



EICH CYNGOR arleinamdani
www.sirgar.gov.uk

YOUR COUNCIL doitonline
www.carmarthenshire.gov.uk

**Carmarthenshire County Council
Environment (Wales) Act 2016 Review 2016-2019
December 2019**

Contents

		Page
	Biodiversity Champion Foreword	3
	Director's Foreword	3
1	Executive Summary	4
2	Environment Act (Wales) 2016	4
3	Carmarthenshire's Natural Resources	5
4	Strategic Context	7
5	Forward Plan Actions delivered 2016–2019	8
6	Review of action delivered	28

Biodiversity Champion Foreword

As Biodiversity Champion I believe that, consistent with the Environment (Wales) Act 2016, the implementation of this Forward Plan is initiating the process of placing biodiversity as a natural and integral part of policy and decision making within Carmarthenshire County Council. Over time it will become more embedded in its plans, policies and projects and day-to-day activities. It is pleasing to see the strong links made between the Environment (Wales) Act and the Well-being of Future Generations (Wales) Act 2015, and importance now placed on the natural environment by this legislation.

In Carmarthenshire we are aware of our rich and varied natural environment, of the many benefits it provide for us, and we take seriously our responsibilities to conserve this irreplaceable resource.

Sign Off

Philip Hughes, Biodiversity Champion and Executive Board Member

Director's Foreword

The Biodiversity and Resilience of Ecosystems Duty set out in the Environment (Wales) Act 2016 provides a clear direction for the protection of biodiversity and sustainable ecosystems, which is to be welcomed. Whilst this presents challenges it also provides opportunities for the County Council to focus priority and resource to the enhancement of the varied, and in some cases unique, ecosystems within Carmarthenshire. I consider that this review of the Council's 2016–2019 Forward Plan demonstrates how we have worked collaboratively to embed biodiversity and ecosystem resilience into our decision making processes, our plans and policies and our day to day working practices. Over the next 3 years we will continue to develop this approach and monitor our progress. As a public body we will actively seek opportunities to maintain and enhance our natural environment, and promote ecosystem resilience, and we are mindful of its importance to us all for our well-being.

Sign Off

Ruth Mullen, Director, Environment Department

1. Executive Summary

This review has been published to comply with the Authority's legal obligation under the Environment (Wales) Act 2016. Under S6 of this Act all public bodies 'must seek to maintain and enhance biodiversity in the proper exercise of their functions and in doing so promote the resilience of ecosystems'. This is referred to as the S6 Biodiversity and Resilience of Ecosystems Duty.

In order to evidence delivery of this duty, under the Environment Act, it is a statutory duty that all public bodies in Wales must have prepared and published a plan on how they intended to comply with the Biodiversity and Resilience of Ecosystems Duty by March 2017. The legislation also requires them by December 2019, and every 3 years thereafter, to review their plan and publish that review. With reference to Carmarthenshire County Council (CCC), it is requested by Welsh Government that the Forward Plan and the 3-yearly reviews of it are published on the Council's web site. Carmarthenshire County Council published its first Environment Act Forward Plan in 2017, and this is the first review of that plan.

Carmarthenshire's approach to developing and delivering its Forward Plan has been to engage officers in looking at their working practices, plans and projects and help them to identify where these present opportunities for maintaining and enhancing biodiversity and promoting ecosystem resilience, alongside the delivery of their other obligations and objectives. This approach is often resulting in the need to change what in some cases are long-established working practices. This can take time. While some service areas find this a relatively easy change to make, other find this much harder and require regular support in making these changes. We believe we are now seeing changes in working practices.

The agreed 29 Forward Plan actions, as set out below in Table 2, are monitored via CCC's Performance Improvement Monitoring System (PIMS) and reported on by the responsible officer every six months. That report is then signed off by the relevant Head of Service. The Rural Conservation Manager and the Biodiversity Officer are responsible for monitoring the delivery of the plan and engaging all appropriate CCC officers in this process. The delivery of each actions requires regular liaison between these officers and those responsible for each individual action, such as Ground Maintenance officers and officers in Highways and Transportation, while this is time consuming it is essential if working practices are to change.

2. Environment (Wales) Act 2016

The Environment (Wales) Act became law on 21st March 2016. It puts in place legislation to enable Wales' resources to be managed in a more proactive, sustainable and joined up manner and to establish the legislative framework necessary to tackle climate change. The Act supports the Welsh Government's wider remit under the Well-being of Future Generations (Wales) Act 2015. (WFG Act, see below), so that Wales benefits from a prosperous economy, a healthy and resilient environment and vibrant, cohesive communities.

The Biodiversity and Resilience of Ecosystems Duty

Section 6 of the Environment (Wales) Act requires that all public authorities 'must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions'.

The intention of the legislation is to ensure that in carrying out their functions, public authorities will:

- Place biodiversity as a natural and integral part of policy and decision making within public bodies, embedding it in its plans, policies and projects and day-to-day activities.
- Address biodiversity decline, through positive actions that will result in maintenance or enhancement of our biodiversity.
- Develop ecosystem resilience through maintaining and enhancing biodiversity.

What is a resilient ecosystem?

A resilient ecosystem is one that is healthy and functions in a way that is able to address pressures and demands placed on it, and is able to deliver benefits over the long term to meet current social, economic and environmental needs. Our ecosystems provide us with a wide range of services and benefits. We need to take all of these into account when we make decisions about how we use them, so that they provide multiple benefits for the long term. This includes taking into account their intrinsic value.

3. Carmarthenshire's Natural Resources

In reporting on its Environment Act Forward Plan Carmarthenshire County Council understands the importance of the natural environment. Biodiversity, and resilient ecosystems provides us with many of the things that sustain our lives, through a number of important services:

- **Provisioning** – providing food (wheat, fish, etc.), fuel (timber, coal), fresh water, medicine, textiles.
- **Regulating** – disposing of pollutants, controlling floods, absorbing carbon dioxide (greenhouse gases), stopping erosion.
- **Cultural** – beautiful landscapes, a sense of place, recreation and tourism, inspiration and investigation, from schoolchildren to scientists.
- **Supporting** – maintaining soils and plant growth.

A healthy natural environment supports our society and enables our economy to flourish. Our natural resources and ecosystems can help to reduce flooding, supply clean water, improve air quality and supply materials for construction. They also provide a home for a variety of wildlife, and give us landscapes we farm and value in Carmarthenshire, improving our well-being and quality of life, and they are the natural resource on which our growing tourism and recreation industry is based.

However it is well established that the natural environment is under increasing pressure from a variety of causes. A poorly managed natural environment increases the long-term risks to our well-being, and diminishes the value of our natural resources – our natural support system. Hence the rationale in

developing our Environment Act Forward Plan of reviewing our working practices, plan and policies to ensure that they minimise any negative impact on the natural environment and actively seek to maintain and enhance biodiversity and promote ecosystem resilience.

3.1 How our natural resources support the seven well-being goals (from NRW's [State of Natural Resources Report](#))

<i>A prosperous Wales</i>	Natural resources provide opportunities for employment and economic activity. Wildlife and outdoor activity tourism to Wales provides c.206, 000 jobs and is estimated to be worth £6.2 billion. In 2013, over 3.5 million visitors to our coastline brought £602 million to the economy, with growth predicted at 10%. Wales' three National Parks attract 12 million visitors every year who spend £1 billion on goods and services.
<i>A resilient Wales</i>	Biodiversity, mountains, moorlands and heaths, semi-natural grasslands, woodlands, urban greenspaces, rivers, streams, lakes and wetlands, coastline, and marine ecosystems all contribute to supporting Wales' ability to adapt to climate change.
<i>A healthier Wales</i>	Natural resources make a significant contribution to the physical health and mental well-being of people in Wales. Trees help to absorb pollutants and improve air quality, which if poor can impact on people's health. Access to nature and greenspace has positive impacts on physical and mental health.
<i>A more equal Wales</i>	Equal access to ecosystems providing cultural services contribute to equality in Wales. We will work towards proving equal access for everyone to well-being benefits provided by natural ecosystems.
<i>A Wales of cohesive communities</i>	Involving communities in the management of their local parks and woodlands has been shown to improve community cohesion and reduce anti-social behaviour. We have begun to work with Town and Community Councils regarding local parks
<i>A Wales of vibrant culture and thriving Welsh Language</i>	Landscapes have played a significant role in the development of distinct cultural practices, such as local building techniques relying on local materials, along with locally specific art and literature.
<i>A globally responsible Wales</i>	The environment supplies all our material resources but we must ensure that we use only our fair share.

3.2 Nature Recovery Action Plan

The Welsh Government launched its own [Nature Recovery Action Plan](#) (NRAP), which sets out its commitment to biodiversity in Wales,

The NRAP objectives are:

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

In Carmarthenshire a Local Nature Recovery Plan will be developed based on the objectives of the national plan and the priorities of the South West Area Statement.

4. Strategic context

4.1 Council Plans and Policies that link to Environment Act (Wales) 2016

- **The County of Carmarthenshire’s Well-being Plan** – published May 2018. This Plan outlines how the Public Services Board will work in partnership to address some of the key issues affecting the well-being of the citizens and communities of the County.
- **Corporate Strategy.** The 2018–2023 strategy sets out the direction for the local authority over the next five years, incorporating our improvement and well-being objectives as defined by legislation. The strategy outlines the council’s vision for the future in 15 new objectives under four key themes – to support residents to start well, live well and age well in a healthy, safe and prosperous environment. Objective 12 is to: *Look after the environment now and for the future.*

Objective 12 of the Council’s Corporate Strategy is the principal link with the Environment Act, with objectives providing additional links:

	Well-being Objectives	Link with CCC Corporate Strategy
2	Help children live healthy lifestyles	Secondary
3	Continue to improve learner attainment for all	Secondary
6	Create more jobs and growth throughout the county	Secondary
8	Help people live healthy lives	Secondary
9	Support good connections with friends, family and safer communities	Secondary
12	Look after the environment now and in the future	Lead
13	Improve the highway and transport infrastructure and connectivity	Secondary

Other Council Plans and Strategies that should be making reference to the Environment Act and the S6 duty, and relevant PIMS action in Table 2:

5. Forward Plan – actions delivered

Moving Forward in Carmarthenshire: the next 5 years	
Transformations: Strategic Regeneration Plan for Carmarthenshire – 2015–2030	
Local Development Plan 2018-2033	PIMS action 13245
Flood Risk Strategy and Management Plan	PIMS action 12979
Corporate Asset Management Plan 2016–2019	PIMS action 12978
Rights of Way Improvement Plan 2019	PIMS action 12971
Highway Assets Management Plan	PIMS action 12974

Active Travel – Carmarthenshire	PIMS action 12974
Carmarthenshire Cycling Strategy 2017–27	PIMS action 12974
Safe Routes to School	PIMS action 12974
Draft Strategic Plan for Pollinators	PIMS action 13054
Carmarthenshire Nature Recovery Plan (in development)	PIMS action 12967

5.1 How the action plan was developed and reported on

Identifying divisional actions

This first action plan has been developed by and for the Environment Department through a series of workshops and discussions with both Heads of Service and colleagues within four of its divisions. These started in late November and December 2016. Those attending were asked to review the activities for which they were responsible, and identify which of these had the potential to impact on biodiversity and where there are opportunities to address, through a change in working practice, the new S6 Biodiversity Duty placed on public bodies by the Environment (Wales) Act 2016. The actions identified were then circulated to the relevant Head of Service and teams for approval. It was stressed that these actions must come from the teams rather than being imposed on them – this is considered essential for the embedding of new working practices.

Each agreed action was then added to the Council’s Performance Management Improvement System (PIMS) and many are in the process of being integrated with Divisional Business Plans as considered appropriate. Using the PIMS these actions are reported on 6 monthly in June and December each year, with the update report being signed off by the relevant Head of Service. The January PIMS reporting round on these Environment Act PIMS actions forms the basis of the annual report to the Council’s Environment and Public Protection Scrutiny Committee in early July each year. The action plan is a dynamic document. Actions are reviewed and revised as necessary with the officers responsible for them. New actions can be added as discussion take place with other relevant divisions within the Council.

The June 2019 reporting round for the Council’s Environment Act PIMS actions has been used in the compilation of this report.

It is considered that the approach to delivering the Council’s Environment Act Forward plan demonstrates the following ways of working as referred to in the WFG Act:

Looking at the long term so that we do not compromise the ability of future generations to meet their own needs	We have been reviewing the Council’s services and working practices – our core work , and the changes we make to these practices will deliver long term benefits
Understanding the root causes of the issues to prevent them reoccurring	
Taking an integrated approach so that we look at all well- being goals and objectives of other services and partners	We have developed our Environment Act actions with the delivery teams responsible, ensuring that the actions identified can be integrated into working practices, and with other policies and plans
Collaboration - working with others in a collaborative way to find shared sustainable solutions	We have demonstrated a collaborative approach by working together with those responsible for making changes in working practices

5.2 Environment Act Workshop schedule: update and priorities for 3 years in this table

Table 1 Time table of workshops held across CCC service areas in 2016–2019

Department	Division	Date of workshop	Goals agreed?	Comments
Chief Executive	Administration & Law	Corporate Policy and Partnership - September 2019	YES	Inclusion of Environment Act as part of the Integrated Impact Assessment in templates for all committee reports going to Council with assistance for completing this assessment being available
Communities	Housing, Public Protection and Care and Support Services	Homes and Safer Communities - 26/02/2019	YES	Met with housing to discuss pilot project to look at grass cutting at sheltered housing site in Llanelli.
	Leisure	01/06/2017	YES	Outdoor Recreation/Countryside Access/ Country Parks
Education & Children	Children's Services	Youth Support Services - 28/02/2019		Discussions with Youth Support Services with suggestions for partnership working at sites in Llanelli
Environment	Planning /Minerals	Planning 10/1/2018 Enforcement 14/6/2018 Minerals 2/10/2018	YES	
	Property	30/11/2016	YES	
	Highways and Transport	7/12/2016	YES	
	Grounds and Cleansing	11/05/2017	YES	
	Waste & Environmental Services	Flood Defence 26/2/2018 Waste and Environmental Services 30/11/2016	YES	

Workshops to identify actions to be included in the Forward Plan were initiated in November 2016 as set out in Table 1 above. Agreed actions were placed on the Council’s PIMS system and were reported on from December 2017, and every 6 months thereafter. The June 2019 reporting round is the basis for this report and is summarised in Table 2 below.

5.3 TABLE 2 Carmarthenshire County Council’s Environment Act Forward Plan Actions developed and reported on:

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
GROUNDS MAINTENANCE				
<p>PIMS 13043 We will review grass cutting undertaken by Grounds Maintenance to investigate efficiencies and benefits of biodiversity. We will identify the areas managed in the following ways: Regular mowing -ha where mowing will be less frequent and cut with higher blades, befitting pollinators, Wildlife areas - ha cut less frequently</p>	<ul style="list-style-type: none"> The Biodiversity Officer worked with grounds maintenance officers to consider five pilot sites owned by the council to look at how management could be amended to benefit pollinators. Grass cutting was relaxed between April and mid-July. This has highlighted the problems of working to change existing management and problems with internal communication and the results have been mixed, but the basis for future management and the need to establish new ways of working have been laid down. 	<p>Costs:</p> <ul style="list-style-type: none"> Reduction in frequency of cutting and later start dates are expected to bring some cost savings. <p>Environmental benefits:</p> <ul style="list-style-type: none"> Reduced use of fuel Greater opportunities for grassland plants to flower and provide source of nectar for pollinators Increased infiltration by water as plants develop deeper roots in response less frequent cutting, and so reducing water run-off <p>Impact:</p> <ul style="list-style-type: none"> More diverse grassland areas with more species able to flower for longer. A more natural feel to the areas being managed 	<ul style="list-style-type: none"> Engage and support participation and understanding to embed biodiversity throughout decision making at all levels – CCC operators understand how and why the value of grassland to biodiversity can be improved through less frequent and later cutting regimes. Increase in biodiversity value of grasslands to pollinators achieved through changes in grass cutting regimes 	<p>Case study provided p.4</p> <p>Signs created to show areas where management was amended</p>
PIMS 13044	Jan2019 Melcourt peat-free	Costs:	<ul style="list-style-type: none"> Tackle key pressures on species and 	

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
Review use of annual bedding plants in formal areas and their suitability for pollinators, whether they are grown in peat compost.	compost is now used on the supply of bedding. More work needs to be done to consider the nature of the bedding plans or whether longer-term perennial planting can be used.	<ul style="list-style-type: none"> • Possibly some increase in cost as peat free products tend to be slightly more expensive. <p>Environmental benefits:</p> <ul style="list-style-type: none"> • Reduced demand for peat based products 	habitats <ul style="list-style-type: none"> • Reduced demand for peat product and established use of suitable alternatives 	
<p>PIMS 13045</p> <p>When visiting schools to agree content of SLA agreement and grass cutting options, discuss the potential to manage areas of school grounds for biodiversity, with the support of Conservation Section.</p>	The Biodiversity Officer met with two teachers from Johnstown Primary School to discuss management of their school grounds to enhance the site for biodiversity. A simple management plan was drawn up. This was well received and evidences that large gains can be achieved with minimal input. This contact led to help with another project with the school.	<p>Costs:</p> <ul style="list-style-type: none"> • Very little, change to management costs expected. <p>Environmental benefits:</p> <ul style="list-style-type: none"> • More diverse habitats within the school grounds greater ecological connectivity and ecological resilience • Opportunities created for teaching about ecosystems <p>Impact:</p> <ul style="list-style-type: none"> • More diverse grassland areas with more species able to flower for longer. A more natural feel to the school grounds 	<ul style="list-style-type: none"> • Engage and support participation and understanding to embed biodiversity throughout decision making at all levels. • Increased area of grassland managed for pollinators. • Increased awareness within teaching staff. 	Evidence: Management Plan and photos supplied.
<p>PIMS 13046</p> <p>Consider amendments to grass cutting on land around sheltered housing/old age homes, etc. as part of review of contract with housing to undertake this work</p>	Biodiversity officer met with Housing Officer at sheltered accommodation at Clos Llanfihangel in Dafen and met the residents to discuss grassland management there. They agreed to some concessions to cutting. A boundary bank and strip along	<p>Costs:</p> <ul style="list-style-type: none"> • Very little, change to management costs expected. <p>Environmental benefits:</p> <ul style="list-style-type: none"> • More diverse habitats within the grounds greater ecological connectivity and ecological resilience 	<ul style="list-style-type: none"> • Engage and support participation and understanding to embed biodiversity throughout decision making at all levels. • CCC operators understand how and why the value of grassland to biodiversity can be improved through less frequent and later cutting regimes. 	

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
	<p>the bottom was left uncut. The grass around the building is species rich and would benefit from being left until mid July but residents were not keen and a second meeting could not persuade them.</p> <p>It would certainly be worth surveying other sites to see if they were species rich as well and then work to highlight benefits of relaxed mowing regime.</p>	<ul style="list-style-type: none"> Opportunities created for raising awareness of ecosystems and the services they provide <p>Impact:</p> <ul style="list-style-type: none"> More diverse grassland areas with more species able to flower for longer 	<ul style="list-style-type: none"> Increase in biodiversity value of grasslands to pollinators achieved through changes in grass cutting regimes 	
<p>PIMS 13047 We will ensure that sites being transferred to T&CCs, that trees that may become unsafe are safety surveyed (Tree Assured), with assistance from the Conservation Section and TPOs used appropriately.</p>	<p>The Rural Conservation Manager and Biodiversity Officer met with the Grounds Manager and Senior Assets Management Surveyor to discuss asset transfer on 11 January 2018. TreeAssured system for tree safety surveys being promoted to T and CCs</p>	<p>n/a</p>	<p>Engage and support participation and understanding to embed biodiversity throughout decision making at all levels.</p>	<p>Evidence: Guidance produced for T&CCs provided.</p>
<p>PIMS 13050 Eastgate roundabout Llanelli - investigate if our landscape officer could prepare a simple planting design for this that would be a low cost, sustainable low maintenance and meet the Council's expectations</p>	<p>This efficiency proposal was agreed at full council on 20-2-2018. Discussions on design and planting options have taken place with Planning and Grounds Maintenance officers. Final decision on planting regime to be concluded within 3 months with new regime implemented by 1st April 2020 in line with agreed budget proposal.</p>	<p>Costs</p> <ul style="list-style-type: none"> Considerable reduction in cost expected as annual bedding plants are replaced with pollinator friendly perennials. Lower annual labour costs as well once new design is implemented <p>Environmental benefits:</p> <ul style="list-style-type: none"> Reduced demand for horticultural products, and enhancement of the planting area for pollinators 	<ul style="list-style-type: none"> Engage and support participation and understanding to embed biodiversity throughout decision making at all levels. The resulting design will be of greater benefit to pollinators and in the longer term will reduce costs as it will no longer be necessary to purchase bedding plants 	

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
		Impact: <ul style="list-style-type: none"> • a demonstration of a more sustainable approach to urban landscaping 		
PIMS 13052 Parc Howard. Work in collaboration with Friend’s group/landscape officer/biodiversity officer to look at management of the park and review its management for biodiversity and generally improve horticulture here. Action to be revised.	Discussions at Parc Howard were not productive so CCC decided to work with Cwmwaman Town Council at Golwg yr Aman in Garnant. This is park was the case study used in the event at the NBGW see 13048	Costs <ul style="list-style-type: none"> • No costs available as yet. Environmental benefits: <ul style="list-style-type: none"> • Park improvements that will enhance ecological connectivity and resilience: grass cutting that will benefit pollinators, enhancement of water courses, tree and shrub planting • Impact: the park will improve in terms of its value to biodiversity and overall amenity value 	<ul style="list-style-type: none"> • Engage and support participation and understanding to embed biodiversity throughout decision making at all levels. • Key biodiversity gain: greater ecological connectivity across the park and along the riverside 	Case study provided – p 4.
13043- 13052 WELL BEING – public will enjoy seeing flower rich grassland in the open spaces near where they live, and along the road side verges, and will see the benefits of these for pollinators. Children will benefit children from more diverse and more natural school grounds, and will hopefully spend more time in the outdoor classroom. Some cost savings from a reduction in frequency of grass cutting is expected. Cost saving in removing regular expenditure on bedding plants, reducing labour costs and in reducing fuel costs and consequently carbon emissions from mowing machinery				
LEISURE SERVICES				
PIMS 13056 Develop simple biodiversity management plans for each countryside site that Leisure manage, linking the plan to recreation and the management of natural resources and WFG Act well-being goals, Environment Act biodiversity duty and WG Bee-friendly action guide: Pembrey CP, Llyn Llech	<ul style="list-style-type: none"> • 5-year strategic conservation management plans have been created for all sites, and are being delivered supported by WG grant aid. • Management of these sites will ensure that their biodiversity interest is maintained and enhanced and that ecosystem resilience is promoted. Activities include heathland restoration, pond 	Costs: c. £38,200 p.a. post and contracted services for management activities that cannot be delivered in house (2018/19 figures from WG grant) Environmental benefits: <ul style="list-style-type: none"> • Country Parks and LNRs which tend to be close to local communities are managed in ways that maintain and enhance biodiversity and promote ecosystem resilience, 	<ul style="list-style-type: none"> • Safeguard species and habitats of principal importance and improve their management • Increase the resilience of our natural environment by restoring degraded habitats and habitat creation • Tackle key pressures on species and habitats • Improve our evidence, understanding and monitoring • Key biodiversity gain: Habitats managed primarily for biodiversity and public access, 	Projects delivered across CCC’s County Parks and LNRs in 2018/2019 included 22 Conservation volunteer days on LNR sites including Pwll Lagoon LNR, Pembrey Burrows LNR, Morfa Berwig LNR, Ynys Dawela NP. Work has included removing invasive saplings, installation of dormouse boxes, repairs to fencing and stiles, bank management for water vole, tree planting, monitoring for marsh fritillary larval food webs, water vole and otter monitoring, pond management, stock

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
Owain CP, Mynydd Mawr, Ynys Dawela, M Coastal Path, etc.	management, management of species rich grassland, and offer opportunities for volunteer involvement.	<p>providing accessible natural green space</p> <ul style="list-style-type: none"> • Ecological connectivity is developed • Monitoring is carried out as appropriate, and as resources permit <p>Impact:</p> <ul style="list-style-type: none"> • CCC is actively managing green infrastructure for public well-being and biodiversity benefit 	<p>maintenance of natural green space. Enhanced ecological connectivity across sites and improved ecological resilience</p>	<p>management training session with Pont Cymru, monitoring of winter bat roosts and barn owl site and boardwalk repairs.</p> <p>2. Health and wellbeing Mindfulness Trails have been completed for Pembrey Burrows LNR, Mynydd Mawr WP and Ynys Dawela NP whilst an Active Walking Trail has been completed for Pembrey Burrows LNR. Leaflets were distributed in various locations including social prescribing group at GP surgeries.</p> <p>3. Initial liaison with promotions officer resulted in strategy for increased presence of LNR's on council website.</p> <p>4. 42 dormouse boxes were installed in Pwll Lagoon LNR by Carmarthenshire LNR Conservation Volunteers and a contract completed with JTJ Landscapes to remove large willow and birch saplings from the floor of the fen.</p> <p>Habitat management works were carried out by John Davies Contracting at Ynys Dawela NP with cut and collect for field 4, drainage improvement and improvements to trackways in the west of the park.</p> <p>Pond management works were carried out at Mynydd Mawr WP with selective coppicing / thinning around pond 1 and 2, dredging of 30% of pond 2 and installation of a sluice for pond 2 to raise water levels by 0.3m.</p> <p>5. The interpretation panel for Ynys</p>

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
				Dawela NP was installed outside the cinema in Brynaman along with 3 waymarkers, signing the LNR from the town. 6. Heathland and bog restoration at Llyn Llech Owain CP
<p>PIMS 13057 With the teams involved, identify wildlife and ecology training needs and consider which needs can be met through skill sharing and those which require external trainers. Summarise in a training plan, and identify trainers, and deliver</p>	<ul style="list-style-type: none"> Monday Nov 19, 2018 - Pollinator Course and Grassland Management with Bumble Bee Conservation Trust. 12 Leisure Services staff attended Staff have also attended Visual tree Inspection Courses and Ash Dei back courses that will be of benefit to them in the ensuring the appropriate long term management of wooded areas in the Country Parks 	<p>Cost: usually covered within training budget</p> <p>Environmental benefits:</p> <ul style="list-style-type: none"> A more environmentally aware and engaged work force Skills and knowledge gained is applied to site management, and feeds into public events and interpretation of the sites. 	Improve our evidence, understanding and monitoring	
<p>PIMS 13058 Ensure rangers are familiar with biological recording and submit records to West Wales Biological Recording Centre in Whitland. WWBIC can provide training</p>	<p>BioBlitz held in Pembrey Country Park in June 2018 supported by West Wales Biodiversity Information Centre, County Recorders, Rangers and the Carmarthenshire Nature Partnership.</p> <p>WWBIC App sent to rangers in August 2018 and all rangers are familiar with how to submit records to WWBIC</p>	<p>Cost - free</p> <p>Environmental benefits:</p> <ul style="list-style-type: none"> A more environmentally aware and engaged work force Skills and knowledge gained is applied to site management Impact: develops evidence and understanding of the importance of the sites CCC is managing 	Improve our evidence, understanding and monitoring	
<p>PIMS 13059 Having developed management plans for sites, use laminated</p>	Signs/interpretation delivered and placed around various sites	<p>Cost: per sign inc. design = £7.20</p> <p>Environmental benefits:</p> <ul style="list-style-type: none"> provide interpretation for the 	Improve our evidence, understanding and monitoring	Case study provided – p 6.

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
bilingual signs to explain changes in grass cutting regimes, and other management changes to the public in an informative way. Develop prototype sign		<p>general public where it is needed</p> <p>Impact:</p> <ul style="list-style-type: none"> portrays CCC as an organisation that is actively managing sites for pollinators, and engaging with the public. 		
<p>PIMS 13060</p> <p>Identify equipment needs to deliver long-term management objectives for habitats (as per management plans) within Leisure sites and identify training needs associated with any new management practice or piece of machinery to be used for conservation purposes, and deliver training</p>	<p>Cut and collect machine to facilitate more appropriate management of smaller areas of species-rich grassland to be purchased with WG ENRaW grant. Acceptance of grant offer by ENRaW partnership awaited</p>	<p>Cost: £29,900</p> <p>Environmental benefits:</p> <ul style="list-style-type: none"> smaller areas of species rich grassland in the Country Parks can be managed more effectively to conserve species richness by cutting at the most appropriate time of year and removal of arisings <p>Environmental benefits:</p> <ul style="list-style-type: none"> increase in species diversity and longer periods of flowering in our grassland habitats 	<ul style="list-style-type: none"> Safeguard species and habitats of principal importance and improve their management Increase the resilience of our natural environment by restoring degraded habitats and habitat creation Key biodiversity gain once machinery is available, improved management of specie –rich grassland in our County Parks 	<p>\\ntcarmcc\cfp\Planning & Building Control\Biodiversity\Environment Act 2016\Machinery needed to improve biodiversity.docx 09/06/2017</p>
<p>PIMS 13061</p> <p>Identify staff who would benefit from refresher course in Tree Inspections and liaise with Steven Edwards re arranging the necessary course</p>	<p>Refresher training on visual tree inspection completed 20th February 2019. 22 attended.</p>	<p>Cost: c. £25-35 per trainee if group is set up</p> <p>Environmental benefits:</p> <ul style="list-style-type: none"> increased awareness among staff od how trees should be managed with regards to safety, using a risk based system, highlighting alternatives to felling where these exist and the value of old trees to biodiversity <p>Impact:</p> <ul style="list-style-type: none"> trainees are more confident with regards to completing tree safety surveys and identifying appropriate tree management 	<p>Improve our evidence, understanding and monitoring</p>	

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
<p>13056 – 13061 WELL BEING – Overall approach will improve the value of our country parks for biodiversity and also the awareness of our staff and the public of how important these areas are for supporting biodiversity, and contributing to the well-being of those who use them. The parks offer opportunities for volunteers to be actively involved in managing these natural areas, that include river valleys, grasslands, woodlands and coastal habitats.</p>				
<p>HIGHWAYS and TRANSPORTATION</p>				
<p>PIMS 12970 Verge Cutting - Continue to implement policy, deliver annual tool box talk and make provision for late cut verges</p>	<p>The service has continued to implement the verge maintenance policy, deliver annual tool box talk and make provision for late cut verges across the highway network. The management of highway verges has also been the subject of a CCC Environment and Public Protection Scrutiny Committee Task and Finish group. The recommendations of the group made on 4th March 2019 include: 2a Facilitate further environmental enhancement for biodiversity, such as late or biennial cutting of selected areas, or other appropriate management provision. 2c Include clear information on the Council website with specific regard to the conservation and management of roadside verges.</p> <p>Biodiversity officer drafted these as FAQ and they are now with Highways team for consideration. In the pollinator section of the biodiversity web pages there are verge photos and brief into about verge</p>	<p>Late cuts may incur additional cost if contractors have to return to an area for a relatively small amount of work</p> <p>Cutting a single swathe of some areas may result in lower costs.</p> <p>Environmental benefits: Biennial cutting will benefit some of our grassland and low shrub (e.g. heathland) ecosystems, particularly those that flower in late summer</p> <p>Impact: Contractors understand that roadside verge management is important for road safety and biodiversity. Road verges are managed in ways that reflect the importance of these habitats for wildlife</p> <p>Cutting used to start before the end of May and now usually starts after mid-June or later. Some cost savings in terms of less cutting e.g. only one swathe now cut along wider verges. Reduction in carbon emissions from mowing machinery.</p>	<ul style="list-style-type: none"> • Engage and support participation and understanding to embed biodiversity throughout decision making at all levels. • Key biodiversity gain: management of the county's c. 6000km of road side verges that will enhance their biodiversity value. Their value for pollinators and other invertebrates will be enhanced through later cutting, and the value of adjacent scrub habitats will be enhanced as only a 1m swathe will be cut in most instances 	<p>http://rllloydpr.co.uk/2018/06/12/annual-grass-cutting-gets-underway-in-carmarthenshire/</p> <p>http://democracy.carmarthenshire.gov.wales/documents/s21411/Report.html?CT=2</p> <p>Evidence: guidance note provided.</p>

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
	management. These actions are to be completed by 1/1/2020			
PIMS 12971 The review of Rights Of Way Improvement Plan will address new duties placed on LAs under this Act. The review will be completed in 2018	The 12-week consultation on the draft ROWIP is now complete and all responses have been reviewed and these included comments from the Biodiversity Officer. ROWIP scheduled to go through CMT, Pre-Exec Board, Exec Board and Scrutiny. Amend target date to 21/11/2019 to reflect committee timetables.		<ul style="list-style-type: none"> Engage and support participation and understanding to embed biodiversity throughout decision making at all levels. 	
PIMS 12974 Highways and Transportation will work with the Rural Conservation Section to identify and highlight opportunities in the development and implementation of new infrastructure that will contribute positively to ecological resilience	With the appointment of a Project Ecologist the Rural Conservation team now has the resources to provide detailed advice regarding the design and implementation of highways schemes so as to demonstrate understanding and delivery of CCC'S S6 duties	Cost: as a percentage of the cost of the total scheme, the cost of accommodating biodiversity is usually small but it can impact on the time of year when the scheme can be delivered Environmental benefits: Highway schemes are delivered in compliance with relevant legislation and policy. Habitats and species are safeguarded Adverse Impact on habitats and species is minimised, an mitigation integrated with design from the outset of the project	<ul style="list-style-type: none"> Engage and support participation and understanding to embed biodiversity throughout decision making at all levels Safeguard species and habitats of principal importance and improve their management 	<ul style="list-style-type: none"> Ammanford footways scheme as designed to include a method statement for working in an area that had the potential to support dormice. Landscaping of this scheme (Winter 2019/20) will provide enhancement to the habitat by increasing the amount of hazel in the road side corridor Ty Croes footway scheme is being designed to improve pedestrian road safety with minimal impact on mature trees, and a species - rich hedgerow, while ensuring that the requirement of protected species (badgers and dormice) have been met. Case study provided – p.1
12970 – 12972 WELL BEING – Overall approach will lead to a greener transport infrastructure which will be of benefit the public and to wildlife. Projects are addressing biodiversity issues from the outset				
PLANNING SERVICE				
PIMS 12965	During the 3 year period	Cost: none	<ul style="list-style-type: none"> Engage and support participation and 	

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
Undertake workshops with relevant Divisions in other CCC Departments to generate action/s for these Divisions to incorporate into their Business Plans and report on via the PIMS	workshops were held with Development Managers and in (June 2017) with Enforcement officers (October 2017) to highlight S6 Environment Act duties. Further workshops held with Minerals in (October 2018), and Flood Defence in Feb 2018. A further workshop on the S6 duty was run on 11 th Jan 2019 for the Planning Service, and for planning agents on 18 th Jan 2019 and for Elected Members on 20 th June 2019	<p>Environmental benefits: Increased awareness of the legislative requirement of CCC's S6 duty, and the policies that exist to support this approach.</p> <p>Impact: Service area across the Environment Dept. and elsewhere have identified the opportunities that exist in their plans, policies and working practices that when delivered will demonstrate that CCC is delivering its S6 duty</p>	understanding to embed biodiversity throughout decision making at all levels.	
<p>PIMS 12966 Produce guidance notes on protected species for use by colleagues to ensure that we work within the legislation with regard to protected species and to be consistent with our duty under the Environment Act 2016</p>	Advice notes on various protected species written for officers were produced and made available to officers via an open access file on the council's file plan system. However this is not the optimum place for them and they should be made available on the Council's Intranet. This still needs to be done so they can be more widely promoted to officers.	<p>Cost: none</p> <p>Environmental benefits: Guidance communicated to target audience</p> <p>Impact: better informed workforce, increase in capacity to deliver S6 Biodiversity Duty</p>	<ul style="list-style-type: none"> Engage and support participation and understanding to embed biodiversity throughout decision making at all levels Safeguard species and habitats of principal importance and improve their management 	Guidance notes available
<p>PIMS 12967 Review the Local Biodiversity Action Plan for Carmarthenshire in light of the new legislation and guidance</p>	Part 1 of the Carms Nature Recovery Plan, which is aimed at the public/business/communities has been drafted and consulted on internally and with the WBP officer. The principle of the plan's contents have been approved by the Nature Partnership. Part 2, which addresses the national	<p>Cost: none, as this is core work</p> <p>Environmental benefits: the plan will set out a strategy that will be delivered in partnership to guide nature recovery in Carmarthenshire</p> <p>Impact: a partnership strategy that can be</p>	<ul style="list-style-type: none"> Tackle key pressures on species and habitats Safeguard species and habitats of principal importance and improve their management Improve our evidence, understanding and monitoring 	

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
	objectives and local implementation will be discussed at the next Nature Partnership meeting on 15th October.	communicated to the public and other organisations		
<p>PIMS 12969 Environment Department to deliver an integrated and long term approach to the implementation of projects on the Llanelli Levels. Identify and work with partners and stakeholders e.g. Network Rail, Wildfowl and Wetlands Trust, Wildlife Trust, local communities</p>	<p>The creation of a 400+m ditch with associated banks designed as water vole habitat on CCC-owned land near the WWT has been completed. Monitoring of this and the adjacent pond site was undertaken in June 2019 and signs of water voles were found on the ditch site. Action is still required to remove the traveller ponies from the adjacent pond site - they have cut through a fence and also dumped rubbish. Discussions re the management of wetland habitats at nearby Machynys housing development site with the developer has moved on with the sum agreed and the planning officer working out the best mechanism to take the agreement forward. Wetland management by CCC continues at Morfa Berwig LNR. It would be beneficial to survey the ponds created for the link road to see if there signs of water vole there. There is still a need to look at connectivity via road and rail culverts in the Bynea area. However, Network Rail have been hard to engage with.</p>	<p>Cost: c. £5,000 (Phase 2 – S106 contribution)</p> <p>Environmental benefits: c. 800m of new water vole habitat in a key site for the species</p> <p>Impact: creation of significant extent of habitat for this species of principle importance</p>	<ul style="list-style-type: none"> • Engage and support participation and understanding to embed biodiversity throughout decision making at all levels • Key biodiversity benefit creation of 800m of habitat for water vole in one of its key sites in Wales that will also provide better connectivity between other areas of suitable habitat. • Safeguard species and habitats of principal importance and improve their management • Tackle key pressures on species and habitats • Improve our evidence, understanding and monitoring 	<p>Case study provided - p1.</p>

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
<p>PIMS 13245 The Planning Division will develop a consistent approach to ensuring that biodiversity is maintained and enhanced, and that ecosystem resilience is promoted as part of the planning system and also within its Conservation, Minerals Forward Planning and Building Control activities.</p>	<p>Planning applications are assessed by CCC's planning ecologist to ensure that where approvals are granted applications demonstrate that CCC is discharging its S6 duty. E.g. Application S/38351 - the Ecological Mitigation Plan for the Bury Port Harbour Developments. The plan addresses the demolition of a pipistrelle bat roost under NRW licence, reptile (slow worm and common lizard) translocation, with enhancement and monitoring of the receptor site in the CCC managed Millennium Coastal Park (MCP), working outside of the bird-nesting season, and off site compensation for the loss of open mosaic habitat on previously developed land, by way of a financial contribution to the cost of managing Morfa Berwig Local Nature Reserve over 25 years in order to provide this habitat in perpetuity</p>	<p>RE S/38351 Cost: to the developer, contribution to the LNR management £137,500 (25 years' management) plus cost of reptile work (translocation habitat enhancement and monitoring)</p> <p>Environmental benefits: Long-term management of the LNR had been secured by this financial contribution and habitat management works will be funded to ensure the open mosaic habitat is appropriately managed. Being in an LNR, this form of management is a priority and it will also be interpreted for and enjoyed by local residents and school children.</p> <p>Impact: a development that demonstrates the S6 duty to maintain and enhance biodiversity and promote ecosystem resilience of and LNR</p>	<ul style="list-style-type: none"> Engage and support participation and understanding to embed biodiversity throughout decision making at all levels Safeguard species and habitats of principal importance and improve their management Tackle key pressures on species and habitats Improve our evidence, understanding and monitoring Key biodiversity benefit: Brownfield habitat managed in perpetuity on site now designated as LNR, as well as habitat managed for reptiles in MCP. Bat mitigation 	
<p>PIMS 13048 Prepare guidance on environmentally friendly land management for the larger Town and Community Councils covered by the Env Act duty re and grass cutting and biodiversity management of land under</p>	<p>WG passed the guidance on to One Voice Wales who liaise with T&CCs throughout the country.</p> <p>In addition NBGW, in partnership with CCC hosted a session for Town and Community Councils and others</p>	<p>Cost: None - core work</p> <p>Environmental benefits: T and CC will be better placed to deliver their S6 and Well-being Act responsibilities in terms of the management of the land for which they are responsible</p>	<ul style="list-style-type: none"> Engage and support participation and understanding to embed biodiversity throughout decision making at all levels. Key Biodiversity benefit : more land managers will be aware of management techniques that will enhance biodiversity rather than contribute to its decline. 	<p>Case study provided - p1.</p>

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
their control	<p>on how to manage green spaces for people and wildlife on 27th June 2019 at the NBGW.</p> <p>This event was attended by over 50 delegates and included presentations of alternative approaches to managing public open space, guided walks and a workshop session based on a Carmarthenshire park.</p> <p>Two T&CCs have now approached CCC for help in preparing their required policy on biodiversity under the Env Act.</p> <p>Guidance is useful when liaising with public enquiries re local projects as well.</p>	<p>Impact: More likely that land managed by some T and CC will maintain and enhance biodiversity and will promote ecosystem resilience</p>		
<p>PIMS 13054 Produce a Pollinator Strategy for the Council to inform positive action for pollinators throughout the Council's work. This strategy could be adopted by Community Councils, PSB and strategic developments, etc.</p>	<p>The draft strategic plan for pollinators for the county has been prepared and formatted into a designed document - and five management plans for CCC-owned sites produced. The plan needs to be formally signed off internally before it can go on the website or sent to Welsh Government. At the moment it is not a fully endorsed document. Future projects will be based on the objectives of the strategic plan so its approval/endorsement is important during 2019/20</p>	<p>Cost: none - core work</p> <p>Environmental benefits: a plan that can be used by a range of organisation and sets out how land can be managed for the benefit of pollinators.</p> <p>Impact: will depend on delivery of the strategy</p>	<ul style="list-style-type: none"> • Engage and support participation and understanding to embed biodiversity throughout decision making at all levels. • Safeguard species and habitats of principal importance and improve their management • Tackle key pressures on species and habitats • Key Biodiversity benefit: more land will be managed using techniques that will enhance biodiversity rather than contribute to its decline. 	<p>Draft strategic plan for pollinators provided. Case study provided – p 4.</p>

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
<p>PIMS 13055 Seek funding for a pollinator project for Llanelli, which seeks to include elements involving schools, communities, housing, MCP, PCP, grounds maintenance, highways. It would include practical management (purchase of kit and wild flower seed), public events, workshops</p>	<p>Graduate Ecologist has been working with rangers at PCP and mowers. A reduced cutting regime has been continued in 2019 with an area at Sandy Water Park, in the Millennium Coastal Park left uncut until late summer, another cut regularly and others ever 3 weeks or so. These are being monitored. This experiment will inform cutting elsewhere in future years.</p> <p>As with other grass cutting it has not been without its problems re communication, equipment issues and staff constraints but overall the project has been a success and will be continued. The use of interpretive signage at these sites has been welcomed by the public.</p> <p>To date the cost of the collect has been prohibitive but the purchase of a cut and collect machine with WG grant aid will improve the management of these areas for biodiversity.</p>	<p>Cost: none - core work</p> <p>Environmental benefits: Collaborative approach to investigating the benefits of different mowing regimes on pollinators and opportunity to discuss this with the public and gain feedback</p> <p>Impact: Increase in area managed with pollinators as a priority; increased public awareness and support. Can be used as an example of how this management could work for a range of land managers</p>	<ul style="list-style-type: none"> • Engage and support participation and understanding to embed biodiversity throughout decision making at all levels • Safeguard species and habitats of principal importance and improve their management • Tackle key pressures on species and habitats • Key Biodiversity benefit: more land is managed using techniques that will enhance biodiversity rather than contribute to its decline. Benefits of this approach are interpreted to the public 	<p>Evidence provided: Monitoring report</p> <p>Evidence provided: Project sign provided.</p>
<p>• 12965 to 13055 WELL-BEING -the planning division is taking a lead in raising awareness of how CCC can deliver its S6 duties, both via communicating with other service areas and by advising on the management of land within CCC's property portfolio for biodiversity, and that managed by T and CC, which in the long term will benefit the well-being of Carmarthenshire's communities who enjoy these areas, e.g. changes in grass cutting regimes, that is being monitored, will benefit pollinators habitat creation to enhance a key water vole site. In some instances the changes in management that is proposed will result in cost savings but it is too early to gauge these at present</p>				
<p>PROPERTY DESIGN (ENVIRONMENT)</p>				

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
<p>PIMS 12977</p> <p>In order to demonstrate that CCC is embedding its S6 duties into its ways of working in relation to the development or re-development of CCC owned/ managed sites, Property Design will monitor the inclusion of measures to enhance biodiversity and improve ecological connectivity as features of both briefs for ecological survey work, and in project design briefs, as well as in projects for which planning permission is granted and in projects that are delivered on site. Where CCC ecologists, at the concept stage, identify opportunities to deliver biodiversity enhancement and ecological connectivity as part of a CCC project on a particular site, the target is to ensure that 100% of such schemes deliver these benefits.</p>	<p>As part of our design process and commissioning work we require contractors and consultants to commission ecological surveys as appropriate to the developments being undertaken and include consultation with the in-house ecology team on bio-diversity and ecological resilience. The appointment of a second Ecologist post (to start in April 2019) is helping to ensure the necessary ecological input and monitoring of CCC schemes.</p>	<p>Cost: Salary costs (inc. SAnn and NI) for new post £44,600</p> <p>Environmental benefits: CCC schemes are beginning to be designed with greater awareness of biodiversity issues and ecosystem resilience from the outset, resulting in survey work being carried out in time to inform the design of schemes, and comply with planning requirements as applications are developed</p>	<ul style="list-style-type: none"> • Engage and support participation and understanding to embed biodiversity throughout decision making at all levels • Safeguard species and habitats of principal importance and improve their management • Tackle key pressures on species and habitats 	<p>Managers of the boiler room at Llys Y Dderwen, Ponthenri (a housing sites) were able to call on the project ecologist (PE) when they realised that there were bats in the boiler room where maintenance issues required the replacement of the boiler. The PE has been able to offer immediate advice on how to design and time the repairs to have minimal impact on bats, and to liaise directly with NRW regarding Protected Species legislation and the Council's legal obligations.</p> <p>Case Study provided , p.2</p>
<p>• 12977 WELL-BEING: CCC's property design projects will deliver S6 duties, and as a result sites for which they are responsible will, through appropriate design features, deliver benefits to biodiversity and ecosystem resilience, this may well result in cost savings when compared to previous approaches to land management. This approach to design will benefit of those that will use the sites in the future, making it easy for them to benefit from active engagement with nature.</p>				
<p>CORPORATE PROPERTY (REGENERATION)</p>				
<p>PIMS 12978</p>	<p>Biodiversity assessments on</p>	<p>Cost: none to date core work</p>	<ul style="list-style-type: none"> • Engage and support participation and 	

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
<p>Sites that are being retained - Carry out biodiversity assessments of these sites and identify both the biodiversity they support and the contribution that they make to ecosystem resilience. Review management of these sites</p>	<p>five sites have been undertaken, e.g. Parc Dewi Saint, Cross Hands Business Park, Cross Hands Food Park, Capel Hendre Business Park, Dafen Park. Recommendations for maintaining, enhancing and management of sites for biodiversity purposes are being taken forward with grounds maintenance and relevant departments. Management review of the chosen sites will be undertaken and potential for adding further sites. ENRaW funding, when approved, will assist in delivery of actions at Parc Dewi Sant, Carmarthen that will, through the planting of native trees and shrubs enhance the site's biodiversity. Grasslands will be managed for pollinators with fewer and later cutting regimes</p> <p>Liaison with very busy colleagues in property and ground maintenance has been difficult and further engagement is required prior to next spring.</p>	<p>Environmental benefits: CCC land is managed in ways that addresses it S6 duty</p> <p>Impact: CCC sites will deliver greater biodiversity and green infrastructure that will benefit both wildlife and people</p>	<p>understanding to embed biodiversity throughout decision making at all levels</p> <ul style="list-style-type: none"> • Safeguard species and habitats of principal importance and improve their management • Tackle key pressures on species and habitats • Key Biodiversity benefit: more CCC land is managed using techniques that will enhance biodiversity rather than contribute to its decline. 	
<p>• 12978 WELL-BEING CCC's Corporate Property service will deliver S6 duties on land that it manages that will benefit biodiversity. This may well result in cost savings when compared to previous approaches to land management. It will also benefit of those that will use the sites in the future, and provide opportunities for them to benefit from active engagement with nature</p>				
<p>WASTE and ENVIRONMENTAL SERVICES</p>				
<p>PIMS 12979</p>	<p>Flood Drainage Consent</p>		<p>• Engage and support participation and</p>	<p>Evidence provided: guidance for</p>

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
Flood Defence - Develop working methods that address biodiversity issues. Build these into method statements for work being done at individual sites. Develop procedure for contractors carrying out works on site are aware of the site's biodiversity. Review training needs for officers and contractors and provide training needs	Biodiversity guidance for applicants completed and being used to inform design of schemes that require Flood Defence Consent. Guidance is sent to applicants with application form.		<p>understanding to embed biodiversity throughout decision making at all levels</p> <ul style="list-style-type: none"> • Safeguard species and habitats of principal importance and improve their management • Tackle key pressures on species and habitats • Key Biodiversity benefit: more aquatic and riparian land is managed using techniques that will enhance its biodiversity rather than contribute to a decline. 	applicants
<p>PIMS 12980 Pride in you Patch. Biodiversity Officer will attend quarterly PiyP stakeholder meetings, in order to identify and progress opportunities for collaborative working.</p>	<p>The Biodiversity Officer attends the quarterly PIYP meetings and contributed to the ToR, ensuring that the Env Act duty and consideration for biodiversity are part of the group's objectives. The Biodiversity officer has met with the PIYP officer and agreed to prepare guidance notes for group he works with. The Biodiversity officer has met with two of the TCs on the group to discuss the Env Act and management of parks.</p>	<p>Cost: none - core work</p> <p>Environmental benefits: Colleagues in PiyP are aware of their S6 biodiversity duty and how they can build this into the activities they deliver</p> <p>Impact: PiyP will be delivering S6 obligations</p>	<ul style="list-style-type: none"> • Engage and support participation and understanding to embed biodiversity throughout decision making at all levels • Tackle key pressures on species and habitats 	<p>PIYP T&C provided.</p> <p>Examples of activities have included:</p> <p>Every litter pick carried out can potentially save dozens of small mammals from being trapped and killed - and the dead small mammals found when doing this is direct evidence of this.</p> <p>Beach clean ups have collected hundreds of plastic bags which would otherwise have been a threat to marine mammals digestion system.</p> <p>Path clearance work includes habitat piles suitable for the overwintering of small mammals and invertebrates.</p>
PIMS 12981	Some grounds maintenance	Cost:	<ul style="list-style-type: none"> • Engage and support participation and 	

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	Evidence provided (e.g. links to outputs)
<p>Management of land managed by the division e.g. Wern Ddu and Ammanford Cemetery; Carry out biodiversity assessments of sites and include an assessment of the contribution these sites make to ecosystem resilience; where appropriate develop management plans to protect, enhance biodiversity & promote ecosystem resilience</p>	<p>work conducted at Wernddu in line with biodiversity recommendations, namely strimming of top lagoon (after bird nesting survey) and maintenance of access route to top lagoon.</p> <p>Ammanford cemetery, agreed area not subjected to any annual cuts</p>	<p>£3,000 in 2019 for land management costs associated with delivering planned works.</p> <p>Environmental benefits: Wern Ddu to be managed in accordance with simple management plan. Grassland management in Ammanford cemetery improved for pollinators with less frequent cutting. These management changes have been interpreted for the public through signage</p>	<p>understanding to embed biodiversity throughout decision making at all levels</p> <ul style="list-style-type: none"> • Safeguard species and habitats of principal importance and improve their management • Tackle key pressures on species and habitats • Key Biodiversity gain; grassland at Wern Ddu managed primarily for biodiversity with later cutting and collection when feasible. 	
<p>12979 – 12981 WELL-BEING Public engagement with the PiyP projects will include opportunities to be actively involved in projects that provide environmental benefits and so enhance the well-being of those involved. Management of Wern Ddu and Ammanford Cemetery– introducing management that will benefit biodiversity</p>				

5.4 Additional action CCC has delivered that was not included in its first 3 year Environment Act Forward Plan 2016-2019

5.4.1 Working on constructions sites where there is peat: CCC’s Mineral Section is drafting guidance for developers working on sites where there is peat. While NRW’s Phase 1 habitat survey does identify areas of peat, these are not automatically exempt from development and the current situation in Wales is that peat is treated as waste if it need to be moved off a development site, when it then falls under NRW’s regulatory responsibilities. Carmarthenshire’s Minerals Section provide Mineral Planning Services for nine out of 23 local authorities in Wales and have had experience of working development sites with peat in the county, they are in a good position to promote awareness of this issue across Wales.

5.4.2 Committee templates: CCC is reviewing its templates for all items that go to committee for decision, and will be including in each report an Integrated Impact Assessment (IAA). The purpose of the IAA is to raise awareness of how the democratic system, and the Council’s decision making processes impacts on the delivery of the Well-being Act and also the delivery of its Environment Act S6 duties. Report authors will be asked to set out how the report demonstrates, where appropriate, delivery of the Council’s S6 duty. Officers are on hand to advise authors where they unsure of this and require guidance. In a similar way report authors have to set out if there are any legal, financial, human resources etc. impacts of the action proposed.

5.4.3 Monitoring of bat activity post construction of the Carmarthen West Link Road:

The building of the Carmarthen West Link road has been a CCC project, and was completed in the late Spring of 2019. The road crosses the Tawelan Brook and the design ensured that this green riparian corridor was safeguarded, partly by including a long single span concrete bridge. In addition to the crossing the brook, the new road also cuts across a double hedged green lane that surveys had highlighted as an important bat commuting corridor. With the construction of the road complete, and lit, it was decided to monitor the bat activity along the green lane and the riparian zone in August and September 2019 to see if there had been any significant changes in bat activity. Results of this monitoring demonstrated that in August both locations were being passed by high numbers of bats suggesting that there was no immediate detrimental impact of the construction of the road. The September monitoring confirmed this in terms of overall bat numbers recorded, and also recorded the presence of a Greater Horseshoe Bats moving along the riparian zone, this first record of this species in this area.

The opportunity to monitor did raise concerns regarding the lighting design and this will be discussed with colleagues in Highways and Transportation to see if there are opportunities to improve on this and reduce its impact on bats.

5.4.4 Developing and Ash Die-back Action Plan: CCC has set up an internal working group to develop and deliver an ash die-back action plan in line with guidance from the Tree Council. The first meeting of the group was held in June 2019. One of the actions the group will be developing is the need to identify suitable sites for planting new woodlands that will help to compensate for the loss of ash that we are likely to experience across the county.

5.4.5 Additional seminars for Agents and Elected members on the Environment Act: The Planning Division has delivered workshops to Planning Consultants and Agents who submit planning application to the Planning Authority, highlighting the duties the Environment Act places on public bodies in Wales and explaining what that means in terms of determining planning applications. At these workshops reference was also made to Planning Policy Wales 10 which also sets out the S6 responsibilities placed on Planning Authorities and all those involved in the planning service. A similar workshop was delivered to Elected Members

5.4.6 Town and Community Council Event at the National Botanic Garden of Wales see ACTION 13048 above

This event was run under the NBGW's Grow the Future project (GtF), in partnership with CCC. It met the outreach needs of the GtF project, and it enabled CCC to deliver this action, in a way that was more effective than initially planned. The purpose of the event was to show case how open spaces can be managed for both amenity and biodiversity. The 58 delegates attending represented Community Councils, Town Councils, CCC, Welsh Government, the Fire Service, Bug Life, Bee Wales, West Wales Biodiversity Information Centre. Presentation included: Go to the Park - an initiative in Burnley that promoted the use of its parks while testing a new approach to management that reduced costs and promoted biodiversity; Designing for biodiversity and aesthetics with perennials; Monmouthshire's Nature is not Neat initiative; a walking tour of NBGW to look at different approaches to grassland management, and a workshop using a local park as a case study for enhancing biodiversity. The event was well received and a review meeting is planned for November 2019. It is hoped that this event will result in practical action in some parks

5.4.7 Appointment of CCC's Project Ecologist: this permanent appointment is facilitating the embedding of the understanding of the S6 duty across the authority. The post holder focuses on the authority's obligations with regard to construction projects and property management. This role is particularly

important in ensuring that biodiversity and ecosystem resilience is integrated with project design from the outset and that inappropriate decisions regarding the natural environment are avoided. See PIMS actions 12974 and 12977 in Table 2 above, both demonstrating the valuable input of this post into project design and delivery

5.4.8. Liaison with the public/T&CCs

There is an increasing interest in local environmental projects from the public, community projects and Tand CCs and the Conservation Section are spending more time liaising with them to discuss these issues. The local guidance prepared for T and CCs has been useful as a starting point for engagement and it is hoped that the Carmarthenshire Nature Recovery Plan will have the same function. We need to think about how we can use the biodiversity pages on the website to provide information for local people communities. This will be further aided by the Strategic Plan for Pollinators being adopted by the Council as this document sets out how people can take positive local action, and is also suitable for T and CC adoption.

6. Review of action delivered

6.1 Is the approach to the Forward Plan achieving the objectives?

Carmarthenshire CC's approach to developing and delivering its Forward Plan has been to work towards embedding biodiversity and delivery of CCC's S6 duties across its decision making processes, its projects, plans and working practices. This is being achieved by engaging officers in looking at their individual and service areas of responsibility and helping them to identify where there are opportunities for maintaining and enhancing biodiversity and promoting ecosystem resilience, alongside the delivery of their other obligations, and in some cases making biodiversity a new priority. This approach is often resulting in the need to change, what in some case, are long established working practices. This can take time. While some service areas find this a relatively easy change to make, e.g. Leisure, other find this much harder and require regular support in making these changes, which with this approach, can be provided. We believe we are seeing changes in working practices, and where these changes do not come naturally to the service area they require long-terms support and encouragement to make these changes. Having run Environment Act workshops for officers and elected members, the hope is that the latter will start to request evidence of this new approach being delivered, as is now the case with Environment and Public Protection Scrutiny Committee that receive a report on the delivery of CCC's S6 duty once a year. As reported above, it is proposed that all reports to CCC's committees will have to make reference to delivery of S6 duties, and this will assist in raising awareness of this legal obligation. The agreed Forward Plan actions, as set out above, are monitored via CCC'S Performance Improvement Monitoring System (PIMS) and reported on by the responsible officer every six months. That report is then signed off by the relevant Head of Service. The Rural Conservation Manager and the Biodiversity Officer are responsible for ensuring the plan is delivered and monitored and also engaging all appropriate CCC officers in this process. The delivery of each actions requires regular liaison between these officers and those responsible for each individual action, such as Ground Maintenance officers and officers in Highways and Transportation, while this approach is time consuming it is essential if working practices are to change.

Perhaps the overall achievement of the Forward Action plan has been to raise awareness of the need to investigate and be fully aware of the impact of any plan or project on biodiversity at the outset of the project. The Project Ecologist is able to provide a quick response to colleagues on these issues and how to go about addressing them. This was not so easy to do prior to the appointment to of that post.

6.2 Monitoring delivery of the Forward Plan by CCC

To summarise, with the following measures in place, CCC's Forward Plan objectives are being achieved, and delivery of the plan is being monitored:

- Engaging and collaborating with officers via workshop sessions, support officers in changing working practices, monitoring and reflect of actions
- Integrating agreed Forward Plan actions with working practices, policies and plans, including Divisional Business Plans
- Reviewing actions , update targets and report to PIMS every 6 months
- Reporting annually to Scrutiny on delivery of actions
- Ensuring every report going to the Council's committees makes reference to the Environment Act as appropriate in its Integrated Impact Assessment

CCC have put in place the systems necessary for the on-going development delivery of its Forward Plan, and Table 2 summarises the delivery of the actions set out in the Forward Plan 2016–2019. It is recognised that as familiarity with this approach develops across the organisation it will become easier to deliver further and more ambitious actions. CCC continues to build on its successful actions and this helps to embed awareness and understanding of the requirements of the Environment Act across the authority, at all levels.

The Council's has adopted a practical approach to delivering its Forward Plan. Using its PIMS it is monitoring the actions this plan contains, ensuring that its S6 duty is recognised and understood across the authority, and that appropriate actions are being put in place, delivered and reported on.

6.3 What biodiversity issues have occurred 2016–2019?

Ash die-back is a major issue for CCC, and will affect a significant proportion of the trees in our landscapes and impact on our woodlands. Part of CCC's ash die-back policy will be the need to identify and deliver new tree and woodland planting to compensate for these losses.

Carmel Woods SAC near Llandeilo in Carmarthenshire is the most westerly ash wood in Britain designated at this level as such. It is of particular importance given its location, and its ash trees are suffering from this disease. The Council has set up an Ash Die-back Working Group that is addressing the Council's own responsibilities with regard to the disease. It is also developing a Communications Plan that will provide advice for land managers and will address the long-term need for tree planting. The Council is mindful of the need to ensure that new tree and woodland planting ensures that the right trees are planted in the right places and that the existing biodiversity value of proposed planting sites is not overlooked.

The future arrangements for agricultural support from Welsh Government may well have a significant impact on the biodiversity associated with our farmed landscapes. Agricultural land and the wildlife habitats associated with it supports much of the county's biodiversity, and the value of this land to biodiversity is extremely vulnerable to changes in the fiscal support for agriculture.

It is widely recognised now that the rivers in West Wales and the wildlife they support are threatened by agricultural pollution incidents. The extreme weather incidents we appear to be experiencing exacerbate these issues as periods of very intense rainfall are challenging for those managing slurry etc. CCC, in partnership with NRW, has initiated a process in 2019 of reviewing water management on its county farms in the Tywi Valley.

6.4 Conclusions and recommendations regarding the delivery of the 2016–2019 Forward Plan

CCC has taken a structured and pragmatic approach to developing and delivering its 2016-2019 Forward Plan. It has sought to engage and work collaboratively with officers across the authority to develop the individual actions that the plan contains. While it is clear that this approach does appear to be becoming understood across several services, it is apparent that for some of the teams involved the actions which they identified during workshops sessions are harder to report on in a meaningful way. In some instances the action has been delivered on the ground but the reporting is lacking. To improve on this situation it is recommended that:

- Regular conversations continue with those responsible for individual actions and their line managers to highlight the importance of informative reporting on actions. Similar conversations continue with Elected Members and senior officers in CCC with the aim of embedding further the S6 duty into working practices. These conversations will also enable the wording of the actions to be reviewed and updated. They will also permit the development of new more ambitious actions, one of the overall aims of the Forward Plan being to demonstrate continuing improvement in the way CCC addresses its S6 duties.
- That the contribution the Conservation and Green Infrastructure Ranger post in Leisure makes to both the delivery of CCC's S6 duty and to its well-being objectives is recognised, and a longer term solution to its financing is secured for these reasons.
- Forward Plan PIMS actions are integrated into all Divisional Business Plans as appropriate
- The Environment Act Forward Plan remains on the agenda of Departmental and Corporate Management Teams and Scrutiny Committee, and that these teams and committees scrutinise the evidence that CCC is continuing to improve in the way it delivers its S6 duties.