m per annum into the Welsh economy.

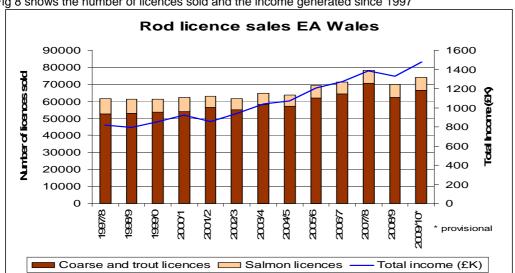


Fig 8 shows the number of licences sold and the income generated since 1997

Role

One of our roles is to promote water-based sport and recreation. We also administer the Welsh Assembly Government grant scheme Splash! to increase the numbers of people who can enjoy their local environment as well as bring in economic benefits through tourism. Through our monitoring and enforcement work we continue to ensure that fish stocks are protected – we prosecute those who fish illegally, in accordance with our Enforcement and Prosecution Policy. We also manage navigation on the Dee Estuary and the Wye.

- To promote greater water based recreation in Wales we developed with Welsh Assembly Government a new water related sport and recreation strategy, *A better place to play in Wales*, published in May 2008
- With partners we have allocated £800,000 (with match funding of approximately £750,000 it brings the total to nearly £1.5 m) to 49 projects in the last two years creating new opportunities for boating, fishing, sailing and general waterside recreation across Wales including the construction of a canoeing lake in Llandysul and improving children's access to water sports at Plas Menai
- We have included a cycle track and a play park into our flood defence scheme on the Afon Adda in Bangor, a cycle track into our flood defence scheme at Lon Las Cefni and improved disabled access in our flood defence scheme at Pwllheli
- On average, we introduce 3,000 new people to angling in Wales every year
- Our Salmon Homecoming project came second in an education category of the Waterways Renaissance Awards 2009. This project has raised the awareness of the importance of salmon and its life cycle to more than 1,300 primary school children over six years
- We have introduced a new cockle licensing system in 2009 50 legal cocklers now harvest one third of the available cockles in order to leave sufficient stocks to maintain a sustainable fishery and protect wildlife on the River Dee. To protect the cockle beds from illegal activity we have also installed surveillance equipment
- Between April 2007 and January 2010 we have obtained 820 convictions for fishing licence and related offences (poaching and introduction of alien species)
- We manage navigation on the Wye and the Dee as a public right

7 Aquatic wildlife and habitats are maintained and enhanced

Our work as an aquatic biodiversity deliverer directly contributes to sustainable development by ensuring water related habitats and species are protected and enhanced, which has benefits for both the environment itself and for the services the ecosystems provide to society and the economy.

Since 2003 we have opened up an additional 670km of river to migratory fish such as salmon and sea trout through habitat improvements and fish pass construction.

Evidence

Otters continue to make a healthy comeback with preliminary results from the EAW led Wales Otter Survey (2009-2010) showing otters are present at eight out of ten survey sites. In the 1970's, only 25 per cent of the Welsh otter population present in the 1950's still existed. The water vole population has declined by 94 per cent since the 1950s due to agricultural intensification, fragmentation of habitat and predation by the invasive American mink. The native white-clawed crayfish continues to decline due to competition and disease from invasive signal crayfish, habitat loss, pesticide use and pollution. Recent surveys (2008-09) of the Freshwater pearl mussel show populations continue to fall across Wales with a 50 per cent decline observed for rivers where populations still exist and they're now extinct from the River Taff in West Wales and the Rivers Ogwen and Gwyrfai in Gwynedd. There is significant habitat loss at key salt marsh sites (e.g. Welsh side of the Dee estuary) due to coastal squeeze. There is an estimated 460 hectares of reed bed remaining in Wales from a total of 2,840 hectares in1995, a decline of 84 per cent.

Role

We deliver aquatic biodiversity improvements across Wales through our water management and pollution prevention and control work. We are the Competent Authority for implementing the Water Framework Directive (WFD) and a Competent Authority for the Habitats Directive. We are working

with Countryside Council for Wales (CCW) and other partners to identify and complete specific key actions to bring internationally designated sites and Sites of Special Scientific Interest (SSSI) into favourable or recovering condition.

- We have reviewed our consents in relation to 28 Habitats Directive sites and ensured that the activities we permit either do not put these special sites at risk, or where risks have been identified we have initiated the process of modifying permits so that this risk is removed
- Since 2007, we have created / restored 98 hectares of BAP habitat, including marshy grassland, blanket bog and wet woodland
- We are involved in over 60 collaborative projects that are expected to provide new habitat, for example we have worked with Rivers Trusts and other organisations throughout Wales through our Sustainable Fisheries Programme which has delivered 481 km of river bank improvements between 2003 and 2009
- Our flood risk management team is establishing a habitat creation programme in order to derive benefits for water quality, water retention, habitat preservation as well as flood risk reduction
- Since 2003, we have completed work on 22 fish passes allowing migratory fish such as salmon and sea trout access to an additional 670km of river in Wales. Results from the 2008 season have indicated an improvement in the status of salmon stocks
- We have re-introduced over 200 water voles to their native habitat in Llangorse Lake this year. Following work with local landowners, Countryside Council for Wales, Brecon Beacons National Park Authority and Brecon Wildlife Trust, the habitat around Llangorse is now able to support a water vole population with other wildlife also benefiting from the habitat improvements
- To ensure we adequately protect fisheries and promote sustainable inland fisheries, we reviewed Net Limitation Orders (NLOs) by consulting netsmen throughout Wales. We have submitted a report of this review to Welsh Assembly Government. We also implemented a pilot project in Wales to change the emphasis from licence checking numbers to targeting fisheries and areas with higher evasion rates
- We are active members of the project board and working groups that have been set up to support Welsh Assembly Government (WAG) as they assume full responsibility for sea fisheries management in Wales

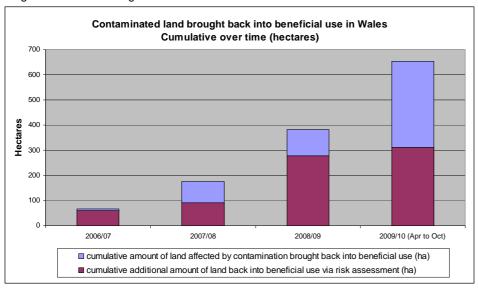
8 Wales has sustainable farming and forestry practices and protected and restored land with healthier soils

Our work to ensure land is managed and farmed sustainably means that soils and water are not polluted, habitats are protected or improved and biodiversity increases. By ensuring land and soils are available and in good quality to support ecosystems services, including acting as carbon stores, we are contributing to a more sustainable economy – and hence sustainable development – for Wales.

Since 2006/07, a total of 653 hectares of contaminated land in Wales has been brought back into beneficial use in Wales.

Evidence

Fig 9 shows land brought back into beneficial use



Role

The Water Framework Directive sets new and tougher standards for rivers and other water bodies, placing much greater emphasis on the ecological status of the water environment. Meeting this challenge will require changing land management practices and tackling pollution coming from multiple sources such as agriculture, industry, households and road transport. We regulate major industry in Wales to prevent any further deterioration to land. We advise local planning authorities to ensure land use planning decisions have full regard to environmental impacts and opportunities at an early stage. We promote sustainable land management and advise landowners on good practice which delivers improvements for the farmer and for the aquatic and soil environment. Under Part 2A of the Environmental Protection Act 1990, we advise local authorities and other partners on how to remediate historic mine pollution and restore brownfield sites for the benefit of the local community and economy. And for the most contaminated sites, we will lead on preventing further contamination to land and controlled waters, such as Brofiscin Quarry near Cardiff.

- In conjunction with Countryside Council for Wales (CCW), CADW, Coed Cymru and the Forestry Commission, we provide advice and support to the Welsh Assembly Government on ecosystem services and their application into policy to deliver more sustainable land management practices. We continue to support the Welsh Assembly Government's Pont Bren and Cambrian Mountains projects through our membership of their Steering Groups – which are central to the development of agri-environment policy
- We will continue to advise the Welsh Assembly Government on the design of Glastir, and continue to work with the Rural Inspectorate of Wales in its cross compliance regulatory inspections programme. The Glastir scheme involves a clear shift to a culture in which farmers are paid for providing environmental goods and services. Following our advice on the scheme, it will also include Climate Change capital grants to promote the efficient use of energy, water and natural resources
- To raise awareness of the need to manage farming in a sustainable manner we hold conferences and workshops on farm planning, sheep dip and nutrient management among other things to help avoid problems of soil related water pollution and flooding, protect soil resource and contribute to the achievement of WFD targets for 2015
- Our Catchment Initiative has identified the Cain, Cleddau, Clwyd, Teifi, Usk and Wye river catchments as areas particularly at risk of pollution - we offer advice to farmers and land managers in these areas to reduce the impact of their activity on the environment

- We are supporting WAG in development of the Welsh Soils Action Plan through advice and guidance. We have our own Soil Strategy - and we promote the value of soils
- Since 2006-07, we have helped bring back into beneficial use 653 hectares of contaminated land in Wales
- There are over a hundred contaminated land sites (as defined in legislation) in Wales. We lead on two "special sites" in Wales. Tondu House, Bridgend was successfully remediated in 2007-08. We are currently carrying out remedial assessment actions at Brofiscin Quarry, Groesfaen

9 Managing the business

We protect and improve the places where people work, live and play all over Wales. We have a duty to provide the people of Wales with value for money and the best services possible. The work we undertake to minimise our own environmental impact, our policies to support equality and inclusiveness in our work, and managing our finances and resources in a socially and environmentally responsible way, all play a part in contributing to sustainable development.

Good to do business with

- National Audit Office (NAO) sign off our annual accounts each year with no major areas of concern. We anticipate that our debt position will be at £300,000 which will meet Public Sector best practice. We buy in around £26 million worth of goods and services in Wales each year. We pay over 90 per cent of all invoices received within 10 days
- In 2007-08 and 2008-09 we made £2.460 million and £3.141 million efficiencies through procurement savings and local efficiencies
- Our budgets are benchmarked with other Environment Agency regions and other public sector organisations, so that we constantly strive to reduce costs and improve value for money
- Since 2005 we have obtained over £14 million from EU funding sources and Welsh Assembly Government match funding. We have had confirmation in Wales that we will receive nearly £30 m over the next five years in direct income from EU funds and WAG match-funding
- We have achieved the commitment we made against the Sustainable Procurement Assessment Framework (SPAF) by recently attaining level 4 across all criteria and have achieved level 5 across some criteria
- We always look to improve our processes for example we have simplified our permitting process to facilitate permitting of new waste facilities
- We are accredited to ISO 9001 for framework of processes and procedures we follow and ISO 14001 for the Eco-management and Audit Scheme for environmental management. We are eighth in the Sunday Times 60 Best Green Companies
- Our Welsh Language Scheme was updated and approved in June 2007. General enquires, Floodline Direct, our publications and other information sources such as Netregs and "What's' in your backyard?" which provide advice and information for business and the public are all available in Welsh as well as in English
- In partnership with Countryside Council for Wales, Forestry Commission and the Centre for Welsh Medium Higher Education, we sponsor Welsh speaking students who take up environmental degrees at Welsh universities. Since 2003, over 100 students have benefited from the scheme
- Our buildings are legally compliant and two meet the Building Research Establishment's Environmental Assessment Method (BREEAM) - the most widely used environmental assessment method for buildings in the UK. We use rainwater harvesting systems and voltaic solar panels at some of our office buildings, one of our hatcheries is 100 per cent reliant on hydropower

 Our Accommodation Programme has been set up to transform our property portfolio and help improve the way we manage our buildings. It will support more flexible working arrangements reduce our carbon footprint and re-invest money saved into improving the environment

Learn from others to improve the way we work and share our expertise

- Our staff contribute to multiple partnerships with a wide range of organisations, including voluntary and statutory organisations, in Wales and beyond – examples include Bury Inlet and Neath Port Talbot
- We prepare and help others to prepare for major environmental and flooding incidents, including responding to pollution events and providing advice to other emergency responders on the best environmental options. We have provided equipment to North Wales Fire and Rescue Service which they used to prevent 10,000 litres of spilt milk flowing into the Dee Estuary and during the snow event in January 2010 we provided assistance to the Health Service to transport key health service staff to hospitals
- We continue to learn from and share good practice for example the Director General for the Department of Irrigation and Drainage in Malaysia visited us in October 2009 to share his experiences of extreme flooding events. We also run conferences such as the Land Management Conference in order to share our experience and advice with partners
- Our staff are seconded to Welsh Assembly Government, Countryside Council for Wales and Forestry Commission and we host the Welsh Assembly Government Waste Strategy team
- We have helped other Assembly Government Sponsored Bodies to implement environmental management standards in their agencies through sharing good practice. For example, we shared our travel policies, alternative technologies and our trials on a bio diesel fleet at the Wales Audit Office Fleet Management Conference
- We work through the planning and governance regimes in Wales e.g. Town and Country Planning; Community Planning and Local Service Boards and the Wales Spatial Plan to help ensure the environment is appropriately considered alongside social and economic issues
- We are active in Welsh environmental research and support our staff to develop links with research institutions to develop and refine environmental evidence. Within Wales, we co-fund the Welsh Environment Research Hub (WERH) and are a member of its Management Board. We support Welsh Assembly Government to develop co-ordinated evidence plans among the research funders – Welsh Assembly Government, Countryside Council for Wales, Forestry Commission and ourselves. We also provide direct support to Welsh Assembly Government and relevant multi-partner projects on for example the Cambrian Mountains project

Staff are proud to work for us and recognise that it is a great place to work

- We are accredited by Investors in People organisation that employs over a 1000 staff in Wales.
 EAW employee satisfaction is 76 per cent as measured in a recent Environment Agency survey
- We have been named Wales' top employer in Stonewall's annual Workplace Equality Index 2009 and 2010 for gay, lesbian and bisexual people. The Environment Agency is in the Times 2009 Where Women Want To Work Top 50
- We provide a safe and healthy place to work and our staff manage the risks they face. To date we have had only one time lost incident in 2009-10