Statutory Biodiversity Duty **REPORT ON DELIVERY**

1 January 2015 to 31 December 2017









Foreword

In 1998 Angus Council joined with Perth & Kinross Council (and Dundee City Council) to set up one of the first local biodiversity partnerships in Scotland. Since the publication of the very first Tayside Local Biodiversity Action Plan in 2002 we have been key partners in helping to implement its first 400 actions. Our first Biodiversity Duty Report (for the 2012 to 2014 period) noted that of the 75 priority projects going ahead in Tayside, 63 were situated in Angus. Many of these were community-led, but many were also being initiated by Angus Council officers.

It was heartening to see that the Tayside Biodiversity Partnership launched its 2nd Edition Local Biodiversity Action Plan in Angus in August 2016 and there are no less Angus based priority projects in 2017 than in 2014. The 2nd Edition will advise us on the actions we all need to achieve up to 2026 and will allow us to collectively report back, in due course, on the Scottish Government's "2020 Challenge for Scotland's Biodiversity". This national document was prepared in response to the Aichi Targets set by the United Nations Convention of Biological Diversity and the European Union's Biodiversity Strategy for 2020.

In 2015 the Scottish Government published its "Scotland's Biodiversity – a Route Map to 2020" which acknowledges that much valuable work is underway and planned by local authorities, local biodiversity partnerships and public agencies. The Route Map outlines 'Six Big Steps for Nature' which both the Tayside Local Biodiversity Action Plan and Angus Council are taking forward.

The Scottish Biodiversity Strategy outlines the need for everyone to maximise the benefits of a diverse natural environment and engage people with the natural world. We are now at the stage of not just rolling out small-scale projects, but also looking at ways to set up larger ecosystem-based initiatives with much greater partnership working. Sharing knowledge and experience will help inspire landscape-scale thinking with in-built sustainability.

Angus is one of the most biologically rich areas of Scotland. We can be proud of sharing our local biodiversity with both residents and visitors - from the Golden eagles in our glens to the Red squirrels in our woodlands, from our Barn owls on our farmland and seabirds and Small blue butterflies on our coast. Beneficial insects pollinate our crops and the land provides raw materials for our well-known food and drink industries, as well as materials for buildings and roads. Angus Council, community planning partners and nature conservation bodies are still very much committed to working together to conserve our special natural heritage.

The Nature Conservation (Scotland) Act 2004 requires every council employee to have a legal duty to conserve and enhance biodiversity. Across all our services we continue to develop the best way to do this, ensuring other policies and initiatives contribute to biodiversity. By involving local communities and council officers in projects, we can raise awareness of a very wide range of biodiversity issues across the county and further embed more work being carried out to safeguard our important Angus species and habitats

Margo Williamson

Chief Executive, Angus Council

Contents

	Баску	round	4	
	1.1	Our Duty to Report	4	
	1.2	The International and Scottish Context	4	
	1.3	The Role of Local Authorities and Local Biodiversity Partnerships	5	
2	The Strategic Delivery of the Biodiversity Duty in Angus Council 2015–17			
	2.1	Governance, Leadership and Management	6	
	2.2	Mainstreaming	8	
	2.3	Monitoring	8	
	2.4	Partnership Working and Biodiversity Communications	10	
3	The De	elivery of the Biodiversity Duty 2015–17	13	
	3.1	Place Directorate	14	
	3.2	Chief Executive's Unit	31	
	3.3	People Directorate	32	
4	Biodiv	ersity Highlights and Challenges	33	
5	Monito	oring	35	
6 Future Biodiversity Action		Biodiversity Action	36	
7	Conclusion			
	endix 1	ril Cantuibutian to the 2020 Challenge for Scotland's Diadireceits.	27	
Ang	jus Counc	cil Contribution to the 2020 Challenge for Scotland's Biodiversity	37	

1 Background

1.1 Our Duty to Report

Under the Nature Conservation (Scotland) Act 2004, all public bodies in Scotland are required to further the conservation of biodiversity when carrying out their functions. The Wildlife and Natural Environment (Scotland) Act 2011 further requires all public bodies to report every three years on how they comply with this Duty. This second report is required by 1 January 2018 to cover activity for the period 1 January 2015 to 31 December 2017. This report demonstrates how Angus Council has complied with the Biodiversity Duty for this period.

1.2 The International and Scottish Context

The work undertaken by Angus Council to further biodiversity conservation contributes to international targets to halt the global loss of biodiversity. The 1992 Convention on Biological Diversity provides the original overarching target to halt global biodiversity loss; in 2010, new global targets for 2020 -the 'Aichi' targets were agreed. These are:

Strategic Goal A

Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society;

Strategic Goal B

Reduce the direct pressures on biodiversity and promote sustainable use;

Strategic Goal C

To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity;

Strategic Goal D

Enhance the benefits to all from biodiversity and ecosystem services;

Strategic Goal E

Enhance implementation through participatory planning, knowledge management and capacity building.

Following the agreement of the Aichi targets, the European Union published 'Our Life Insurance, Our Natural Capital: an EU Biodiversity Strategy to 2020'. To update and supplement the Scottish Biodiversity Strategy ('Scotland's Biodiversity: It's in Your Hands') which was published in 2004, the Scottish Government launched its '2020 Challenge for Scotland's Biodiversity' in June 2013. Appendix 1 outlines how the ongoing work carried out by Angus Council contributes to these targets. In 2015 "Scotland's Route Map to 2020: The Big Six Steps for Nature" was published which links in with the original Aichi Biodiversity Targets:

- Ecosystem restoration
- Investment in Natural Capital
- Quality greenspace for health and education benefits
- Conserving wildlife in Scotland
- Sustainable management of land and freshwater
- Marine and coastal ecosystems restored

All these steps have been included in the 2nd Edition of the Tayside Local Biodiversity Action Plan and in the lead up to reporting against the 2020 Challenge for Scotland's Biodiversity, the Tayside Biodiversity Partnership will cross-reference these against the Action Plan's Priority List.

1.3 The Role of Local Authorities and Local Biodiversity Partnerships

Local Authorities are well placed to deliver biodiversity conservation as they can have a significant impact on biodiversity through the protection and enhancement of the natural environment. There are opportunities for wide scale community engagement, sustainable resource management and positive education, plus a range of projects and initiatives that can be undertaken, all of which can contribute directly to the safeguarding of local biodiversity.

In Scotland, many Local Authorities support and act as key leaders for the Local Biodiversity - Partnership in their area. These partnerships were created in response to the original Convention on Biological Diversity. The Tayside Biodiversity Partnership (TBP), part funded by Angus Council, was one of the first in Scotland, being set up in 1998. A dedicated Biodiversity Co-ordinator has been in place for the past 17 years. The role and importance of Local Biodiversity Partnerships is recognised and supported in the Scottish Biodiversity Strategy.

Since its first publication in 2002, the Tayside Local Biodiversity Action Plan the (TLBAP) has had two main aims, namely:

- To conserve and enhance the regions biodiversity, taking into account both local and national priorities; and
- To co-ordinate existing actions, as well as initiating and co-ordinating new ones.

In the 2nd Edition TLBAP, published in 2016, a Tayside Vision was added:

"By 2030 Tayside will have a fully functioning ecosystem network "from summit to sand" – reaching from the Angus Glens and Highland Perthshire to the Tay Estuary, the Angus coast and beyond to the marine environment. Visitors and residents alike will be able to learn about the area's rich biodiversity and will be keen to protect and enhance it. Both the rural and urban environment will be delivering benefits essential for everyone, from helping to reduce flooding, assisting species to adapt to climate change, and ensuring there is no further loss of biodiversity".

The TBP is currently overseeing over 75 projects via its themed Working Groups; with the Partnership taking forward some of the projects itself. Angus Council staff sits on the management board and working groups. Through partnership working much of the funding needed for these projects is sourced externally, but increasingly there is a need for the Partnership to set up projects. Many Angus Council services contribute to project delivery through limited direct funding and in-kind contributions.

2 The Strategic Delivery of the Biodiversity Duty in Angus Council 2015-17

This section outlines how Angus Council has strategically delivered biodiversity conservation for the three year period 2015-2017.

2.1 Governance, Leadership and Management

Angus Council are a joint leader/funder with Perth and Kinross Council of the Tayside Biodiversity Partnership which employs a Biodiversity Co-ordinator to facilitate the Tayside Local Biodiversity Action Plan TLBAP and assist the council in delivering against our biodiversity duty.

Many teams within Angus Council lead on carbon, climate change, sustainability, waste, flood risk and planning work within the Council co-ordinating various policies, action plans and projects which have clear links to biodiversity conservation. Angus Council is a signatory to the Climate Change Declaration, and the Scotland Geodiversity Charter. Both contribute towards biodiversity conservation measures. Although individual teams delivering a wide range of activities contributing to our biodiversity duty, it is important to note the corporate objectives and duties Angus Council work towards. These include;

Angus Council Plan 2014-2017

Angus Council Plan 2014-2017 refers to local outcomes as 'the results we want our work and that of our partners, to deliver', and includes the following:

Local Outcome 2 Angus is a good place to live in, work in and visit

Local Outcome 8 We have improved the health and wellbeing of our people and

inequalities are reduced

Local Outcome 10 Communities are developed in a sustainable manner

Local Outcome 11 Our Natural Environment is protected and enjoyed

Local Outcome 12 Our carbon footprint is reduced

The Angus Community Plan and Single Outcome Agreement 2013-16

The Angus Community Plan and Single Outcome Agreement 2013-16 (now superseded by the 'Angus Local Outcomes Improvement Plan 2017-2030'), highlighted that the 12 local outcomes 'reflected our local circumstances and priorities and also supported and contributed towards the government's sixteen national outcomes'.

The local outcomes related to biodiversity, above, included the following national priorities:

National Outcome 12 We value and enjoy our built and natural environment and protect it

and enhance it for future generations

National Outcome 14 We reduce the local and global environmental impact of our consumption

and production

Angus Local Outcomes Improvement Plan 2017-2030

Published in October 2017, Angus Council Local Outcomes Improvement Plan and four area Locality Plans are requirements of the Community Empowerment (Scotland) Act 2015. The plans aim to deliver strategic outcomes that contribute to Angus Council's Vision for the future that 'Angus is a great place to live, work and visit'. The Outcomes Framework below sets out how collaboration can achieve the vision. It is based on the five national strategic objectives and three local, cross-cutting themes of economy, people and place. The TLBAP 2016-26 is included in the family of strategies that will help deliver these outcomes.

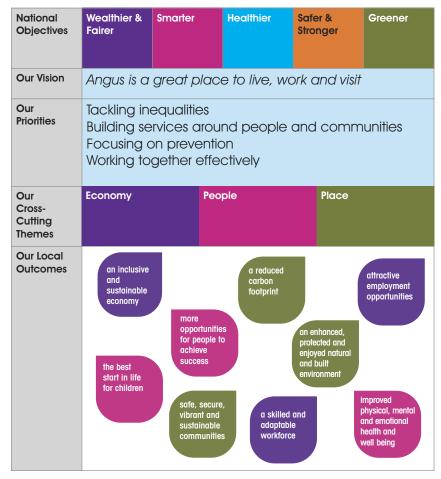


Figure 1. Angus Local Outcomes Improvement Plan Outcomes Framework.

2.2 Mainstreaming

The conservation of biodiversity is embedded in the delivery of Council services. Main Drivers include:

- Angus Local Development Plan -a key service in the delivery of biodiversity conservation through land management policies, protection and designation of local sites. This ensures that land use planning and the management of Council-owned land delivers protection and enhancements for biodiversity;
- The Development Standards team who assess planning applications and potential impacts on biodiversity;
- The Climate Change Member Officer Group whose Adaptation Working Group consider landscape scale natural flood management projects that can deliver additional biodiversity benefits;
- The Angus Alive Ranger Service who manage the natural environment within Angus Country Parks,
 Local Nature Reserves and a range of non-designated sites;
- Environmental Strategy Project Officers who develop media and awareness raising opportunities, training seminars, environmental projects and collaborative working opportunities.

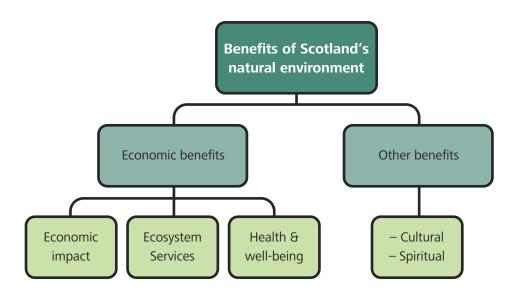


Figure 2. The importance of the environment cannot be counted in economic terms alone (SNH).

2.3 Monitoring

The status of biodiversity and activity on biodiversity conservation is monitored through:

- Extensive internal monitoring by the Tayside Biodiversity Partnership's Working Groups and regular reports on overall delivery of actions and targets;
- Annual Report by the Parks and Burial Grounds Service;
- A programme of species monitoring and survey work carried out by Council staff, volunteers and partners to provide the baseline data for indicators;
- Angus Council Climate Change Public Bodies Duty reporting;
- Angus Council's Local Outcomes Improvement Plan 2017-30;
- River South Esk Catchment Management Plan;
- Angus Council's Climate Change Member Officer Adaptation Working Group.

Case Study

The Rottal Burn Restoration "One Project - Multiple Benefits"

In 2017 Angus Council, the River South Esk Catchment Partnership, the Esk Rivers and Fisheries Trust and Abertay University hosted a river restoration review event marking 5 years since the re meandering of the Rottal Burn in Glen Clova. It brought together agencies and individuals who have contributed to this exemplar restoration project and who have been instrumental in developing an evidence base of post restoration change and impact.

Although initially driven by a desire to improve habitat for fish, the project has delivered multiple benefits including: improved water quality, improved habitat for species, natural flood management, better access to enjoy the site and increased education opportunities. The project has captured the interest of a wide range of audiences and is used to show good practice in river restoration. The project, and wider land use projects in the catchment, have been valuable in meeting Angus Council s environmental statutory duties e.g. Climate Change and Biodiversity duties and Single Outcome Agreement. This example of good practice has been showcased by the Scottish Government on numerous occasions, as an example for other Local Authorities of how to achieve multiple benefits by working in partnership.



Monitoring change at the Rottal Burn, Glen Clova.

2.4 Partnership Working and Biodiversity Communication

Partnership Working

Tayside Biodiversity Partnership

The Council is a joint lead partner for the Tayside Biodiversity Partnership. The Partnership comprises approximately 100 organisations and bodies, including government agencies, non-governmental bodies, local naturalists, community groups and volunteer conservation groups. It is chaired by an independent Chairman. The Partnership is responsible for the production, delivery and promotion of the Tayside Local Biodiversity Action Plan (TLBAP), together with reporting on actions and targets.

To facilitate wider partnership working, the Partnership set up its own Forum and Angus Council was pleased to host its first meeting in Forfar in March 2012. Angus Council hosted the third Forum meeting in Arbroath in May 2014; afterwards members explored the coastal cliff path and learned more about the ongoing work being undertaken there. In August 2016 Angus hosted the launch of the 2nd Edition TLBAP (at East Haven).

River South Esk Catchment Partnership

The River South Esk Catchment Partnership Programme Manager role is fulfilled by a member of Angus Council staff. Angus Council are one of the main founding funders of the partnership. The River South Esk catchment covers a large area of Angus and is drained by the River South Esk and its tributaries. This includes its lochs, groundwaters, wetlands and the unique enclosed estuary of Montrose Basin.

Over the last three years a range of projects have been carried out that contribute towards the health and wellbeing of the catchments habitats and species, in line with the catchment management plan objectives. These include:

- The extensive treatment of non-native invasive species such as giant hogweed, Japanese knotweed and Himalayan balsam and American mink.
- Significant river restoration projects to encourage habitat diversification and river naturalisation.
- Native tree planting projects.
- European funded projects such as Pearls in Peril Life + and Heritage Lottery Fund funded projects such as Scottish Wildcat Action.

The partnership has welcomed five ministerial visits to the catchment and has been praised on its collaborative work. The partnership promotes nature conservation and project work through its dedicated website, newsletter and twitter account.

Tay Estuary Forum

Angus Council is a funding member of the Tay Estuary Forum. The Forum brings together organisations and individuals with a common interest in the welfare and sustainable use of the Tay Estuary and adjacent coastline. It is hoped that through improved co-ordination and communication between these diverse interests and users, future conflicts within the coastal zone can be minimized. The over-arching nature conservation aim of the forum is to promote understanding and monitoring of species in order to make informed decisions relating to their management. Issues which impact upon biodiversity such as flooding, diffuse pollution, coastal erosion and invasive species are monitored by the group.

Council officers also work in collaboration with a range of other bodies and partnerships including: Cairngorms National Park Authority, Angus Rural & Environment Partnership, Angus Local Access Forum, TACTRAN, Sustainable Scotland Network, Scottish Geodiversity Forum, North East Green Network, Angus Council Educational Development Service (Creative Learning Partnership).

Biodiversity Communication

Awareness-raising, communication and engagement are key elements of the biodiversity work undertaken by Angus Council. Promotion of biodiversity includes:

Websites and Social Media

The Angus Council website is regularly updated to include local, regional and national biodiversity news and two twitter accounts highlighting sustainability and the River South Esk catchment were launched in 2014. These twitter accounts compliment the Angus corporate account @anguscouncil (11.3k followers) to promote biodiversity. This format and the Angus Council intranet have been used frequently to encourage citizen science projects such as the surveying of cetaceans and invertebrates in coastal areas, red squirrel surveying and the promotion of local biodiversity related events.

The Tayside Biodiversity Partnership (TBP) administers four Facebook pages featuring many events, updates and stories from Angus & Tayside Biodiversity, Tayside Swifts, Tayside Amphibians & Reptiles, and Tayside Wildlife Recorders' Forum. The 1st Edition Local Biodiversity Action Plan with its appendices is retained on the website and the 2nd Edition Tayside Local Biodiversity Action Plan 2016-2026 is also featured, together with its new Actions Schedules.

For some years the TBP has hosted a website for Tayside Geodiversity which has helped to raise awareness of the unique geology of the area. In 2017 Angus Council signed the new Scottish Geodiversity Charter, joining Perth & Kinross Council, the TBP and Tayside Geodiversity as signatories.

Press and Print

The TBP regularly prepares press releases and arranges photocalls for its events in Angus and has published a series of species newsletters (focussing on Barn owls, Red squirrels and Swifts). A new issue of the Tayside Swifts Newsletter will be published in 2018. The Partnership's occasional newsletter "From Summit to Sand" features Angus projects and initiatives. To keep up with the fast pace of projects and initiatives arising from the 2nd Edition, from early 2017 a regular E-Newsletter is now being penned and widely circulated. This is archived on the website. Many of the Angus projects and South Esk catchment projects are also regularly featured in the UK Biodiversity Newsletter published by DEFRA, and the Scottish Biodiversity Forum Biodiversity Bulletin.

Events

Scottish Nature Week and Scotland-wide Festivals

During 2015 and 2016 the Partnership contributed events from Angus and Perth & Kinross to the Scottish Nature Week (to raise awareness of biodiversity issues), as well as submitting numerous press releases on the wide range of activities, workshops and training days held throughout the year. The Angus Alive Ranger Service takes forward most of the Angus-based events for this Week.

In addition, Angus Council officially launched the new Scottish Coppice Festival Week in March 2017 and worked with the Partnership to make the inauguration of the first Scottish Small Blue Butterfly Week successful. The first such Week took place in May 2017 and there are now plans in place to continue the event into 2018.



A well attended community survey at Barry Buddon, Angus.

Tayside Recorders' Forum

The Angus Alive Ranger Service hosted the 10th Anniversary Recorders' Day at The Meffan, in Forfar in March 2017. The event brings together professionals and amateurs interested in both citizen science and species survey work. It acts as the focus to launching a number of TBP projects, most of which involve local people. A Recorders' Bulletin was circulated in the event's delegates pack and is now featured on the website. The Tayside Wildlife Recorders Forum Facebook page helps to publicise a variety of surveys and papers.

Species Champions

Angus Council is now leading the way within Tayside to set up a series of Local Species Champions to encourage local MSPs, councillors and schools to raise awareness of our county's special wildlife. The first such champion is Woodlands Primary School, Carnoustie, who took part in the first Scottish Small Blue Week and held a competition to choose the artwork for a poster and logo for the event. They are keen to repeat something similar in 2018.

3 Delivering Our Biodiversity Duty 2015-17

This section outlines how Angus Council has delivered biodiversity conservation at a service level for the three year period 2015-2017.

Recently Angus Council has undergone a management restructure. The new structure, adopted over the last year incorporates three distinct areas of work. These are:

Place Directorate services to communities

People Directorate services to individuals and families

Chief Executive's Unit economic development, communications, governance, resilience and

corporate support

Each Directorate has a number of Service areas. Responsibilities of and activities within Service areas are detailed below, although in many cases Services will work in collaboration.

3.1 Place Directorate

Planning

Environment & Development Plan

The work of the Environment & Development Plan team includes a wide range of specialisms which contribute towards nature conservation, protection, increasing awareness raising and mainstreaming through policy and project focussed work. These include:

Environmental Strategy and Policy

Staff provides an advisory service on a variety of biodiversity related issues such as protected species, nature conservation site designations, Habitat Regulations Appraisal and climate change.

Environmental Policy is developed and implemented, a recent example being, the ban of balloon releases on Angus Council grounds. On 18th August 2015 Angus Council's Communities Committee approved a Policy prohibiting intentional balloon and lantern releases on Council owned land and property, by Council staff, and at events endorsed or supported by the Council, including those on non-Council land. Angus Council also committed to raising awareness of environmental consequences of balloon and Chinese/sky Lantern releases and to promote alternatives.

Angus Council Climate Change Strategy 2012-16

The Council's Climate Change Strategy includes a section on Cultural and Natural Heritage which outlines work undertaken by the council (and other stakeholders) to achieve the objective to raise awareness of climate change issues which will influence our stewardship of biodiversity, natural resources and the unique natural environment of Angus..

The strategy reports annually on the progress made on actions within the strategy as part as our obligation under the Climate Change (Scotland) Act 2009. Angus Council signed up to Scotland's Climate Change Declaration in 2007 and has produced an annual report every year since then. The Declaration has now been superseded by the annual mandatory Public Bodies Duty Report. The report contains a section which asks how the council is performing its biodiversity duties under the Nature Conservation (Scotland) Act 2004.

From 2018 onwards Angus Council will have a Sustainable Energy & Climate Action Plan. Adaptation will feature heavily in the plan and recently a Climate Change Member Officer Group was established and an adaptation working group formed to take forward project delivery.

The Environmental Strategy Project Officer delivers a range of biodiversity related project work including:

- Biodiversity related GIS layers e.g. protected species badgers, wildcat, small blue butterfly and kidney vetch and Green/blue network mapping.
- Participating in, and leading marine and coastal training opportunities e.g. Capturing our Coasts,
 Marine Conservation Society beach cleans and FIDRA nurdle hunts. Since 2015 Angus has seen a greater number of beaches adopted, surveyed and cleaned than ever before.
- Volunteering, species surveying and camera trapping for local and national projects e.g. Scottish Wildcat Action, Scottish Badgers, Scottish Wildlife Trust Red Squirrel Surveying, Marine Life Angus, Marine Conservation Society etc.

- Participation in a structured ERASMUS+ training programme in Norway in 2015, has led to new techniques being applied to the management of our own natural resources. Actions in the new Tayside Biodiversity Action plan 2016-26 were inspired by the visit.
- During #eugreenweek in June 2017— a "Himalayan balsam Control Workshop" on the River South Esk SAC, at River Street in Brechin was provided for Angus Council staff. The theme of the week was #greenskills and members of the Parks, Environment & Development Plan and Angus LEADER teams. (14 in total) came along and pulled out approx. 1.5 tonnes of Himalayan balsam out along a 230m stretch of riverbank. A second a sweep a month later resulted in a further tonne being removed.
- Wildlife tourism in Angus has been promoted through a year round guide to wildlife watching
 opportunities in Angus and the website www.marinelifeangus.co.uk The website highlights coastal
 sites of interest and land based cetacean watching hotspots. Citizen science recording opportunities
 are on the website recording whales and dolphins, butterflies, maritime plants and marine non-native
 species.
- Throughout 2015 and 2016 Angus Council delivered town centre charrettes in the Angus burghs, and in 2017, a rural charrette. The charrettes aimed to generate a long term vision for town centres and rural locations shaped by the community. Engaging local businesses, community groups, institutions, community planning partners and the everyday public, provided an opportunity to raise the profile of biodiversity to a wide audience, and the creation of biodiversity enhancement projects now being delivered in Brechin and Montrose.

Angus Local Development Plan

The Angus Local Development Plan (ALDP) was adopted on 23 September 2016 and provides the planning framework for the council area and the policy context for the determination of planning applications.

The ALDP along with the approved TAYplan Strategic Development Plan 2016 - 2036 (October 2017) and Cairngorms National Park Local Development Plan (Adopted 2015) (including that part of northern Angus which lies within the designated boundary of the Cairngorms National Park) now comprise the Statutory Development Plan in Angus.

The ALDP sets out a presumption in favour of sustainable development as well as a development strategy, policies and land allocations to guide development to the most appropriate sustainable and accessible locations. The ALDP includes specific policies to protect and where possible enhance the areas rich and varied natural environment and biodiversity by minimising the impact of new development on designated sites, important habitats and protected species.

The ALDP was subject to Strategic Environmental Assessment and Habitats Regulations Appraisal to consider potentially significant effects of the provisions of the Plan on the wider Angus environment and the conservation objectives of any European designated site. Where potential significant environmental effects were identified amendments were made to the Plan or mitigation measures incorporated to minimise identified impacts.

Tayside Local Biodiversity Action Plan

The Tayside Local Biodiversity Action Plan (TLBAP) delivery includes a wide range of positive action for biodiversity across the region. Staff within the department assists with the delivery and monitoring of actions by their contribution to specific Partnership Working Groups.

Over the past few years, the Tayside Biodiversity Partnership (TBP) Co-ordinator has held regular informal biodiversity surgeries in Angus: the purpose of these is to advise Local Authority employees across all departments on their biodiversity duty, help start up biodiversity projects, or add a biodiversity slant to existing projects. The latter has proven particularly important where the Brechin Flood Prevention Scheme and Arbroath (Brothock Water) Flood Protection schemes are concerned.

At biodiversity surgery meetings held with the TBP co-ordinator, there is also an opportunity to ensure specific TLBAP input into the numerous biodiversity projects being considered by the Angus Environmental Trust.

In-house training seminars

Training and advice is provided by the TBP 'Building Better Biodiversity' series of training sessions on a range of biodiversity topics. During 2015 there were lunch time seminars in Forfar covering subject such as Badgers in Development, Wildlife Crime and Wildcats and Planning. Hedgelaying training was also offered at Scotia Seeds by Brechin.

Angus BeeWild Project

The TBP Co-ordinator has developed and delivered the innovative "Angus BeeWild Project. Angus Environmental Trust funding enabled nine care homes, a sheltered housing unit and a day care centre to take part in the pilot project to refine it to ultimately expand across Tayside.

Each property received a suite of wildlife kits to suit their site, including patio wildlife (hedgehog hibernation house, nestboxes and bird tables), orchard trees, wildflower meadow seeds, and a preformed pond with local provenance native wildflowers. The TBP prepared an extensive Site Biodiversity Action Plan for each site, focussing not just on improving the garden grounds for wildlife, but to also suggest to Activity Organisers how best to involve staff, residents and visitors.

Since the end of the project in 2016 additional workshops have been held to hold the interest of the staff. These have included talks by the British Dragonfly Society and Scotia Seeds. These workshops are continuing into 2018 when Butterfly Conservation Scotland will introduce their Urban Butterfly Project to the project.

Angus Open Space Audit

An audit of publicly useable open space was carried out by Consultants on behalf of Angus Council during 2016/2017. The audit covered the main Angus towns and villages. The audit findings will be analysed and mapped to provide an overall picture of the open space resource across Angus as well as within the individual settlements. This baseline information will be used to identify issues and opportunities for open space and develop a strategy in consultation with the community and other stakeholders. The mapping exercise also allows Angus Council to identify opportunities for creating/enhancing green networks within settlements as well as potential linkages to the wider (strategic) green network.

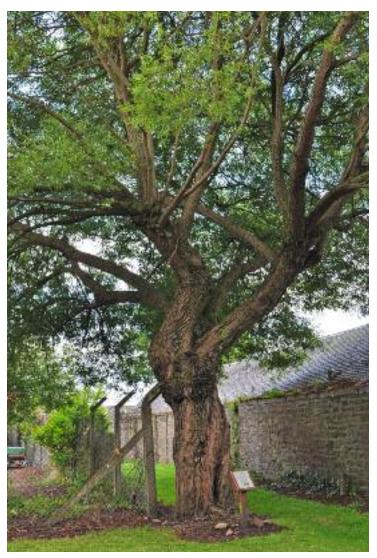
Outdoor Access

Management activities are carried out within the planning service and contribute to the enjoyment and conservation of biodiversity within Angus. Examples include:

- Development of path networks, and improvements to core paths, increasing opportunities for people to access and appreciate Angus' biodiversity.
- Path construction works are designed to retain existing habitats whenever possible, and timed to minimise disturbance to species. Use of native seed mixes is considered when re-seeding of verges is required
- Path maintenance regimes are typically low intervention, with minimum impact on biodiversity. Herbicide use is restricted to hard path surfaces, and vegetation is cut no more than twice per year.

Tree Preservation Orders

Three Tree Preservation Orders have been made between 2015-17. These were made on the grounds of visual amenity in the towns of Monifieth, Carnoustie and Kirriemuir but the trees also contribute towards biodiversity. The Dibble Tree in Carnoustie has an interesting story; and is a cricket bat Willow reputed to be 200 years old.



The Dibble Tree, Carnoustie.

Case Study

Angus Council SuDS Audit and Biodiversity Value Review

In early 2017 a three month internship with Angus Council and the Tayside Biodiversity Partnership (TBP) took place with the aim of identifying all the Sustainable Urban Drainage System (SuDS) within Angus and to determine their biodiversity potential. A student from France worked with the Council and TBP to document thirty five SuDS, twelve of them with water. OPAL water surveys were undertaken on these with half of them being found to be quite healthy. There were also 23 records of amphibians from the public, thereby determining possible migration routes. This knowledge will prove useful in identifying potential gullypots that need fitting with amphibian ladders. The baseline information from the internship will be used by the Partnership to plan a future Tayside Ponds Project as well as used by Angus Council Road Services to ensure biodiversity is taken into account in its management.



Building Conservation

Building conservation activities include:

Kirriemuir Conservation Area Regeneration Scheme

Liaising with the Kirriemuir Conservation Area Regeneration Scheme proposals led to the Kirriemuir Swift Conservation Project being set up and funded via the Angus Environment Trust. This was the first such project in Scotland (and possibly the UK) to work closely in association with a Conservation Area Regeneration Scheme (CARS) property restoration project. Nine talks were given in the town, including one at the Council's Kirriemuir Charrette and one at a CARS Traditional Roofing & Repair training workshop which was very relevant to the project.

Four guided walks and a number of exhibitions were also staged and training days arranged for Council staff to raise awareness not just of swifts, but also bats using the same buildings. By the end of the project ninety five new swift nestboxes had been given to householders, churches and businesses in the Kirriemuir area. As some of these were triple boxes it means there are now one hundred and fifteen new nesting locations for swifts, so hopefully this can help Kirriemuir's swift population to greatly increase over the next few years. The Project Officer liaised regularly with Angus Council's Planning Officers and many nestboxes were painted to blend in with the red sandstone and locations which were unobtrusive were chosen in conjunction with the officers.

The leaflet produced to publicise the project was later updated to use as a Tayside-wide swift leaflet. It also led to a small project "Help Save Edzell's Swifts" which involved siting a number of nestboxes and running a public walk in July 2017.

SNH Swift Best Practice Advice Note

Experience gained working in Kirriemuir led to Tayside Swifts, a working group of the Tayside Biodiversity Partnership, being commissioned to pen a Guidance Note on Swifts & Development. This was published in 2017.

Buildings and Biodiversity Conference, Perth

The Partnership has run greenspace and buildings conferences in the past, but to bring the Tay Landscape Partnership's Buildings for Biodiversity Project to a close a conference was held in Perth in November 2017 which Angus Council staff attended. Speakers included Professor Sandy Halliday of Gaia Research, Dusty Gedge, Living Roofs, and Edward Mayer of Swift Conservation.

Development Standards

The development management service implements the biodiversity protection and enhancement policies contained within TAYplan and the Angus Local Development Plan through the assessment of applications for planning permission. The development management function is also responsible to ensure that development is assessed against legislation designed to protect designated sites and species (e.g. Habitat Regulations). Below are some examples of how the work the team carries out contributes to the enhancement and protection of biodiversity:

- Development proposals which could affect protected sites require to be supported by information
 to show that adverse impacts can be mitigated against e.g. ensuring that drainage proposals for
 new houses close to the South Esk SAC do not increase the phosphorous loading on the
 watercourse or sediment release into it. By and large, planning permission is only issued where
 adverse impacts can be mitigated.
- Protected Species Surveys are required in support of development proposals being assessed e.g. a bat survey which identifies impacts of developments on bats and any mitigation or habitat enhancement measures required to comply with the statutory duty or to enhance habitats. This may include actions such as the use of bat slates in buildings or areas of roofs which are maintained or provided as bat roosts. For birds, controls may be attached to a planning permission restricting the time of year development can take place to avoid disturbing birds during the nesting season.
- Planning conditions or planning obligations have been utilised to treat invasive species such as Giant Hogweed on and adjacent to residential development sites (e.g. Baldovan House, Strathmartine).
- Development proposals which would destroy areas of woodland have been resisted which has consequently protected the habitats contained within those woodlands.
- New housing developments have included open spaces and landscaped areas which promote biodiversity; and a recently approved housing development includes provision of a community orchard.
- Woodland management schemes which enhance biodiversity by removing non-native plants have been included in development proposals.

Officers have undertaken a program of training through SNH in relation to the habitats regulations and procedures for undertaking appropriate assessment.

Building Standards

The building standards team have a range of publications that highlight the need to consider biodiversity when carrying out works on property. Produced by the Tayside Biodiversity Partnership the materials are available at main customer points within Angus Council main offices and are available for mailing out to customers where appropriate. A Septic tank guidance note produced by the Dee Catchment Partnership is also available at main reception points and, whilst stocks last, with applications for building warrant for new houses in the countryside.

Parks and Burial Grounds

The neighbourhood areas are a key delivery mechanism for biodiversity conservation through the management of community parks and local greenspace projects. The neighbourhoods are also of great importance for the close communication networks they have with local communities. The following projects have been carried out in Angus:

Soft Landscaping Projects

All soft landscaping schemes for housing areas, parks and open spaces, road improvements etc. are developed along the following principles:

- Identify species & habitats of interest on existing site and ensure their protection during site works.
- Incorporate existing habitats such as scrub and woodland, grassland, ponds, burns, etc. into the new green space where appropriate.
- Retain mature and veteran trees for their high biodiversity value.
- Check timing/ effect of works on species and habitats to ensure lowest possible impact.
- Include fruit and nut producing tree species in new hedges, woodlands or standard tree plantings.
- Use native, local provenance species of shrubs, trees and other plants whenever possible.
- Where possible, utilise walls and fences for growing a wide variety of climbing plants which will
 provide shelter and a food source for invertebrates, birds and bats.

Angus Orchard Project

- This 3 year project saw 357 fruit trees planted to form 63 orchards in schools, nurseries and country parks in Angus, with 75 different groups involved from schools to social work departments.
 A wide variety of cooking and eating apples, plum, pear, walnut and cherry were planted, and where possible old heritage varieties from Angus were used.
- As a follow up project to the planting works, a leaflet on orchard tree care and maintenance has been produced and distributed to all groups involved. This gives tips on how to prune orchard trees and harvest the fruit safely.

The following projects had the protection and enhancement of biodiversity features at their heart.

- Montrose Borrowfield Park Pond: Whilst repair works to the pond edges and footpath system were underway several wetland planting areas were created. Small turves were uplifted in water retention areas around the pond and suitable wildflower plugs and small pots planted.
- Balmachie Grass Pitches Carnoustie: screen planting around four sides of the new football pitches with native trees and shrubs, which are host and food source to large variety of insects and birds.
- Newmonthill New Affordable Housing: within a new housing area in Forfar a biodiversity friendly area has been planted with various trees and shrubs to attract wildlife.
- Standard Tree Planting: The tree population in parks, cemeteries and play areas in Angus has suffered over the years. The effect of budget constraints has meant little investment in replenishing mature tree stock which has been reduced by approximately 25% through many years of natural decay, disease and weather damage. The standard tree replacement programme introduced in 2014 is currently in year three of a ten year plan to remedy this.

Elliot Links SSSI

The site was designated as a Site Special Scientific Interest (SSSI) for its stable sand dune system and abandoned river meanders, which together support open dune and fen plant communities which are uncommon in Angus. The site contains rare plants including nationally scarce small scabious, as well as butterflies such as the ringlet and small blue.

Parks Services have consulted with Scottish Natural Heritage (SNH) to work on management options that ensure the protection of the special features and funding was received from Angus Environmental

Trust to carry out various improvements. Fencing and boardwalks have been introduced at earlier stages to protect species like kidney vetch, the plant species on which the small blue butterfly depends. Since 2014 a three year management programme of invasive species has been undertaken, which main objective is to remove invasive plants like roses and gorse that outcompete and threaten the development of indigenous plant species. Further management measures are currently being investigated in partnership with SNH.

Brechin Flood Prevention Scheme

The scheme installed in 2014-16 provides integrated flood protection and drainage solutions from Inch Park through to East Mill Industrial Estate. Within Inch Park the protection measures took the form of concrete cored earth bunds. The embankments of the bund have been incorporated into the local park and contain 3 different kinds of wildflower seed mixtures; each sourced locally and designed to provide a wide wildflower palette for varying ground conditions. The wildflower meadows have already established very successfully in the first year after seeding and provide an important food source for a variety of insects and an attractive environment for the park's visitors.

A variety of shrubs and trees that are nectar and food sources for birds, vertebrates and insects have been planted around the park. Moisture loving perennials such as meadowsweet, marsh marigold, yellow flag and purple loosestrife accompanied by willow and alder trees have been planted in drifts along the river.



One of the many wildflower meadows created at River Street, Brechin.

Parks Services have also designed a series of interpretation boards to inform on the history, culture and natural environment of the local area and Brechin as a whole. Two of the information signs inform on the wildlife in the park such as bats, birds and butterflies and also on life in the River South Esk with its internationally important populations of Atlantic salmon and Freshwater pearl mussels. The signs act to inform visitors what to look out for and to raise awareness of threats and dangers to the vulnerable species and their habitats.



A community wildflower meadow brightening up the roadside in Forfar, Angus.

Community Groups

The Parks and Burial Grounds Service continues to work with many community groups in Angus that wish to improve their local environment. The support the section is giving varies from project to project in terms of advice, design services and contract supervision, supply of manpower and materials and all projects are based on engaging with the community to shape their own surroundings. Examples of this are:

- Montrose in Bloom: development of attractive flowerbeds in the Mid Links.
- Brechin in Bloom and IMPS: planting improvements to a local rest garden and various annual borders, wildflower seeding and grass seats along Skinners Burn, grass seats in Inch Park, improvements of roundabout on the A935, wildflower meadow creation in Brechin Public Park.
- Forfar in Flower: wildflower meadow, enhancements of roundabout at A90 junction.
- Keptie Friends: works to improve the Keptie Pond and its environment, by reducing nutrient input, removal of algae and invasive plant species, and informing the public to reduce dog fouling and feeding of wildfowl.
- Arbroath in Bloom: floral feature planting at various places in Arbroath, commemorative bed to the Royal Marines Association at Infirmary Brae.
- Kirriemuir Dementia Friendly Garden: development of a garden which people living with dementia, their carers and family, as well as members of the local community can enjoy and help to maintain.
 The garden contains a wildflower meadow, espalier fruit trees and a variety of trees, shrubs and groundcover shrubs to encourage biodiversity.
- Kirriemuir Regeneration Group Development Trust: various works in The Den including coppicing and brashing of trees in the millennium woods, fence and bench painting, path maintenance, tidying up of entrances.
- Monifieth Ecoforce: litter picks and environmental improvements, including the planting and maintenance of a large new orchard.
- Colourful Carnoustie: wildflower meadows at Links Parade.
- Carnoustie Golf Links: based on a management plan drawn up by Parks and Burial Grounds Service
 the section continues to work with the organisation to improve biodiversity on the golf courses.
 Ornamental tree species are being replaced with native species over the years and habitats are
 preserved through adequate management techniques. Kidney Vetch planting took place in 2016 as
 part of the Small Blue Butterfly Project.

Parks and Grounds Maintenance

The section continues to reduce the overall quantity of chemicals applied in parks and other open spaces through alterations to maintenance regimes and by exploring alternative methods of weedkilling.

Nearly 40,000 square metres of species rich wildflower meadows have been created in various locations in Angus, with the largest being in Rosemount Estate in Hillside. Although higher in manpower and material investment than conventional maintenance methods these areas are managed through a single cut late in the season with all cuttings removed, which will distribute seeds to further encourage meadow species.

Angus Council Woodlands

All 141 woodlands, including 92 hectares of Millennium Woodland, that are managed by the Parks and Burial Grounds Service have been organised into a thinning and monitoring cycle to ensure the longevity of the woodlands and to encourage biodiversity, recreation and education.

A cycle of safety and condition inspections has been created, which vary in frequency from four to ten years. The resulting thinning, brashing and replanting works will be prioritised and carried out under available woodland maintenance budgets.

Currently an Angus Woodland and Tree Strategy is under development to provide an overall long-term strategy that will ensure well managed healthy trees and woodlands, specifying actions needed to achieve this objective.

Several sites of the Millennium Woodland project have been planted with hazel and willow and are coppiced annually. The yield of the coppicing is used by local groups to produce outdoor living sculpture work, hurdles, play tunnels and domes. Angus Council has hosted the first Scottish Coppice Festival in March 2017, where delegates visited two coppicing sites at Forfar Loch and Kirriemuir Hill. Staff from Parks and Burial Grounds and their colleagues in Angus Alive informed on the benefits and practice of this ancient woodland management technique

Angus Alive Countryside Rangers Service

The following list highlights the ongoing environmental work delivered by the Culture and Leisure Trust that has delivered countryside services for Angus Council since 2015.

- Angus Community Orchard Project 1000's of native fruit trees planted around Angus.
- Grass Cutting Regimes (Country Parks) improve wildflower diversity.
- Forfar Loch Country Park Garden Project create pond & marshland habitats.
- Forfar Loch Country Park, Going the Whole Hog project To encourage Schools to create Hedgehog habitats, with Grant Aid from AET.
- Forfar Loch Country Park Removal, aiming for eradication, of Himalayan Balsam from Country Park.
- Forfar Loch Country Park Increase area of willow habitat by planting up/expanding existing woodland around the country park.
- Forfar Loch Country Park Creation/Expansion of existing reed beds around Forfar Loch by seeding new areas with seed gathered on site, and discouraging shore access by public at selected sites.
- Forfar Loch Country Park Working with Roads/Parks to identify potential sites for large pond/SuDS-type structures within park boundary.
- Monikie Country Park Wildflower meadow, small woodland. Fruit tree Orchard. Specimen broad leaf & conifer tree planting, Established two Beehive colonies.
- Monikie Country Park Brechin Flood Prevention: Rangers engaged by Angus council to advise on environmental issues, plant trees, construct/erect bird boxes, work with local schools.
- Monikie Country Park Toad Crossing Mitigating measures on roads to protect annual amphibian migration. Community involvement.

- Crombie Country Park Peddieston West Heathland Restoration. Removing scrub/non-native species. Second stage of heather rotation completed on schedule by Crombie Ranger staff and volunteers. Rhododendron and Birch invasion require intensive eradication.
- Crombie Country Park Creation of Dragonfly Pond and viewing platform with Grant Aid from Froglife. – Completed and annual maintenance carried out by ranger staff and volunteers.
- Crombie Country Park Squirrel Hide and feeding area with Grant Aid from AET completed and interpretive panel installed.

Community Planning

Community planning contributes to the nature conservation duty at a high overarching level. Angus Council services are driven by local and national objectives highlighted in section 2.1 Governance, Leadership and Management. Partnerships and working groups are in place and contribute towards the role out of fulfilling our biodiversity duty. These include:

Angus Rural and Environment Partnership

Over the past two years the Angus Community Planning Partnership has been developing a local outcomes improvement plan and four localities plans, which were published end September 2017. These documents include a cross-cutting theme of 'Place', and local outcomes which include 'a reduced carbon footprint', 'safe, secure, vibrant and sustainable communities' and 'an enhanced, protected and enjoyed natural and built environment'. Locality implementation partnerships are being formed to implement areas for action, including, for example, seafront development, coastal erosion, greenspace, path networks/cycle routes and flood mitigation.

Pride in Place Member Officer Group

The Pride in Place Member/Officer Group has facilitated community involvement in projects which focus on improving the environment of Angus through community participation, indirectly benefiting local biodiversity. The Clean-up Angus campaign is covered in further detail further on in the report. The following are also important projects.

Angus Litter Summit

Led by the local community (East Haven Together) the summit has led to a number of community groups, especially East Haven Together, to prepare their own Litter Action Plan. The TBP has also drafted such a Plan, incorporating existing actions listed in the 2nd Edition TLBAP and adding a suite of generic actions that the partners could undertake.



Dog Fouling

Dog fouling is a problem not only from public health perspective; dog excrement can create nutrient enrichment if left unchecked upsetting the delicate balance of ecosystems. Elliot Links SSSI, designated for coastal plant species suffered from nutrient enrichment due to this very reason and restricted access measures have been applied on site by creating boardwalk trails. From 1 April 2014 52 fixed penalty notices were issued for dog fouling in Angus. The member officer group works closely with environmental health teams and proactive community groups such as The Green Dog Walkers initiative raising awareness within the community, hopefully reducing the occurrence of this widespread problem.

Beautiful Angus Working Group

More than 22 Community schemes from at least 12 localities participate in local garden and habitat improvement projects, many of which have been commended by Keep Scotland Beautiful. The group also runs the annual 'Garden Competition' encouraging tenants and businesses to take an interest in biodiversity and sustainable gardening.

Community Planning led "Beautiful Angus Market Place" events took place in 2015 and 2016 in the Reid Hall Forfar; the TBP Co-ordinator gave a workshop on increasing biodiversity value for members of community "In Bloom" groups from across Angus.

The Pride in Place Members officer Group Awards was introduced in 2017 which recognises the work of groups and individuals have done which have made a noticeable difference to their local community and/or environment. The categories for this award are Individuals, Village, Flower / food, Environment. Everyone nominated are invited to attend and awards ceremony that recognises and celebrate the effort and work being led by local communities.

Roads

Roads staff activities fall into various specialisms including roads maintenance and flood management. Biodiversity projects from the last three years include:

Roads Maintenance/Verge Management

The Tayside Biodiversity Partnership (TBP) and Angus Council Roads Service liaise with local communities, environmental organisations and botanists with regard to the maintenance of speciesrich verges in parts of Angus. The rural grass cutting regime in Angus is two cuts on A, B and C class roads per year, a 1 metre swathe generally with extra sight lines and inside of bends, plus only one cut on U class roads in mid-summer. A one cut local agreement is in place with the Scottish Wildlife Trust on the A92 at the Montrose Basin Wildlife Centre for the centre itself to look after an area of grass for conservation purposes.

The River South Esk "Riverwatch" scheme for reporting Invasive Non-Native Species (INNS) has proved popular across Angus. Reports of Giant hogweed in particular have been submitted and the roads maintenance team have been happy to aid in treating INNS along roadside areas in accordance with their established procedures.

The TBP will continue to liaise with the roads maintenance team and relevant partners to plan habitat links for a future B-Lines Project with Buglife Scotland. There are also opportunities to work with the Bumblebee Conservation Trust and Butterfly Conservation Scotland to focus in the future on verges, greenspace and new development greenspace specifically for nectar and pollinators. This will help us achieve targets listed in the Scottish Pollinators Strategy.

The Stirling and Tayside Timber Transport Group funded passing bays scheme to the west of Kirriemuir noted the reduction of timber transport vehicles passing the adjacent SSSI site as a benefit to that environment.

Case Study

Amphibians in Drains / Gully Pot Project

Roads have confirmed an interest in working with the TBP to incorporate wildlife drains during routine work. Success of the project will be publicised across the UK. Froglife, Amphibian & Reptile Conservation (ARC) and the UK Herpetological Society are keen to be involved. The TayARG (Tayside Amphibian & Reptile Group) was set up in 2013: its volunteers are taking forward a number of Toads on Roads projects and the TBP is providing training and practical conservation work for the volunteers.

Following the long term survey work being undertaken by the TBP in Perth & Kinross, the Angus Council Roads Department gave permission for the first British Amphibian Ladder trial to be undertaken at two sites: one just north of Dundee and the other in Carnoustie (this follows the first such global trial in the Netherlands). This was undertaken by the Friends of Angus Herpetofauna and students from University of the Highlands and Islands and the University of Dundee, reporting directly to Angus Council. The resulting academic paper has since been widely circulated and is helping to influence other local authorities across the UK.

In Perth & Kinross, Amphibian Priority Zones were ground truthed by a student intern and data entered into the Perth & Kinross Council (PKC) GIS; this, together with ground truthing the SUDS Audit data, has highlighted where best to focus the installation of wildlife kerbs and the trial amphibian ladders by PKC Roads Department which is incorporating such installation at the maintenance planning stage. A similar Amphibian Priority Zone mapping project will be considered for Angus Council roads during 2018 to link with the new SuDS audit undertaken in 2017.

Flood Risk Management Team

Natural Flood Management

Angus Council has a number of actions to be implemented from 2016-22 that may impact on biodiversity, as part of the duties on responsible authorities under the Flood Risk Management (Scotland) Act 2009. These are published in the Tay Estuary and Montrose Basin and Tay Local Flood Risk Management Plans.

An assessment of the potential for natural flood management (NFM) was used to help identify opportunities for using the land and coast to slow down and store water. NFM actions have been recommended in areas where they could contribute to the management of flood risk. In such instances these actions are described as part of flood protection or NFM studies.

Natural Flood Management Works

NFM works (NFM) are continuing following completion of the Brechin Flood Protection Scheme. The works, which include upland reforestation, will be informed by a NFM study (described below) and the River South Esk Catchment Management Plan produced by the River South Esk Catchment Partnership. Angus Council will work with other partners and stakeholders to help co-ordinate the proposed work. Partners and stakeholders include but are not limited to Scottish Environment Protection Agency (SEPA), Scottish Natural Heritage, Royal Society for the Protection of Birds, Forestry Commission Scotland and the Cairngorms National Park Authority. A number of projects have been proposed including the River South Esk restoration pilot projects led by SEPA and the Esk River and Fisheries Trust and a contour planting project led by the Forestry commission Scotland. It is expected that the projects will be delivered by 2019/20 and funded by SEPA and Scottish Government.

Natural Flood Management Studies

NFM Studies are being undertaken for the River South Esk catchment and for Invergowrie on the Tay Estuary.

Glen Clova Natural Flood Management Study

Angus Council is working with the River South Esk Catchment Partnership on a trial NFM project, comprising of contour and riparian tree planting in Glen Clova, within the River South Esk catchment. The economic, social and environmental impacts of the NFM actions will be considered in the study.

The South Esk Pilot Catchment Project

The South Esk pilot catchment project aimed to identify and prioritise opportunities for delivering improvements to river habitats whilst helping to reduce flood risk on the Melgund and Lemno burns. Phase 1 of the study has been completed and SEPA is currently and discussion with landowners is ongoing with regard to taking forward some sites to options appraisal and outline design.

Invergowrie Natural Flood Management Study

Angus Council is working with Perth & Kinross and Dundee City Councils to undertake a natural flood management study to assess whether river / floodplain restoration and sediment management could help reduce flood risk. The study will take a catchment approach and consider the potential benefits and disbenefits and interaction between actions upstream and downstream economically, socially and environmentally.

Opportunities to improve the condition of the Invergowrie Burn, which is located within the study area and the physical condition of this river is identified by SEPA to be at less than good status, will be considered by coordinating with river basin management planning. Listed buildings are also present in the study area, which could be positively or negatively impacted, will also be considered.

Natural flood management actions can reduce flood risk for high likelihood events to fifty-two residential and non-residential properties. These actions can restore and enhance natural environments and create opportunities for recreation and tourism. A reduction in flood risk would also have a positive benefit to the health and wellbeing of the community.

Transport

Angus Councils Transport team indirectly contribute to the conservation and enjoyment of biodiversity by implementing sustainable strategies and making the outdoor more accessible for Angus residents. Below are a range of projects highlighting how this is carried out.

One of the strategic objectives outlined in Angus Council's Public Transport Policy Statement is to develop the role of public transport within the community, providing mobility for those without access to cars, as an attractive alternative to those with access to cars and contributing to addressing issues of sustainability. Collaboration is ongoing and the team are currently working with Environmental Strategy, Dundee City Council and Perth & Kinross Council, Tactran to introduce an Active Travel radio/social media campaign "Get on the Go".

The transport team promote public transport through the implementation of the Angus Public Transport Information Strategy. This includes at stop information, real time information available at key stops and via mobile phone, website, journey planners etc. Good, readily available public transport information is a key to people being able to access sustainable transport.

The team also promote the carriage of bicycles on buses where this facility is available e.g. Service X7 operating from Aberdeen to Perth advertises this facility which is promoted by Stagecoach in conjunction with Aberdeen City, Aberdeenshire, Angus and Dundee City Councils.

Environmental and Consumer Protection

Waste Services Team

Pride in Place Member/Officer Group

Since 2013 the Pride in Place Member/Officer Group has facilitated community involvement in projects which focus on improving the environment of Angus through community participation, indirectly benefiting local biodiversity. Main elements include:

Clean-up Angus Campaign

The Clean-Up Angus Campaign continues to facilitate community clean ups and encourage Angus residents to take pride in their local area. At present 19 primary schools, 3 secondary schools and 16 community groups have taken the "Clean up Angus" pledge. Waste operatives who undertake street cleaning now have the Clean Up Angus logo on their hi-vis vests, and various campaign messages e.g. anti-cigarette litter are promoted through posters on street cleaning barrows.

Schools are actively engaged with to promote recycling and anti-litter messages, with secondary schools being the focus of Litter Charter projects, which involve the school deciding on actions they will undertake to create a whole school culture which encourages pupils to take pride in their school and local community.

Waste Services partnered with Keep Scotland Beautiful during 2017 to encourage those using the A90 within Angus to use a litter bin or to "give their litter a lift" i.e. take it home. Various activities were undertaken to promote the campaign including placing signage and posters along the A90 in lay-bys and at bus-stops, and running educational stalls at local events and shopping centres etc.

Waste services have engaged with licensed premises in Arbroath and Montrose to encourage proper disposal of cigarette butts by their patrons – this campaign will be rolled out to other towns in due course.

Additional campaigns such as promoting "any bin will do" i.e. that dog fouling can be disposed of in any general waste bin will continue on an ongoing basis.

Waste Services Team

Waste services contribute to the protection and enhancement of biodiversity in Angus in the following ways:

- Collection of household and commercial wastes from the kerbside (and ensuring that customers meet their duty of care), ensures that waste is disposed of properly, thus protecting habitats
- Anti-litter, fly tipping and dog fouling enforcement and campaign efforts help to reduce levels of environmental crimes, thus again protecting habitats
- Cleaning of public open spaces maintains clean habitats
- Disposal of abandoned vehicles ensures removal of another potential pollutant from the environment

3.2 Chief Executive's Unit

Economic Development

Business Gateway (the provider for all business support across Angus and Tayside through our contractor Elevator) is active in signposting companies to appropriate sources of advice, guidance and funding. This includes Resource Efficient Scotland who work in partnership with Business Gateway to provide advice relating to the reduction of energy costs and waste.

Referrals from Business Gateway to Resource Efficient Scotland are ongoing and have included applications for grant funding for replacement lighting, waste management as well as SME loan funding and full company energy audits.

Resource Efficient Scotland also provided a pilot programme to all Angus Council property unit tenants offering energy saving advice.

Biodiversity action undertaken included a bat survey at Orchardbank cottage, Orchardbank, Forfar and a small number of buildings in Montrose as part of the South Montrose Regeneration project. No bat findings were reported.

Angus Environmental Trust

Angus Environmental Trust (AET) is a company limited by guarantee which was established in September 1997 under The Landfill Tax Regulations (1996). It is an Approved Body enrolled with SEPA, the regulator of the Scottish Landfill Communities Fund. The main aim of the Trust is to distribute landfill tax funds to assist both local community groups, organisations and other environmental bodies to take forward projects in Scotland. All projects supported must be for public benefit and support the following:

- The reclamation, remediation or other operation on land to facilitate economic, social or other environmental use
- Community Based recycling, re-use and waste prevention projects
- To provide, maintain or improve a public park or other public amenity
- The conservation of promotion of biological diversity through the provision, conservation, restoration or enhancement of a natural habitat or the maintenance or recovery of a species in its natural habitat.
- The maintenance, repair or restoration of a building, other structure or a site of archaeological interest which is a place of religious worship, or a site of historic or architectural or archaeological interest and is open to the public.

East Haven BioBlitz

In August 2016 Our East Haven were awarded £5,500 Scottish Environment Protection Agency (SEPA) SLCF funding from Angus Environmental Trust towards costs of a BioBlitz event the event formed part of a series of activities in the village aimed at conserving and protecting the natural heritage of this coastal community on the Angus Coast.

The event brought together scientists/experts to work alongside members of the public to identify as many species of animals, insects, plants and marine life as possible over two days.

As a result of this project a number of key outcomes were achieved:

- An up-to-date species list for the Partnership and the national database of biological records
- Engagement with young people and lowering barriers to engaging with nature
- An increased knowledge & understanding of local wildlife habitats
- Increased skills in identifying marine and terrestrial wildlife
- Information available to aid future conservation practice & local land management

Angus Community Grant Scheme and Crowdfund Angus

The Angus Council Community Grant Scheme aims to support small community and voluntary groups across Angus with a grant towards the cost of a project in the fields of arts, heritage, sport or the environment.

3.3 People Directorate

Schools and Learning

Eco-Schools

19 Angus schools currently have their Green Flag as awarded by Eco-Schools Scotland. The Eco-Schools Scotland programme comprises a set of Seven Elements that are used to plan action on environmental issues and that form the criteria for the Green Flag Award. To earn a Green Flag Award, schools must follow the Seven Elements, ensuring that Eco-Schools is pupil-led, linked to the curriculum and involves the whole school and wider community.

John Muir Award

The John Muir Award encourages learners to connect with, enjoy and care for wild places. They engage in a holistic approach to leaning including awareness, understanding and action which reinforce values-based learning, promote citizenship and develop their understanding of Learning for Sustainability. Four Schools in Angus have received the award.

Biodiversity landscaping

Biodiversity landscaping has been carried out at Angus schools including:

- Timmergreens Primary School: creation of a biodiversity friendly area, which was planted with various trees, shrubs and climbers, which provide shelter and food for birds, bees, butterflies and a variety of insects.
- Warddykes Primary School: the existing orchard with local heritage fruit trees was successfully
 transplanted after the new build and demolition of the old school building. The orchard is
 integrated into the new school playground and was underplanted with a wildflower meadow.

Pride in Place Awards - Angus Council

The Pride in Place Members Officer Group Awards, introduced in 2017 recognises the work of groups and individuals which have made a noticeable difference to their local community and/or environment. At present seven Angus schools have obtained the award.

The Beautiful Angus garden competition was opened up to primary schools and nurseries in 2015 and entries were received from across Angus in 2016 and 2017. In 2016 nine primary schools entered and Aberlemno Primary School won overall. In 2017 seven primary schools entered and Monikie Primary School won this prestigious award.

Pride in Place Recognition Scheme

The Pride in Place Recognition Scheme is a Citizenship Award Scheme for schools and youth clubs which awards and gives recognition for activities which promote pride in place, deemed relevant to the curriculum and their community. These activities are tracked and monitored within the school or the club. In 2017 Seven schools received the award.

Corporate GIS

The Corporate GIS team help create and maintain a range of environmental datasets. This information is displayed on interactive maps on the Council website. These maps allow a large volume of information to be visualised and are useful for showing different themes within the biodiversity data as well as patterns and changes over time.

4 Biodiversity Highlights and Challenges

Highlights

This report demonstrates the breadth of activities delivered by the council which help to protect and enhance the area's biodiversity. Particular highlights from 2015-17 which follow, illustrate the strength of partnership working within Angus and the level of dedication to species and habitat conservation that occurs regularly.

Figure 3 below shows at a glance, keywords from the body of this report highlighting the wide range of biodiversity related activity that Angus Council staff have delivered over 2015-17.



Figure 3. Angus Council staff biodiversity related activity in 2015-17.

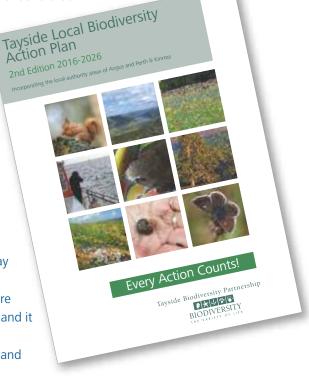
Tayside Local Biodiversity Action Plan 2016-2026

Tayside Biodiversity Partnership's Local Biodiversity Action Plan 2016-2026 charts the way ahead in protecting the multitude of flora and fauna that

flourish across the county, as well as their habitats, bringing together organisations, communities and individuals. The new plan has more than 140 projects that communities, businesses and individuals can get involved in.

It was heartening to see that the Tayside Biodiversity Partnership launched its 2nd Edition Local Biodiversity Action Plan in Angus in August 2016 at a community led event hosted by the East Haven Together community group and local schools.

As part of the launch, the group along with the Tayside Biodiversity Partnership Co-ordinator and the Angus Alive Rangers Service ran an ambitious two day bioblitz. Working alongside statutory bodies, organisations and individuals the group recorded more than 600 species. This was true partnership working and it demonstrated the progress made over the past two decades in raising awareness of our county's unique and very special biodiversity.



River South Esk Catchment Partnership – Catchment Management Plan Review 2017

The wide range of stakeholders that make up the partnership has undoubtedly been the key to delivering such a wide suite of projects that has led to a 90% project delivery rate against the 65 actions included in the partnerships catchment management plan, published in late 2009.

Each partner has their own stake in the catchment, and their own areas of expertise.

By focussing on the Action Cards in the plan, we can measure our success in delivering projects that tackle the main issues in the catchment. The Action Cards are: quality of water; water resources; managing floods; river engineering; habitats and species; socio- economic factors and delivering the plan. More than £1million has been spent on environmental projects resulting in more than 27,000 native trees planted, 8000m or rivers restored and invasive non-native species tackled on a catchment wide scale.

It is worth noting that since the original plan's inception, the policy landscape in Scotland has changed greatly. Actions in the plan contribute towards many strategies, action plans and statutory obligations organisations in the partnership deliver. Themes include climate change, biodiversity, flood risk management, economic development and community planning. The partnership is named against action delivery for more than 25% of all actions, across all sections, of the Tayside Local Biodiversity Action Plan 2016-26. This will greatly influence the next catchment management plans content.

Case Study

Small Blue and Coastal Butterflies Project

The Small Blue Interest Group was set up in 2011 and meets regularly to report on annual survey results, training, habitat enhancement and community engagement. Since 2015 the project has grown extensively. Scotia Seeds donated local provenance kidney vetch seeds for a local nursery to grow on and these have been planted out in key locations to form extensive kidney vetch corridors. It is hoped this will help ultimately restore connectivity of populations along the coast. Landowners along the coast have been approached to carry out restoration work and more than 10 are now involved in the conservation project including Carnoustie and Montrose Golf Links both having carried out supplementary planting and surveying.

Annual surveys are carried out by trained volunteers and in 2017 a full survey of small blue butterflies and kidney vetch was paid for by the Tayside Biodiversity Partnership. Findings highlighted an abundance of kidney vetch; the sole plant the small blue lays its eggs on, however butterfly populations remain isolated. Although numbers are still declining in some areas there were exciting discoveries of small blue at Elliot Links and one sighting near Usan.

Small Blue Week 29 May 4 June 2017

Small Blue Week was launched across Scotland in 2017. And there are more than 10 events taking place in Angus. Woodlands Primary School in Carnoustie kicked it all off at East Haven designing bunting, promotional posters and logos. The primary school became our first Species Champion and look forward to helping local conservation efforts.

Challenges

The challenges over the next three years that Angus Council may face in delivering the actions we aspire to implement are:

- Funding for projects;
- Resource and capacity to deliver e.g. staff; and
- The outcome of BREXIT in relation to funding streams and policy development;

The Tayside Biodiversity Partnership and Tayside Local Biodiversity Action Plan gives a clear outline of what Angus Council hope to achieve in the period to 2026 and provides an opportunity to carry out robust monitoring.

5 Monitoring

Monitoring the impact of Angus Council actions and their ability to fulfil our biodiversity duty is carried out in many ways including:

- Tayside Biodiversity Partnership working group meetings allows regular monitoring of progress against the measures contained within the Tayside Local Biodiversity Action Plan (TLBAP).
- Reporting on planning, climate change, waste and flood risk management provides an evidence base of Angus Council's corporate contribution to protecting and enhancing biodiversity.
- Year two (2017-18) delivery and monitoring of the TLBAP will paint a more comprehensive picture
 of the impact the new plan is having.

Six years of biodiversity reporting has shown that there is potential to:

 Explore biodiversity opportunities at the early stages of development proposals (for example, make better use of SuDS and influence landscaping schemes).

- Work more closely with local authority design teams and procurement.
- Engage adult learning and social work teams in TLBAP projects.

6 Future Biodiversity Action

The key work areas for the next three years (2018, 2019 and 2020) will be:

- Angus Council staff will assist with the rolling out of the actions listed in the 2nd Edition of the Tayside Local Biodiversity Action Plan.
- The mainstreaming of the biodiversity process across Angus Council departments will continue with a focus on currently underrepresented services.
- Encouraging more community and school groups to undertake small-scale environmental projects and to play an active part in undertaking citizen science surveys.
- Helping to set up Local Species Champions to encourage local MSPs, councillors, schools and businesses to focus on action for our priority species and priority projects.
- With the Tayside Biodiversity Partnership (TBP), help embed the biodiversity process into local businesses to demonstrate the economic, as well as the intrinsic, value of ecosystem services and biodiversity.
- Exploring "Green Prescribing "and engaging more volunteers in "Healthy" environmental volunteering e.g. manual invasive species control.

The challenges of getting people to be healthier (to be more active) and Greener (to get more involved with the natural world), are enormous. The Ranger Service continues to play its part in servicing these needs, but raising awareness of how everyone can take part in safeguarding their local wildlife and to living a healthier lifestyle is down to every single employee and member of Angus Council.

The TBP's strapline is' Every Action Counts 'and this would be a good motto for Angus to use in championing its biodiversity and ecosystem services to all the residents and visitors to the county.

7 Conclusion

Angus Council are proud to raise awareness of local biodiversity wherever possible and strive to collaborate with the local community, neighbouring local authorities and stakeholders to ensure that biodiversity can be enjoyed by all, for generations to come.

Collating the range of work that is undertaken within Angus Council's many services shows the vast range of activity teams facilitate as part of their regular work programme. Tremendous progress has been made in the past few years to mainstream the biodiversity process and this report demonstrates this. It will be a useful document to review internally on an annual basis as more and more Services understand the need to report back. This will pave the way for a more comprehensive and inclusive reporting structure in time for the next Scottish Biodiversity Duty reporting round in 2020.

Ongoing monitoring will allow both existing and new projects in Angus to be reported upon, especially important as we approach the final 2020 Challenge.

Appendix 1

Angus Council Contribution to the 2020 Challenge for Scotland's Biodiversity

The following table indicates how Angus Council actions have contributed to the Scottish Government targets for the conservation and enhancement of biodiversity in Scotland the "2020 Challenge for Scotland's Biodiversity".

Chapter 1 Healthy ecosystems					
Targets	Delivery method	Evidence			
(1.1) Encourage and support ecosystem restoration and management, especially in catchments that have experienced the greatest degradation	River South Esk Catchment Partnership Tayside Local Biodiversity Action Plan (TLBAP)	Catchment Management Plan TLBAP – Freshwater Ecosystems section			
(1.2) Use assessments of ecosystem health at a catchment level to determine what needs to be done	River South Esk Catchment Partnership Catchment Management Plan	Ecosystems Knowledge Network Training			
(1.3) Government and public bodies, including SNH, SEPA and FCS, will work together towards a shared agenda for action to restore ecosystem health at a catchment-scale across Scotland	River South Esk Catchment Partnership Cairngorm National Park Authority - Joint Catchments SGP Group	Joint working or knowledge share with Spey, Dee, Tay and Tweed catchments			
(1.4) Establish plans and decisions about land use based on an understanding of ecosystems. Take full account of land use impacts on the ecosystems services that underpin social, economic and environmental health	River South Esk Catchment Partnership – edition 2 (2018) Tayside Local Biodiversity Action Plan	Actions in both plans will be informed by the current and desired health of local ecosystems			
	Chapter 2 Natural Capital				
Targets	Delivery method	Evidence			
NA	NA	NA			
Chapte	er 3 Biodiversity, heath and qualit	ty of Life			
Targets	Delivery method	Evidence			
(3.1) Provide opportunities for everyone to experience and enjoy nature regularly, with a particular focus on disadvantaged groups	Tayside Local Biodiversity Action Plan Angus Local Outcomes Improvement Plan	Actions/strategic goals in both plans focus on social inclusion			
(3.2) Support local authorities and communities to improve local environments and enhance biodiversity using green space and green networks, allowing nature to flourish and so enhancing the quality of life for people who live there	Tayside Local Biodiversity Action Plan Angus Council Locality Plans Parks and Recreation and Angus Alive Rangers Service	Greenspace/network projects in Urban and farmland sections. Locality Plans can deliver improvements in towns' e.g. The Inch, Brechin. Environmental enhancements carried out in sites e.g. River Street Brechin.			

Chapter 3 Biodiversity, heath and quality of Life							
Targets	Delivery method	Evidence					
(3.3) Build on good practice being developed by the National Health Service (NHS) and others to help encourage greenspace, green exercise and social prescribing initiatives that will improve health and wellbeing through connecting people with nature	Tayside Local Biodiversity Action Plan Angus Rural & Environment Partnership Angus Local Outcomes Improvement Plan	Actions included in Urban section. Project development and knowledge share with community planning partners e.g. Steps Tay Health, Active Travel Steering Group.					
(3.4) Increase access to nature within and close to schools, and support teachers in developing the role of outdoor learning across the Curriculum for Excellence	Angus Alive Rangers Service the Scottish Wildlife Trust and Angus Schools deliver educational visits/activities to Angus National and Local Nature Reserves	More than 2,700 participants in educational outreach per annum in South Esk Catchment alone.					
(3.5) Encourage public organisations and businesses to review their responsibilities and action for biodiversity, and recognise that increasing their positive contribution to nature and landscapes can help meet their corporate priorities and performance	N/A	N/A					
Chapte	Chapter 4 Wildlife, habitats and protected places						
Targets	Delivery method	Evidence					
(4.1) Ensure that the management of protected places for nature also provides wider public benefits	Local Nature Reserve at Montrose Basin and 3 Country parks	Management Teams and Action Plans in place.					
(4.3) Integrate protected areas policy with action for wider habitats to combat fragmentation and restore key habitats	Tayside Local Biodiversity Action Plan Identify, Create and Enhance Wildlife Corridors Actions within all sections of plan.	Where possible enhance connectivity in development e.g. Angus Local Development Plan Policy PV1. Angus Open Space Audit.					
(4.5) Involve many more people than at present in this work and improve understanding of the poorly known elements of nature	Tayside Biodiversity Partnership Tayside Local Biodiversity Action Plan Angus Recorders Forum	Running local citizen Science projects e.g. small blue butterfly, grayling, capturing our coasts. The Plan highlights a range of habitats and species across Angus. The recorders forum values and promotes all taxonomic groups and encourages reporting to NBN etc.					
Chap	ter 5 Land and freshwater manag	gement					
Targets	Delivery method	Evidence					
(5.1) Promote an ecosystem approach to land management that fosters sustainable use of natural resources and puts biodiversity at the heart of land-use planning and decision-making	Tayside Local Biodiversity Action Plan River South Esk Catchment management Plan	Actions across plan. An Ecosystems approach will be fundamental in the creation of a new plan (2018).					
(5.2) Ensure that measures taken forward under the Common Agricultural Policy encourage land managers to develop and retain the diversity of wildlife habitats and landscape features	Tayside Local Biodiversity Action Plan River South Esk Catchment Management Plan	Ongoing work with agencies such as Forestry Commission Scotland,, National Farmers Union Scotland,					

Chapter 5 Land and freshwater management						
Targets	Delivery method	Evidence				
(5.3) Support 'High Nature Value' farming and forestry	River South Esk Catchment Management Plan	Through the current CAP and SRDP activities.				
(5.4) Put in place the management necessary to bring Scotland's protected areas into favourable condition and improve the ecological status of water bodies	Angus Local Development Plan Tayside Local Biodiversity Action Plan River South Esk Catchment Management Plan Parks and Burials Team Elliot Links, SSSI, Arbroath	Policy PV14 Water Quality in the Angus Local Development Plan. The purpose of this policy is to protect and enhance the quality of the water environment. Actions from both plans have had input from Scottish Natural Heritage staff and staff sit on both partnerships. The Parks Service have been carrying out an Invasive Non-Native Species removal project for more than three years – improving the SSSI status.				
(5.5) Ensure that biodiversity and ecosystem objectives are fully integrated into flood risk management plans, and restore wetland habitats and woodlands to provide sustainable flood management	Tayside Local Biodiversity Action Plan River South Esk Catchment Management Plan Tay Estuary and Montrose Basin and Tay Local Flood Risk Management Plans Angus Council Climate Change Strategy	Actions in all plans				
(5.6) Restore and extend natural habitats as a means of building reserves of carbon and to help mitigate climate change	Tayside Local Biodiversity Action Plan River South Esk Catchment Management Plan	Actions in both plans				
(5.7) Provide clear advice to land and water managers on best practice	River South Esk Catchment Management Plan Anus Council Roads Flood Risk Team	Partnership working, guidance notes, sharing good practice and communications.				
	Chapter 6 Marine and coastal					
Targets	Delivery method	Evidence				
(6.4) Achieve good environmental status for Scottish seas	Angus Local Development Plan Tayside Local Biodiversity Action Plan Tay Estuary Forum	The Angus Local Development Plan contains policies which seek to minimise flood risk and to increase resilience to the effects of climate change. Policy (PV16) Coastal Planning also contributes to flood management A suite of projects in the Marine & Coastal Section deliver priority actions. The Tay Estuary Forum leads on integrated coastal zone management across the Tay area. Angus Council is a funding partner and contributes to the delivery of forum activities.				





Photo credits: Kelly Ann Dempsey, Catherine Lloyd, Sarah Clement, Maureen Crosbie, Stewart Roberts and and Jutta Scharnberger