

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 it 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 2016 and the Well-being of Future Generations (Wales) Act 2015, and the 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 provides 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 identify where there are 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, others 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 action 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 provide 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 <u>State of Natural Resources Report</u>)

A prosperous Wales	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.
A resilient Wales	Biodiversity, mountains, moorlands and heaths, semi-natural grasslands, woodlands, urban greenspaces, rivers,
A resilient wates	streams, lakes and wetlands, coastline, and marine ecosystems all contribute to supporting Wales' ability to adapt
	to climate change.
A healthier Wales	Natural resources make a significant contribution to the physical health and mental well-being of people in Wales.
A neuriner wates	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.
A more equal Wales	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.
	Involving communities in the management of their local parks and woodlands has been shown to improve
A Wales of cohesive communities	community cohesion and reduce anti-social behaviour. We have begun to work with
	Town and Community Councils regarding local parks
A Wales of vibrant culture and	Landscapes have played a significant role in the development of distinct cultural practices, such as local building
thriving Welsh Language	techniques relying on local materials, along with locally specific art and literature.
A globally responsible Wales	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 wellbeing 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.
communities	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
	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	
Environment	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:

		_	NRAP objective(s) met; key biodiversity gain; nature	Evidence provided (e.g. links to
Action agreed	Action delivered	Costs, Benefits and Impacts	recovery/ reverse decline	outputs)
GROUNDS MAINTENAN	CE			
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	• 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.	 Costs: Reduction in frequency of cutting and later start dates are expected to bring some cost savings. Environmental benefits: 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 Impact: More diverse grassland areas with more species able to flower for longer. A more natural feel to the areas being managed 	 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 	Case study provided p.4 Signs created to show areas where management was amended
PIMS 13044 Review use of annual bedding plants in formal	Jan 2019 Melcourt peat-free compost is now used on the supply of bedding.	Costs:	 Tackle key pressures on species and habitats 	

Action agreed areas and their suitability for pollinators, whether they are grown in peat compost.	Action delivered More work needs to done to consider the nature of the bedding plants or whether longer-term perennial planting can be used.	Costs, Benefits and Impacts Possibly some increase in cost as peat free products tend to be slightly more expensive. Environmental benefits: Reduced demand for peat 	 NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline Reduced demand for peat products and established use of suitable alternatives 	Evidence provided (e.g. links to outputs)
PIMS 13045 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.	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.	 based products Costs: Very little, change to management costs expected. Environmental benefits: More diverse habitats within the school grounds greater ecological connectivity and ecological resilience Opportunities created for teaching about ecosystems Impact: More diverse grassland areas with more species able to flower for longer. A more natural feel to the school grounds 	 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.
PIMS 13046 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	Biodiversity officer met with Housing Officers 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 the bottom was left	 Costs: Very little, change to management costs expected. Environmental benefits: More diverse habitats within the grounds greater ecological connectivity and ecological resilience 	 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 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. 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.	 Costs, Benefits and Impacts Opportunities created for raising awareness of ecosystems and the services they provide Impact: More diverse grassland areas with more species able to flower for longer 	 NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline Increase in biodiversity value of grasslands to pollinators achieved through changes in grass cutting regimes 	Evidence provided (e.g. links to outputs)
PIMS 13047 We will ensure that sites being transferred to T and CCs, that trees that may become unsafe are safety surveyed (TreeAssured), with assistance from the Conservation Section and TPOs used appropriately.	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	n/a	Engage and support participation and understanding to embed biodiversity throughout decision making at all levels.	Evidence: Guidance produced for T&CCs provided.
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	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.	 Costs 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 Environmental benefits: Reduced demand for horticultural products, and enhancement of the planting area for pollinators 	 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: • a demonstration of a more sustainable approach to urban landscaping		
PIMS 13052 Parc Howard. Work in collaboration with Friends' 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 Cwmaman Town Council at Golwg yr Aman in Garnant. This park was the case study used in the event at the NBGW see 13048	 Costs No costs available as yet. Environmental benefits: 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 	 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.
pollinators. Children will bene in frequency of grass cutting i emissions from mowing mach	fit from more diverse and more nation of the second s	tural school grounds, and will hopefu	ere they live, and along the road side verge Ily spend more time in the outdoor classroc nts, reducing labour costs and in reducing f	om. Some cost savings from a reduction
LEISURE SERVICES PIMS 13056	• 5-year strategic conservation	Costs:	Safeguard species and habitats of	Projects delivered across CCC's County
Develop simple biodiversity	management plans have	c f38 200 n a nost and	principal importance and improve	Parks and LNRs in 2018/2019 include

PIMS 13056	 5-year strategic conservation 	Costs:	•	Safeguard species and habitats of	Projects delivered across CCC's County
Develop simple biodiversity	management plans have	c. £38,200 p.a. post and		principal importance and improve	Parks and LNRs in 2018/2019 included
management plans for	been created for all sites and	contracted services for		their management	22 Conservation volunteer days on
each countryside site that	are being delivered	management activities that	•	Increase the resilience of our natural	LNR sites including Pwll Lagoon LNR,
Leisure manage, linking the	supported by WG grant aid.	cannot be delivered in house		environment by restoring degraded	Pembrey Burrows LNR, Morfa Berwig
plan to recreation and the	 Management of these sites 	(2018/19 figures from WG grant)		habitats and habitat creation	LNR, Ynys Dawela NP. Work has
management of natural	will ensure that their	Environmental benefits:	•	Tackle key pressures on species and	included removing invasive saplings,
resources and WFG Act	biodiversity interest is	Country Parks and LNRs which		habitats	installation of dormouse boxes, repairs
well-being goals,	maintained and enhanced,	tend to be close to local	•	Improve our evidence,	to fencing and stiles, bank
Environment Act	and that ecosystem resilience	communities are managed in		understanding and monitoring	management for water vole, tree
biodiversity duty and WG	is promoted. Activities	ways that maintain and	٠	Key biodiversity gain:	planting, monitoring for marsh fritillary
Bee-friendly action guide:	include heathland	enhance biodiversity and		Habitats managed primarily for	larval food webs, water vole and otter
Pembrey CP, Llyn Llech	restoration, pond	promote ecosystem resilience,		biodiversity and public access,	monitoring, pond management, stock

			NRAP objective(s) met; key biodiversity gain; nature	Evidence provided (e.g. links to
Action agreed	Action delivered	Costs, Benefits and Impacts	recovery/ reverse decline	outputs)
Owain CP, Mynydd Mawr, Ynys Dawela, Millennium Coastal Path, etc.	management, management of species rich grassland, and offer opportunities for volunteer involvement.	providing accessible natural green spaceEcological connectivity is developed	maintenance of natural green space. Enhanced ecological connectivity across sites and improved ecological resilience	management training session with Pont Cymru, monitoring of winter bat roosts and barn owl site and boardwalk repairs.
		 Monitoring is carried out as appropriate, and as resources permit Impact: CCC is actively managing green infrastructure for public wellbeing and biodiversity benefit 		 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. Initial liaison with promotions officer resulted in strategy for increased presence of LNR's on council website. 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. 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. Pond management works were carried out at Mynydd Mawr WP with
				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.

Action agreed PIMS 13057 With the teams involved, identify wildlife and ecology training needs and	Action delivered • Monday Nov 19, 2018 - Pollinator Course and Grassland Management with	Costs, Benefits and Impacts Cost: usually covered within training budget Environmental benefits:	NRAP objective(s) met; key biodiversity gain; nature recovery/ reverse decline	 Evidence provided (e.g. links to outputs) 5. The interpretation panel for Ynys 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
consider which 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	 Bumble Bee Conservation Trust. 12 Leisure Services staff attended Staff have also attended Visual Tree Inspection Level 1 courses and Ash Die-back courses that will be of benefit to them in ensuring the appropriate long term management of wooded areas in the Country Parks 	 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. 		
PIMS 13058 Ensure rangers are familiar with biological recording and submit records to West Wales Biological Recording Centre in Whitland. WWBIC can provide training	BioBlitz held in Pembrey Country Park in June 2018 supported by West Wales Biodiversity Information Centre, County Recorders, Rangers and the Carmarthenshire Nature Partnership. WWBIC App sent to rangers in August 2018 and all rangers are familiar with how to submit records to WWBIC	 Cost - free Environmental benefits: 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	
PIMS 13059 Having developed management plans for	Signs/interpretation delivered and placed around various sites	Cost: per sign inc. design = £7.20 Environmental benefits:	Improve our evidence, understanding and monitoring	Case study provided – p 6.

			NRAP objective(s) met; key biodiversity gain; nature	Evidence provided (e.g. links to
Action agreed	Action delivered	Costs, Benefits and Impacts	recovery/ reverse decline	outputs)
sites, use laminated bilingual signs to explain changes in grass cutting regimes, and other management changes to the public in an informative way. Develop prototype sign		 provide interpretation for the general public where it is needed Impact: portrays CCC as an organisation that is actively managing sites for pollinators, and engaging with the public. 		
PIMS 13060 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	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	Cost: £29,900 Environmental benefits: • 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 Environmental benefits: • increase in species diversity and longer periods of flowering in our grassland habitats	 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 species-rich grassland in our County Parks 	\\ntcarmcc\cfp\Planning & Building Control\Biodiversity\Environment Act 2016\Machinery needed to improve biodiversity.docx 09/06/2017
PIMS 13061 Identify staff who would benefit from refresher course in Tree Inspections and liaise with Steven Edwards re arranging the necessary course	Refresher training on Visual t Tree Inspection completed 20th February 2019. 22 attended.	Cost: c. £25-35 per trainee if group is set up Environmental benefits: • increased awareness among staff of 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 Impact: • trainees are more confident with regards to completing tree	Improve our evidence, understanding and monitoring	

			NRAP objective(s) met; key	
			biodiversity gain; nature	Evidence provided (e.g. links to
Action agreed	Action delivered	Costs, Benefits and Impacts	recovery/ reverse decline	outputs)
		safety surveys and identifying		
		appropriate tree management		
13056 – 13061 WELL BEING –	Overall approach will improve the	value of our country parks for biodiv	ersity and also the awareness of our staff a	nd the public of how important these
			arks offer opportunities for volunteers to b	e actively involved in managing these
natural areas, that include riv	er valleys grasslands, woodlands ar	nd coastal habitats.		
HIGHWAYS and TRANSP	ORTATION			
PIMS 12970	The service has continued to		• Engage and support participation and	http://rlloydpr.co.uk/2018/06/12/ann
Verge Cutting - Continue	implement the verge	Late cuts may incur additional	understanding to embed biodiversity	ual-grass-cutting-gets-underway-in-
to implement policy,	maintenance policy, deliver	cost if contractors have to return	throughout decision making at all	<u>carmarthenshire/</u>
deliver annual tool box talk	annual tool box talk and make	to an area for a relatively small	levels.	
and make provision for	provision for late cut verges	amount of work		http://democracy.carmarthenshire.go
late cut verges	across the highway network.		• Key biodiversity gain: management of	v.wales/documents/s21411/Report.ht
	The management of highway	Cutting a single swathe of some	the county's c. 6000km of road side	<u>ml?CT=2</u>
	verges has also been the	areas may result in lower costs.	verges that will enhance their	
	subject of a CCC Environment	For incompany to the second star	biodiversity value. Their value for	Evidence: guidance note provided.
	and Public Protection Scrutiny	Environmental benefits:	pollinators and other invertebrates	
	Committee Task and Finish	Biennial cutting will benefit some	will be enhanced through later	
	group. The recommendations of the group made on 4 th	of our grassland and low shrub (e.g. heathland) ecosystems,	cutting, and the value of adjacent scrub habitats will be enhanced as	
	March 2019 include:	particularly those that flower in	only a 1m swathe will be cut in most	
	2a Facilitate further	late summer	instances	
	environmental enhancement for		Instances	
	biodiversity, such as late or	Impact:		
	biennial cutting of selected	Contractors understand that		
	areas, or other appropriate	roadside verge management is		
	management provision.	important for road safety and		
	2c Include clear information on	biodiversity. Road verges are		
	the Council website with	managed in ways that reflect the		
	specific regard to the	importance of these habitats for		
	conservation and management	wildlife		
	of roadside verges.			
		Cutting used to start before the		
	Biodiversity officer drafted	end of May and now usually		
	these as FAQ and they are now	starts after mid-June or later.		
	with Highways team for	Some cost savings in terms of less		
	consideration. In the pollinator	cutting e.g. only one swathe now		
	section of the biodiversity web	cut along wider verges. Reduction		

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)
	pages there are verge photos and brief into about verge management. These actions are to be completed by 1/1/2020	in carbon emissions from mowing machinery.		
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.		 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, and mitigation integrated with design from the outset of the project	 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 	 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

			NRAP objective(s) met; key biodiversity gain; nature	Evidence provided (e.g. links to
Action agreed	Action delivered	Costs, Benefits and Impacts	recovery/ reverse decline	outputs)
12970 - 12972 WELL BEING -	- Overall approach will lead to a gre	ener transport infrastructure which v	vill be of benefit the public and to wildlife. F	Projects are addressing biodiversity
issues from the outset				
PLANNING SERVICE				
PIMS 12965	During the 3 year period	Cost: none	 Engage and support participation and 	
Undertake workshops with	workshops were held with		understanding to embed biodiversity	
relevant Divisions in other	Development Managers and in	Environmental benefits:	throughout decision making at all levels.	
CCC departments to	(June 2017) with Enforcement	Increased awareness of the		
generate action/s for these	Officers (October 2017) to	legislative requirement of CCC's		
Divisions to incorporate	highlight S6 Environment Act	S6 duty, and the policies that		
into their Business Plans	duties. Further workshops held	exist to support this approach.		
and report on via the PIMS	with Minerals in (October			
	2018), and Flood Defence in Feb	Impact:		
	2018.	Service area across the		
	A further workshop on the S6	Environment Dept. and		
	duty was run on 11 th Jan 2019	elsewhere have identified the		
	for the Planning Service, and for	opportunities that exist in their		
	planning agents on 18 th Jan	plans, policies and working		
	2019 and for Elected Members	practices that when delivered will		
	on 20 th June 2019	demonstrate that CCC is		
		delivering its S6 duty		
PIMS 12966	Advice notes on various	Cost: none	• Engage and support participation and	Guidance notes available
Produce guidance notes on	protected species written for		understanding to embed biodiversity	
protected species for use	officers were produced and	Environmental benefits:	throughout decision making at all	
by colleagues to ensure	made available to officers via an	Guidance communicated to	levels	
that we work within the	open access file on the council's	target audience		
legislation with regard to	file plan system. However, this	lucius etc.	 Safeguard species and habitats of 	
protected species and to be consistent with our duty	is not the optimum place for	Impact: Better informed workforce,	principal importance and improve	
	them and they should be made available on the Council's	increase in capacity to deliver S6	their management	
under the Environment Act 2016	Intranet. This still needs to be	Biodiversity Duty		
2010	done so they can be more			
	widely promoted to officers.			
PIMS 12967	Part 1 of the Carms Nature	Cost:	Tackle key pressures on species and	
Review the Local	Recovery Plan, which is aimed	none, as this is core work	habitats	
Biodiversity Action Plan for	at the		וומטונמנס	
Carmarthenshire in light of	public/business/communities			
	has been drafted and			
	has been uraited allu			

			NRAP objective(s) met; key	
			biodiversity gain; nature	Evidence provided (e.g. links to
Action agreed	Action delivered	Costs, Benefits and Impacts	recovery/ reverse decline	outputs)
the new legislation and guidance	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 objectives and local implementation will be discussed at the next Nature Partnership meeting on 15th October.	Environmental benefits: the plan will set out a strategy that will be delivered in partnership to guide nature recovery in Carmarthenshire Impact: a partnership strategy that can be communicated to the public and other organisations	 Safeguard species and habitats of principal importance and improve their management Improve our evidence, understanding and monitoring 	
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	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	Cost: c. £5,000 (Phase 2 – S106 contribution) Environmental benefits: c. 800m of new water vole habitat in a key site for the species Impact: creation of significant extent of habitat for this species of principle importance	 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 	Case study provided - p1.

PIMS 13245 Final age and support participation are develop a consistent approach to ensuring that consistent approach to ensuring that and enhance and that consistent approach to ensuring that and enhance and that consistent approach to ensuring that and enhance and that consistent approach to ensuring that and enhance and that consistent approach to ensuring that and enhance and that costs of managing its 56 duty. Engage and support participation are approach to ensuring that costs of reptile work (transiocation thabitat enhancement and monitoring) Developments. The plan and common lizard) transformed to application of a participation and dores set the demolition of a participation for the Bury Port Harbour Working outside of the receptor soit in the CCC. Developments that that do ensare the open mosaic habits is approached to ensure the open financial contribution and habitat management to a priority and common lizard) transforming using the inherence on the bar port of the ensure that open mosaic habits is approached to ensure the open mosaic habits is approached to ensure the open mosaic habits is approached to and constraint and monitoring of the receptor site in the CCC. Minerals forward Planning Avit Beeston for the loss of open mosaic habits is approached to and mosaic habits is approached to and mosaic habits is approached to and mosaic habits is approached by local residents and school children. Minerals continuity or the developed control and of site compensation for the loss of open mosaic habits on previously developed land, by way of a financial contribution and habits and adverses the so duty to an adverses the so duty to an adverses the so duty to an adverses the so duty to application provide this habits in perpetuity. PMMS 13208 PMMS 13208 PMMS 13208 PMMS 13204 <l< th=""><th>A stick a second</th><th>Antion dolivered</th><th>Costo Donofito and Immosto</th><th>NRAP objective(s) met; key biodiversity gain; nature</th><th>Evidence provided (e.g. links to</th></l<>	A stick a second	Antion dolivered	Costo Donofito and Immosto	NRAP objective(s) met; key biodiversity gain; nature	Evidence provided (e.g. links to
PIMS 13048WG passed the guidance on to One Voice Wales who liaiseCost: None - core work• Engage and support participation and understanding to embed biodiversityCase study provided - p1.	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	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. 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	developer, contribution to the LNR management £137,500 (25 years' management) plus cost of reptile work (translocation habitat enhancement and monitoring) 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. Impact: a development that demonstrates the S6 duty to maintain and enhance biodiversity an promote	 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 a site owned and managed by CCC, and now designated as LNR, as well as habitat managed for reptiles in 	outputs)
environmentally menuity is and CCs throughout the information of the i		WG passed the guidance on to			Case study provided - p1.

			NRAP objective(s) met; key	
			biodiversity gain; nature	Evidence provided (e.g. links to
Action agreed	Action delivered	Costs, Benefits and Impacts	recovery/ reverse decline	outputs)
larger Town and Community Councils covered by the Env Act duty regarding grass cutting and biodiversity management of land under their control	country. In addition, NBGW, in partnership with CCC hosted a session for Town and Community Councils and others on how to manage green spaces for people and wildlife on 27th June 2019 at the NBGW. 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. Two T&CCs have now approached CCC for help in preparing their required policy on biodiversity under the Env Act. Guidance is useful when liaising with public enquiries re local projects as well.	T and CC will be better placed to deliver their S.6 Biodiversity Duty and Well-being Act responsibilities in terms of the management of the land for which they are responsible Impact: More likely that land managed by some T and CC will maintain and enhance biodiversity and will promote ecosystem resilience	 Key Biodiversity benefit: more land managers will be aware of management techniques that will enhance biodiversity rather than contribute to its decline. 	
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.	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 by CCC before it can go on the website or sent to Welsh Government. Currently	Cost: none - core work Environmental benefits: a plan that can be used by a range of organisations and sets out how land can be managed for the benefit of pollinators. Impact:	 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 	Draft strategic plan for pollinators provided. Case study provided – p 4.

			NRAP objective(s) met; key	
			biodiversity gain; nature	Evidence provided (e.g. links to
Action agreed	Action delivered	Costs, Benefits and Impacts	recovery/ reverse decline	outputs)
	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	will depend on delivery of the strategy	 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. 	
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	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 every 3 weeks or so. These are being monitored. This experiment will inform cutting elsewhere in future years. 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. 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.	Cost: none - core work 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 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	 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 	Evidence provided: Project sign provided.

			NRAP objective(s) met; key	
			biodiversity gain; nature	Evidence provided (e.g. links to
Action agreed	Action delivered	Costs, Benefits and Impacts	recovery/ reverse decline	outputs)
advising on the management biodiversity. Carmarthenshir see habitat creation delivered more resilient ecosystems. In PROPERTY DESIGN (ENV	of land within CCC's property portf e's communities which use and enj d that will enhance a key water vole some instances, the changes in ma TRONMENT)	folio for biodiversity, and similarly ad oy these areas will see how changes i e site. They will witness the way in wh magement that is proposed will resul	can deliver its S.6 duties, both via commun vising on the management of land by T and in grass cutting regimes (that is being monit nich our green infrastructure can also meet t in cost savings, but it is too early to gauge	CC, which in the long term will benefit cored) will benefit pollinators. They will biodiversity objectives and contribute to these at present
PIMS 12977 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.	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.	Cost: Salary costs (inc. SAnn and NI) for new post £44,600 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	 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 	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. Case Study provided: p.2

Action agreed	Action delivered	Costs, Benefits and Impacts	NRAP objective(s) met; key	Evidence provided (e.g. links to outputs)
			biodiversity gain; nature	
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	undertaken, e.g. Parc Dewi Sant, 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 Liaison with very busy colleagues in property and ground maintenance has been difficult and further engagement is required prior to next spring.	Environmental benefits: CCC land is managed in ways that addresses its S.6 duty Impact: CCC sites will deliver greater biodiversity and green infrastructure that will benefit both wildlife and people	 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 CCC land is managed using techniques that will enhance biodiversity rather than contribute to its decline. 	

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)
PIMS 12979 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 to ensure that they are aware of the site's biodiversity. Review training needs for officers and contractors and provide training needs	Flood Drainage Consent 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.		 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 aquatic and riparian land is managed using techniques that will enhance its biodiversity rather than contribute to a decline. 	Evidence provided: guidance for applicants
PIMS 12980 Pride in you Patch. Biodiversity Officer will attend quarterly PiyP stakeholder meetings, in order to identify and progress opportunities for collaborative working.	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.	Cost: none - core work Environmental benefits: Colleagues in PiyP are aware of their S6 biodiversity duty and how they can build this into the activities they deliver Impact: PiyP will be delivering S6 obligations	 Engage and support participation and understanding to embed biodiversity throughout decision making at all levels Tackle key pressures on species and habitats 	 PIYP T&C provided. Examples of activities have included: Every litter pick carried put 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. Beach clean ups have collected hundreds of plastic bags which would otherwise have been a threat to marine mammals digestion system.

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)
				Path clearance work includes habitat piles suitable for the overwintering of small mammals and invertebrates.
PIMS 12981 Management of land managed by the division e.g. Wern Ddu and Ammanford Cemetery;	Some grounds maintenance work conducted at Wern Ddu in line with biodiversity recommendations, namely strimming of top lagoon (after	Cost: £3,000 in 2019 for land management costs associated with delivering planned works.	• Engage and support participation and understanding to embed biodiversity throughout decision making at all levels	
Carry out biodiversity assessments of sites and include an assessment of the contribution these	bird nesting survey) and maintenance of access route to top lagoon.	Environmental benefits: Wern Ddu to be managed in accordance with simple management plan.	 Safeguard species and habitats of principal importance and improve their management 	
sites make to ecosystem resilience; where appropriate develop	Ammanford cemetery, agreed area not subjected to any annual cuts	Grassland management in Ammanford cemetery improved for pollinators with less frequent	 Tackle key pressures on species and habitats 	
management plans to protect, and enhance biodiversity and promote ecosystem resilience		cutting. These management changes have been interpreted for the public through signage	 Key Biodiversity gain; grassland at Wern Ddu managed primarily for biodiversity with later cutting and collection when feasible. 	

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 needs 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 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 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 an Ash Die-back Action Plan: CCC will develop and deliver and ash die-back action plan in line with guidance from the Tree Council. The first meeting of the officers involved was held in June 2019. One of the actions to be developed is the need to identify suitable sites for the planting of new woodlands and trees 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 showcase 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 T and 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 where these changes do not come naturally to the service area, they require long-term 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 refer to the delivery of S.6 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 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

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 can 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, supporting 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 ambitions 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 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 dieback 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 particularly important given its location, and its ash trees are suffering from this disease. The Council is addressing its own responsibilities regarding 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 over-looked.

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 this approach does appear to be 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 mangers 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 which 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.