

Biodiversity and Ecosystem Resilience

Forward Plan

Environment (Wales) Act 2016

Monmouthshire County Council

March 2017



Contents

Introduction	4
Legislative Context	5
Biodiversity & Ecosystem Resilience in Monmouthshire	6
Developing the Monmouthshire County Council Forward Plan	8
Biodiversity and Resilience of Ecosystems Duty Objectives	14
The Next Steps in Delivery	19
Glossary of terms	20
<u>Figures</u>	
Figure 1 Well-being goals	5
Figure 2 Local Wildlife Site in the Wye Valley	6
Figure 3 Common carder bee foraging on a road verge	7
Figure 4 Wye Valley Woodland	9

Figure 5 Table 1 Summary of Risks and Opportunities identified in the Service Area review	12
Figure 6 Hay making with Friends of Monmouth Cemetery	12
Figure 7 Stakeholder suggestions for Monmouthshire County Council action	13
Figure 8 Table 2 Nature Recovery Plan Objectives	13

Appendices

Appendix 1 Section 7 Habitats in Monmouthshire	
Appendix 2 Section 7 Species in Monmouthshire	
Appendix 3 Summary of the findings of internal interviews	
Appendix 4 Summary of the findings of external interviews	
Appendix 5 Projects and programmes in Monmouthshire	
Appendix 6 Evidence base	

1. Introduction

This forward plan has been prepared by Monmouthshire County Council to meet the Section 6 Biodiversity and Ecosystem Resilience duty of the Environment (Wales) Act 2016 and to provide a mechanism for delivering the County's requirements under the Well-being of Future Generations (Wales) Act 2015.

The Monmouthshire County Council forward plan will:

- ❖ Summarise the relevant legislative requirements for biodiversity & the resilience of ecosystems.
- ❖ Consider the state of Biodiversity and Ecosystem Resilience of Monmouthshire and identify relevant habitats and species of principal importance for nature conservation.
- ❖ Consider the ways in which Monmouthshire County Council can influence Biodiversity and Ecosystem Resilience when exercising its functions as a Public Authority.
- ❖ Consider positive work that is already underway by Monmouthshire County Council and other relevant organisations and identify opportunities for collaborative delivery.
- ❖ Consider the governance of this delivery for biodiversity and ecological resilience in Monmouthshire
- ❖ Outline Monmouthshire County Council's commitments to meeting requirements of the legislation.
- ❖ Identify Objectives for Monmouthshire County Council's compliance with the Biodiversity & Ecosystem Resilience duty.
- ❖ Highlight the importance of the Green Infrastructure Approach to delivery including Green Infrastructure Policy and Supplementary Planning Guidance.
- ❖ Maximise Monmouthshire County Council's contributions across the Well-being goals.

The forward plan follows guidance prepared by Welsh Government and considers the Objectives of the Nature Recovery Plan for Wales¹. It will be an evolving plan that can be updated in line with further evidence from Natural Resources Wales such as Area Statements. Monmouthshire County Council will be required to report on the outcomes of this plan in 2019 and then subsequently every three years. Forward plans will be reviewed accordingly in light of that reporting.

¹ Nature Recovery Plan for Wales <http://gov.wales/topics/environmentcountryside/consmanagement/conservationbiodiversity/?lang=en>

2. The Legislative context of the Forward Plan

The Biodiversity and Resilience of Ecosystems forward plan has been produced in relation to two key pieces of legislation:

2.1 Environment (Wales) Act 2016 - The Biodiversity and Resilience of Ecosystems duty

Section 6 of the Environment (Wales) Act 2016 places a duty on public authorities to **seek to maintain and enhance biodiversity** where it is within the proper exercise of their functions. In doing so, public authorities must **seek to promote the resilience of ecosystems**.

This means that Monmouthshire County Council must take a pro-active approach to improve and not reduce biodiversity when carrying out functions.

The duty came into force on 21st May 2016 and replaces the earlier Biodiversity duty in the Natural Environment and Rural Communities Act 2006. The preparation of this Forward Plan assists in complying with the new duties and is a requirement on all public authorities. There is a requirement to report on the plan in 2019 and every 3 years following this. The plan can be subsequently reviewed.

2.2 Well-being of Future Generations Act 2015 - A Resilient Wales

The work undertaken to meet the Biodiversity and Resilience of Ecosystems duty will assist Monmouthshire County Council to maximise contributions to Well-being Goals under the Well-being of Future Generations (Wales) Act 2015.

The Public Service Board for Monmouthshire which includes Monmouthshire County Council is preparing a Well-being Assessment, Well-being Objectives and a Well-being Plan to outline how the authority and other public services in the County will meet the 7 well-being goals which explicitly includes: **A Resilient Wales**.

This goal is to ensure Wales is a nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change).

Figure 2 Well-being Goals



A summary of the duty published by Welsh Government can be found at: <http://gov.wales/docs/desh/publications/150512-biodiversity-and-resilience-of-ecosystems-duty-en.pdf>

The full text of the Environment (Wales) Act and Explanatory notes can be found at: <http://www.legislation.gov.uk/anaw/2016/3/contents>

Well-being of Future Generations (Wales) Act 2015 <http://www.thewaleswewant.co.uk/about/well-being-future-generations-wales-act-2015/well-being-future-generations-wales-act-2015>

More information on the Resilient Wales goal can be found at: <http://www.thewaleswewant.co.uk/goals/resilient>

3. Biodiversity and Ecosystem Resilience in Monmouthshire

Monmouthshire is a rural county with agriculture and forestry shaping the rich biodiversity and the resilience of ecosystems in the landscape. The Rivers Usk and Wye are designated as Special Areas of Conservation and together with their tributaries provide important wildlife corridors and migratory routes for key species such as otters, shad and white clawed crayfish. These habitats are under threat from water abstraction, pollution and siltation.

The east of the County is heavily wooded and together with woodland on the English side of the border, forms the Wye Valley Woodlands SAC, part of a large swathe of high quality habitat for woodland species including lesser horseshoe bats and dormouse. The quality of the woodland is predominantly under threat from lack of management.

In areas where agricultural intensification has not depleted quality there are networks of unimproved grassland. Much of it is included in the Local Wildlife Sites network and has no statutory protection. It is vulnerable to poor management and development pressures particularly in villages and on the edge of settlements.

The unique man-made landscape in the south of the County along the Gwent Levels has created a network of reens and coastal and floodplain grazing marsh. This sits inland of the internationally important Severn Estuary SPA, SAC and Ramsar site which is particularly important for wintering bird species. The Gwent Levels are under threat from the M4 relief road, housing and industrial development. The Estuary may face future threats from tidal power initiatives.

Areas of upland in the Brecon Beacons National Park such as the Black Mountains, the Blorenges and the Gilwern Hill SSSI's include a mixture of upland habitats including wet heath, blanket bog and limestone grassland. These sites have important populations of rare plants such as endemic Whitebeams, Hawkweeds, mosses, liverworts and lichens.



Figure 2 A Local Wildlife Site in the Wye Valley

J Lewis

No data specifically relating to the resilience of ecosystems has been published, however we know from protected site Core Management plans¹ that many of our protected sites are in an *unfavourable condition*, the extent and quality of habitats in the County is largely reducing, some species are increasing e.g. horseshoe bats and otters but most are decreasing e.g. butterflies and farmland birds and overall diversity is decreasing. Diversity is also varied across the County as demonstrated by vascular plant diversity in the Flora of Monmouthshire² with the north of the County having lower diversity by comparison to areas such as the Wye Valley where diversity is high.

Natural Resources Wales have identified that the ecological connectivity of the county is high³. However, when presented spatially, there are obvious exceptions to this where the landscape has become degraded and improved for agriculture. The north of the county in the catchment of the River Trothy and farmland around the lower Usk catchment are examples of this.

These factors make the adaptability of our ecosystems more difficult to achieve when episodes of drought or flooding occur but no specific data is currently available.

The Green Infrastructure Action Plan for Pollinators in South East Wales⁴ identifies the demand and resource of pollinators across the region and considers not only the demand from agriculture but also the need of pollinators to support biodiversity. Large areas of the County are demonstrated to be important areas for pollinators including areas of commercial orchards and land associated with protected sites particularly in the uplands of the Brecon Beacons National Park.

Further information can be used to increase our understanding of biodiversity and ecosystem resilience as it becomes available e.g. the Vice County 35 Rare Plant Register and other studies such as those relating to tranquillity and dark skies.



Figure 3 Common carder bee foraging on a road verge K Stinchcombe

1 Natural Resources Wales Protected sites Core Management Plans <https://naturalresources.wales/conservation-biodiversity-and-wildlife/find-protected-areas-of-land-and-seas/designated-sites-search/?lang=en>

2 Evans, T. G. (2007). *Flora of Monmouthshire*. Chepstow Society, Chepstow.

3 Natural Resources Wales (2016) Public Service Board - Sir Fynwy – Monmouthshire Environmental Information for well-being assessments

4 [TACP \(2015\) Green Infrastructure Action Plan for Pollinators in South East Wales Report to Monmouthshire County Council on behalf of Monmouthshire County Council and Blaenau Gwent, Caerphilly and Torfaen County Borough Councils. TACP UK Ltd.](#)

4. Developing the Monmouthshire County Council Forward Plan

Current guidance published by Welsh Government states that public authorities must take into account relevant evidence when complying with the Section 6 duty including the State of Natural Resources Report (SoNaRR) published by Natural Resources Wales (2016), The Environment (Wales) Act Section 7 lists of habitats and species of principal importance in Wales, and relevant Area Statements to be prepared by Natural Resources Wales under Section 11 of the Act.

Welsh Government guidance on the Section 6 duty states that in promoting resilience of ecosystems, public authorities must take into account the key characteristics of a resilient ecosystem. These characteristics which include condition, diversity, extent, connectivity and adaptability, will assist public authorities in identifying any actions that may need to be taken.

The Nature Recovery Plan for Wales will provide the Nature Recovery Framework to guide compliance with the duty by providing objectives, outcomes and actions that Public Authorities can take responsibility for and contribute to.

Monmouthshire County Council will also take into consideration the work that individual service areas undertake which could have an impact on Biodiversity & Ecosystem Resilience and the work of other key organisations with whom MCC can collaborate with to maximise delivery under the Act.

4.1 State of Natural Resources Report (SoNaRR)¹

Natural Resources Wales reported in September 2016 on the state and condition of the habitats and species within marine, terrestrial and freshwater environments in Wales, as required by The Environment (Wales) Act 2016.

The economic and social benefits that a fully functioning environment can provide to human society include agricultural production, forestry, building materials, tourism and leisure, energy generation, flood prevention, pollination services for crops, clean water, clean air and healthy soils. The report spells out the major threats facing the proper functioning of ecosystems in Wales, which if not addressed will contribute to further declines in biodiversity, and prevent us from gaining the full economic and social benefits of all that the environment can provide. These threats include:

- Climate change
- Land Use Change
- Over exploitation of natural resources

¹ State of Natural Resources Report (SoNaRR) is available on the NRW Website <https://naturalresources.wales/our-evidence-and-reports/the-state-of-natural-resources-report-assessment-of-the-sustainable-management-of-natural-resources/?lang=en>

- Nutrient enrichment and pollution

- Invasive non-native and introduced pests and diseases

These direct drivers of change are often linked and in general, the extent and scale of their impact is increasing. The focus for action needs to be where the resilience of ecosystems and the benefits we get from them are at greatest risk due to unsustainable management. The objective is not to remove all pressures, however we do need to better understand how to manage them in more sustainable ways so that risks and opportunities are recognised and utilised so that future generations can continue to benefit from all that ecosystems can provide.

On a Monmouthshire scale the following biodiversity and ecosystem resilience issues, raised in the SoNaRR report, are of relevance:



Figure 4 Wye Valley Woodland

K Stinchcombe

- Outside the Welsh Government estate (i.e. managed by Natural Resources Wales) less than 25% of woodlands in Wales are being actively managed, so their full potential is not being realised. Many of Monmouthshire's ancient woodlands are very small and not connected to other areas of similar habitat. Uncontrolled populations of wild deer and grey squirrel damage the value of local woodlands, while Invasive non-native species and introduced diseases continue to be threats.
- Approximately 90% of the fish species in the SACs (e.g. Rivers Usk, Wye and Severn) are in unfavourable condition. There has been a marked reduction in salmon abundance in rivers, caused by poor river conditions and increased mortality at sea.
- Pollution from agriculture, sewerage and soil run off is affecting the ecological status of our rivers. Much of Monmouthshire's drinking water also originates from our rivers.
- The extent of unimproved neutral grassland (traditional wildflower meadows) has declined dramatically, with only 1600 ha remaining in the whole of Wales. Monmouthshire has approximately 700ha of this habitat, important for flowering plants, fungi, rare pollinators and a range of insects, designated as

Sites of Importance for Nature Conservation or Sites of Special Scientific Interest. Despite the designations, this is a vulnerable habitat, easily damaged by unsympathetic management, soil enrichment, neglect and fragmentation.

- 78% of hedgerows in Wales are in unfavourable condition, with a decline forecast to continue. Ash die-back (chalara) will have a large impact on Monmouthshire's landscape as ash an important hedgerow species including many mature specimens.
- The area covered by traditional orchards is estimated to have decreased by 94% between 1958 and 1992. Historically Monmouthshire was an important apple and pear producing County, and old orchard trees in particular support a wide variety of wildlife. Some local groups such as Transition Towns have enthusiastically planted community orchards in their localities, and Gwent Wildlife Trust ran a project from 2010 to 2012 surveying 740 sites, and working with volunteers to encourage management of them.
- 73% of Welsh urban areas show a decline in tree cover. Less affluent areas have less tree cover, important for reducing flood run off, providing shade, reducing summer temperatures, filtering dust and pollution, as well as increasing biodiversity. Transition Monmouth have planted 1000 trees around the town during the winter of 2016 to improve the townscape and reduce flood run off.
- The intertidal area between high and low tide is one of the few habitats that is considered to be in good condition, although sand banks are declining in the short and long term. This habitat is represented in Monmouthshire along the Severn Estuary, supporting a range of wildlife species.

4.2 The Section 7 list of Habitats and Species of Principle Importance for Wales

At the time of writing this forward plan, the Section 7 lists² comprise those habitats and species previously identified as of Principal Importance in Wales under Section 42 of the Natural Environment and Rural Communities Act 2006.

Unfortunately, little up to date spatial data is available for Section 7 habitats in the County with the exception of Phase 1 habitat survey for the Wye Valley AONB. A list of the habitat types that occur in the forward plan area is included in Appendix 1.

Section 7 species in Monmouthshire are included in Appendix 2 of the forward plan. These include species across most priority taxa

² The Section 6 guidance and Section 7 lists are available on the Wales Biodiversity Partnership website <https://www.biodiversitywales.org.uk/Environment-Wales-act>

including mammals, birds, fish, invertebrates, reptiles & amphibians, vascular plants, lichen communities, mosses & liverworts, fungi, and marine species.

Considerations for Section 7 Habitats and Species will be incorporated into the Monmouthshire County Council objectives for delivery of the Biodiversity and Resilience of Ecosystems duty (page 14) and specific actions to maintain and enhance Section 7 habitats and species will be incorporated into individual service area action plans which will follow the publication of this plan.

4.3 Area Statements

At the time of writing this forward plan, Area Statements are not available for consideration however, Monmouthshire County Council will continue to contribute to the development of the Area Statements which are currently being developed by Natural Resources Wales and incorporate changes to the forward plan as appropriate.

4.4 Service Area interviews and reviews

As part of the process undertaken to develop the forward plan, Monmouthshire County Council have undertaken an internal review of key service areas to identify potential risks and opportunities for Section 6 delivery and to develop specific actions. Service areas included in the review were those that are considered to have a potentially negative impact on Biodiversity and Ecosystem Resilience and those that could deliver positive change and maximise delivery under other legislation such as the Well-being of Future Generations Act 2015. Service areas we have met to date include: Building Control, Development Management, Planning Policy, Rural Development Programme, Grounds Maintenance and Waste, Estates including County Farms, Licensing and Events. We also hope to review works undertaken by Property Services, Education, Outdoor education and Highways in the coming months. A summary of risks and opportunities identified are included in Figure 5.

The reviews already undertaken have raised awareness of the Environment (Wales) Act 2016, particularly the Section 6 duty and allowed the development of specific Biodiversity & Ecosystem Resilience Action Plans. These plans, which will be published before May 2017 identify actions that can be incorporated into service area business plans to integrate delivery of the duty.

Figure 5 Table 1 Summary of Risks and Opportunities identified in the Service Area review

Risks	Opportunities
<ul style="list-style-type: none"> ❖ Decision making at all levels ❖ Consents, licences, certificates ❖ Land management practices ❖ Timescales for consideration of biodiversity ❖ Missed opportunities for raising awareness and education 	<ul style="list-style-type: none"> ❖ Raising awareness and training ❖ Environmental education ❖ Net gain for biodiversity secured in consents granted ❖ Green infrastructure approach ❖ Better land management practices ❖ Wider consultation with biodiversity and ecology officers

4.5 Collaboration with other organisations

It was also considered important to review what other organisations are currently doing to deliver for Biodiversity and Ecosystem Resilience to allow future collaborative work to take place to maximise the benefits for Biodiversity. Organisations considered include Natural Resources Wales, Brecon Beacons National Park Authority, Gwent Wildlife Trust, Bee Friendly Monmouthshire, Monmouthshire Meadows Group, Botanical Society for the British Isles, Gwent Ornithological Society, Wye Valley Area of Outstanding Natural Beauty Unit, Canal and Rivers Trust, RSPB (Living Levels Project), Farming Connect (Glastir), Wye and Usk Foundation and Monnow Rivers Association. These organisations have highlighted areas of concern in relation to biodiversity and ecosystem resilience relevant to Monmouthshire and identified projects and programmes with which they are currently engaged. The organisations have also made suggestions of areas where Monmouthshire County Council could have the biggest positive impact on Biodiversity and Ecosystem Resilience and the most popular of these are listed in Figure 7 (below).

A summary of the findings of the interviews are included in Appendix 3. A record of the projects and programmes being undertaken in the County has been compiled and is available in Appendix 4.



Figure 6 Hay making with Friends of Monmouth Cemetery

D McCarty

Figure 7 Stakeholder suggestions for Monmouthshire County Council action

- ❖ Improve management of Council owned land including County Farms for Biodiversity and Ecosystem Resilience
- ❖ Reduce pesticide use across the County
- ❖ Educating and influencing the public by using the “Nature Isn’t Neat” message
- ❖ Planning decisions should ensure sustainable development and include Green Infrastructure to provide connectivity
- ❖ A Monmouthshire Local Nature Partnership / Network for sharing of best practice and collaborative working

It was not possible to fully engage with all organisations delivering biodiversity action in the County in the timescale available however, there is scope to continue this process and meet with more grass roots groups to develop collaborative work where possible such as the town Transition groups, and species specialists such as the Monmouthshire Moth and Butterfly Group.

The Environment Partnership Board* has an important role in steering the development of the forward plan and delivery of action. The board will help establish priorities and identify opportunities for partnership working.

*The Environment Partnership Board (Monmouthshire County Council, Brecon Beacons National Park, Gwent Association of Voluntary Organisations, Gwent Wildlife Trust, Monmouthshire Housing Association, Natural Resources Wales, Wye Valley AONB Unit, Keep Wales Tidy)

4.6 Nature Recovery Plan Objectives

Current guidance suggests that the six objectives can be used to develop actions to comply with the biodiversity and resilience of ecosystems duty.

Figure 8 Table 2 Nature Recovery Plan Objectives

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 environments 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

A number of actions have been included in the Nature Recovery Plan for Public Authorities including those relating to embedding biodiversity into the decision making process, raising awareness, restoration and creation of habitats and the implementation of the Section 6 duty.

5. Biodiversity and Resilience of Ecosystems Duty Objectives

In order to meet the Section 6 duty, Monmouthshire County Council shall undertake work and change current procedures to achieve the following objectives, so long as is consistent with the proper exercise of Monmouthshire County Council's functions as a Local Authority. The objectives have been developed to maintain and increase the resilience of our ecosystems by increasing scale and extent, connectivity, condition, diversity, and ability of ecosystems to adapt.

All objectives apply to both marine and terrestrial habitats as required by the Act.

Objective 1 : Embed biodiversity throughout decision making at all levels

Objective 2 : Provide environmental education to raise awareness and encourage action

Objective 3 : Undertake land management for biodiversity and promote ecosystem resilience

Objective 4 : Influence land management to improve ecosystem resilience

Objective 5 : Tackle key pressures on species and habitats

Objective 6 : Support landscape scale projects and partnerships to maximise delivery

Objective 7 : Monitor the effectiveness of the plan and review

Objective 1 : Embed biodiversity throughout decision making at all levels

High level decision making such as policy and plan adoption and future spatial planning including the development plan process are key areas where embedding biodiversity will be vital to meet the Section 6 duty.

Objective 1 will particularly apply to all types of consents that Monmouthshire County Council issues including planning permission and other consents that may not currently consider biodiversity. It will also apply to decisions taken in relation to procurement, contracts, licences, asset management and wider land management policies such as road verge management.

The objective will be achieved by embedding biodiversity and resilience of ecosystems into business planning by service area. This will require service areas to understand what potential impacts work streams can have on biodiversity and development of a programme of delivery. Internal awareness raising and training will have an important role in meeting the objective.

Section 6 also applies to biodiversity in a global sense and requires Monmouthshire County Council to consider the effect of decisions taken or activities carried out within Wales but also in relation to biodiversity outside of Wales for example in the procurement of sustainable products from other parts of the world. It is also a pertinent point for Monmouthshire where cross boundary considerations for biodiversity and ecosystem resilience, particularly relating to Gloucestershire and Herefordshire, are relevant.

This objective contributes to the Nature Recovery Plan for Wales Objective 1.

Objective 2 : Provide environmental education to raise awareness and encourage action

An improved understanding and awareness of biodiversity and ecosystems leads to behavioural change and encourages everyone to act. Environmental education has developed over several decades and it is now threatened by funding cuts however, to make real progress towards better understanding and appreciation of the value of biodiversity and ecosystems, it is vital to maintain actions to meet this objective.

Environmental education provision by Monmouthshire County Council as the Local Education Authority and through service areas such as Countryside & Green Infrastructure, Waste & Recycling, Outdoor Education, Monmouthshire Youth Service and the role of the Rural Development Programme can deliver this objective which will require sufficient resource to be put in place.

Alignment with the work of external partners will be vital and the use of networks such as the Outdoor Learning Wales: Monmouthshire Cluster Group can facilitate this. Key external partners include Keep Wales Tidy, Gwent Wildlife Trust, Welsh Water, Wye Valley Area of Outstanding Natural Beauty Unit, Brecon Beacons National Park Authority, RSPB and others. Volunteers, including those at Monmouthshire County Council, also provide vital support in this delivery.

There are opportunities to engage staff at Monmouthshire County Council with the use of resources such as the Incredible Edible pollinator garden at County Hall Usk and Caldicot Castle Country Park.

The connection between benefits to the environment and well-being benefits of people is an important target area for many partner organisations. As well as encouraging action, this work shall contribute to the physical and mental health and wellbeing of those involved.

This objective contributes to the Nature Recovery Plan for Wales Objective 1.

Objective 3 : Undertake land management for biodiversity and promote ecosystem resilience

The rationale for land management methods by Monmouthshire County Council shall be reviewed to identify opportunities to improve sites for Biodiversity so long as is consistent with commitments under other legislation such as those relating to Health and Safety and Heritage. A Green Infrastructure approach to this management shall ensure multiple benefits for communities.

Changes shall be made with the aim of restoring habitats to a natural and resilient state and in particular to safeguard Section 7 habitats and species. To achieve this objective Monmouthshire County Council will need to have a better understanding of where and how we influence these habitats and species. Conservation management skills, machinery and processes may need to be developed to enable a shift from a 'neat and tidy' rationale to a management of habitats approach. Reviewing pesticide use and other practices will deliver more benefits.

Working in partnership with other organisations and volunteers such as Keep Wales Tidy and Friend's Groups will increase the specialist expertise available and establish 'buy-in' of local communities. Tools such as the Green Infrastructure Action Plan for Pollinators in South Wales can provide framework for delivery. Monmouthshire County Council has a close connection to the Bee Friendly Initiative is working to achieve a Bee Friendly status which shall aid in meeting this objective.

Monmouthshire County Council shall seek to enhance the capacity of natural resources on sites it owns to provide essential ecosystem services such as water management, climate regulation and crop pollination as well as enhancing the environment.

This objective contributes towards Nature Recovery Plan Objectives 2 & 3.

Objective 4 : Influence land management to improve ecosystem resilience

Positively influencing management undertaken by others can increase the impact Monmouthshire County Council has on improving ecosystem resilience across the region and beyond. Continuing to work with external partners and supporting landscape scale projects such as Living Levels, Wye Catchment Partnership and the Long Forest project can increase the scale of the impact.

Development Management shall continue to deliver this through promoting a Green Infrastructure approach to design, development and subsequent management of sites. The Rural Development Programme shall do this through projects such as those promoting action for pollinating insects.

There is also scope for land owned by Monmouthshire County Council which is subject to tenancies and licences to be influenced by using clauses and conditions which will reduce negative impacts and promote positive actions e.g. protecting high value sites, tree

planting or hedgerow management. There are opportunities to play an important role in tackling climate change and its negative effects.

Monmouthshire County Council shall continue to be an exemplar of best practice for management and encourage other Public Authorities to make changes.

This objective contributes towards Nature Recovery Plan Objectives 1, 2 & 3.

Objective 5 : Tackle key pressures on species and habitats

Pollution, invasive non-native species (INNS), and inappropriate land management are pressures on species and habitats that need to be tackled. Monmouthshire County Council has statutory duties relating to pollution and INNS under other relevant legislation however, by working in partnerships with other organisations for example Living Levels and Wye Catchment Partnership, Keep Wales Tidy and The Deer Initiative, more significant impacts can be achieved.

By adopting a Green Infrastructure approach to site management and in using nature based solutions to make improvements e.g. to improve water quality, we can take steps towards achieving the objective. A Green Infrastructure approach to development management can reduce the impacts of development on biodiversity and conserve, integrate and improve ecosystem services to deliver multifunctional benefits.

This objective contributes towards Nature Recovery Plan Objective 4

Objective 6 : Support landscape scale projects and partnerships to maximise delivery

Monmouthshire County Council's continued role in supporting and contributing to landscape scale projects is important to maximise delivery for biodiversity and ecosystems. Key projects for Monmouthshire County Council will be Living Levels, Wye Valley Catchment Partnership and any forthcoming Sustainable Management Schemes or HLF projects where Monmouthshire County Council has a remit particularly in the National Park and Wye Valley AONB. These projects often require cross-boundary working to take place with neighbouring authorities and organisations.

The role of the Environment Partnership Board in steering this work shall continue to bring together key organisations and provide direction for the Local Authority in delivery of the Environment (Wales) Act 2016 and Well-being of Future Generations Act 2015. As

identified through consultation with external partners, there is a need for a Local Nature Partnership on a Monmouthshire level to provide an information sharing network and identify opportunities for collaborative works with partners, community groups and volunteers.

This objective contributes towards Nature Recovery Plan Objective 1, 2, 3 & 4.

Objective 7 : Monitor the effectiveness of the plan and review

Action carried out by Monmouthshire County Council shall be monitored to establish its effectiveness. Individual service areas shall undertake monitoring. Partnership working including working with volunteers will be vital to establish the effectiveness of action such as the Rural Development Programme. It is a requirement that the plan is reported on to Welsh Government in 2019 and every three years subsequently. Monmouthshire County Council commits to this and to learning from the results of monitoring. The forward plan and service area action plans shall be reviewed accordingly.

This objective contributes towards Nature Recovery Plan Objective 5

6. The Next Steps in Delivery

Work has already commenced to develop Service Area Action Plans to embed and deliver the action required. The first priorities for 2017-18 are to:

- ❖ Continue assessing and reviewing how service areas and work streams impact biodiversity and ecosystem resilience and identify opportunities to meet the Section 6 duty.
- ❖ Develop actions with measurable targets for delivery by work stream for each service area.
- ❖ Use business plans to embed the consideration of biodiversity and ecosystems into policies, plans, programmes, projects and day to day activities.
- ❖ Using the Green Infrastructure approach as a means of delivering multiple benefits.
- ❖ Reporting on implementation of the forward plan as required by Welsh Government.
- ❖ Establish governance with the Environment Partnership Board as the steering group and work in partnership with other organisations to maximise delivery for biodiversity.
- ❖ Identifying how this work delivers Monmouthshire County Council's duties under the Wellbeing of Future Generations Act 2016.

Each service area will have responsibility for delivery and monitoring of the forward plan however the Green Infrastructure & Countryside Team shall lead and facilitate the process.

7. Glossary of terms

Biodiversity is defined in the Environment (Wales) Act as *the diversity of living organisms, whether at the genetic, species or ecosystem level*. Biodiversity drives the functioning and resilience of our ecosystems.

Green infrastructure is defined in Monmouthshire County Council's Supplementary Planning Guidance as *the network of natural and semi-natural features, green spaces rivers and lake that intersperse and connect villages, towns and cities*. When appropriately planned, designed and managed, green infrastructure has the potential to deliver a wide range of benefits for people and wildlife.

Ecosystems are defined by the UN Convention on Biological Diversity (CBD) as "a dynamic complex of plant, animal and micro-organisms and their non-living environment interacting as a functional unit."

Ecosystem approach is defined by the CBD as "a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way." This is widely recognised as international best practice for addressing the decline in biodiversity.

Ecosystem services are the conditions and processes through which natural ecosystems, and the species that make them up, sustain and fulfil human life. They maintain biodiversity and the production of ecosystem goods (Daily, 1997). They are split into four categories:

Supporting services– underpins all other services and includes nutrient cycling, soil formation and primary production

Provisioning services- all our food, fresh water, wood and fibre, fuel

Regulating- cleaning air and water, flood control, carbon sequestration

Cultural- aesthetic, spiritual, educational, recreational

Natural resources are defined in the Environment Act as:

- a) Animals, plants and other organisms
- b) Air, water and soil

- c) Minerals
- d) Geological features and processes
- e) Physiographical features
- f) Climatic features and processes

These individual components defined in the Act combine and work together in many ways and at many scales, from which humans use and obtain benefits. These components and processes work together and are referred to as ecosystems.

Resilience- Ecosystems are considered to be **resilient** if they are able to cope with disturbance or change so that they maintain their functioning and ability to deliver benefits. The Environment Act recognises a number of attributes of ecosystems that support resilience, including their scale and extent, connectedness, condition, diversity, and ability to adapt.