

POLICY

WHAT ARE THE FORTHCOMING LEGISLATIVE ISSUES OF INTEREST TO ECOLOGISTS AND CONSERVATIONISTS IN 2017?

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This paper covers our seventh assessment of the forthcoming legislation that we consider to have likely consequences for the environment or for ecologists. We again review issues of a global scale, those in the European Union (EU), and those in the United Kingdom and constituent countries.

We have often been told that this paper is useful for policy makers desiring a review of the issues on the horizon, as well as for researchers wishing to learn either how their results may be used or their work may be affected by changes in legislation.

An overwhelming change on the horizon is the referendum decision of the UK to leave the EU, which was discussed speculatively in the last scan. This has enormous consequences, however, further speculation at this stage would be premature given there are so many uncertainties over the nature of negotiations. The election of Donald Trump as President of the USA is, at the time of writing in early February, showing signs of having global ramifications for the environment and science.

The legislative scans of previous years (Sutherland 2011-16) are freely available on the British Ecological Society website. Issues described in those scans are not repeated here.

GLOBAL

Climate change and biodiversity

Following the historically rapid entry into force of the Paris Agreement under the UN Framework Convention on Climate Change on 4 November 2016, a focus of the Marrakech Climate Change Conference held later the same month was on its implementation. Parties agreed to develop a 'rulebook' by 2018, delivering amongst others transparent global accounting of emissions reductions. Generally, developing a common and transparent framework for countries to describe and report on their efforts is one of the key challenges ahead. Regarding the development of Nationally Determined Contributions as stipulated by the Paris Agreement, a decision of the 13th Conference of the Parties to the Convention on Biological Diversity (CoP CBD, held in in Cancun, Mexico in December 2016) noted the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity, recognized by some cultures as Mother Earth, and noting the importance for some of the concept of "climate justice", when taking action to address climate change. Uncertainty regarding the Paris Agreement's implementation nevertheless remains with regard to the potential withdraw from the Paris Agreement by the USA, following Donald Trump's inauguration as president.

Ecosystem restoration

The international community has widely considered the issue of ecosystem restoration within different fora. The 13th CoP CBD adopted a short-term action plan on ecosystem restoration as a flexible framework to promote restoration of degraded natural and semi-natural ecosystems. The action plan is intended also to be taken into account in the preparation of the thematic assessment on land degradation and restoration being undertaken by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). The assessment was requested by the UN Convention to Combat Desertification and will be delivered to the 6th IPBES Plenary in early 2018 for approval. As is the case with the already adopted assessments on pollination, the assessment on land degradation and restoration will generate the evidence base for policy-making across all the Rio Conventions: the UN Framework Convention on Climate Change, the UN Convention to Combat Desertification and the Convention on Biological Diversity. Amongst others, the draft chapter on responses to avoid land degradation and restore degraded land assesses different institutional, policy and governance responses. Ecosystem restoration and their policy responses will also feature prominently in the regional and global assessments on biodiversity and ecosystem services, due at the end of 2017 and 2018, respectively.

Conservation and sustainable use of wildlife

In October 2017, the 12th CoP to the Convention on the Conservation of Migratory Species of Wild Animals will be held in Manila, Philippines. Next to reviewing implementation of the Strategic Plan for Migratory Species, Parties will look at relevant decisions and listing proposals passed at the 2016 World Wildlife Conference. This conference, held in September/October 2016 in Johannesburg, South Africa, was the largest ever meeting of the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Amongst several achievements, a number of animals and plants were brought under the convention's trade control regime. The CoP also adopted resolutions on crosscutting issues related to illegal wildlife trade, such as corruption and reduction of consumer demand for threatened wildlife and their parts, as well as cybercrime and traceability.

In addition, a significant achievement was the adoption of a non-binding recommendation on closing domestic markets for commercial ivory trade where it contributes to poaching or illegal trade. This recommendation follows a motion on closure of domestic markets for elephant ivory by the IUCN World Congress held in September 2016 in Hawaii. Following the Johannesburg conference, a decision on bushmeat and sustainable wildlife management, which also makes

reference to illegal wildlife trade, was adopted at the UN Biodiversity Conference in Mexico. At the upcoming 5th session of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services Plenary in March in Bonn, Germany, Member States will conclude discussions as to whether a thematic assessment on the sustainable use of wild species will be undertaken.

Whale conservation and management

At the 66th annual meeting of the International Whaling Commission in October 2016 in Portorož, Slovenia, achievements included a resolution calling for parties to work together to prevent the extinction of the critically endangered vaquita, agreed plans for new Bycatch Mitigation Initiatives, and the first formal recognition of the overall benefits that whales bring to the oceans. It was also the first time that cooperation with other organizations was tackled as a separate agenda item and that NGOs were allowed to participate both intersessionally and during the meeting. A controversial issue was the issue of special permit (also known as 'scientific') whaling. A resolution was adopted to improve the review process by the Commission. Special permit whaling was also addressed by the IUCN World Conservation Congress in September 2016 in Hawaii, as well as the establishment of the long-disputed South Atlantic Whale

Sanctuary, which was once again not successful at the meeting of the International Whaling Commission. Further, progress was made on issues such as collisions between whales and ships, ocean sound, marine debris and whale watching. Lastly, the Scientific Committee was asked to screen the existing research studies on the contribution of cetaceans to ecosystem functioning. At the next meeting, in 2018, a key agenda item will be the setting of aboriginal whaling limits, which are set in six year blocks.

The wider marine agenda

The issues of anthropogenic underwater noise and marine debris also featured on the agenda of the UN Biodiversity Conference. Regarding marine debris, a decision urges Parties to take appropriate measures to prevent and mitigate the potential adverse impacts of marine debris on marine and coastal biodiversity and habitats. The decision also welcomes the UN Environment Assembly Resolution on marine plastic litter and microplastics, adopted in May 2016, which calls on Member States to establish and implement necessary policies, regulatory frameworks and measures on the topic consistent with the waste hierarchy. In this context, some commentators even push for the development of a new international agreement on plastics as part of the chemical and waster cluster of environmental treaties: The Basel, Rotterdam and Stockholm (and



Minamata) conventions. The three conventions will have their next triple Conference of the Parties in April/May this year in Geneva, Switzerland.

The Port State Measures Agreement entered into force in June 2016 to combat illegal fishing. It requires foreign vessels to submit to inspections at any port of call and for port states to share information on violations. The European Union is a party to the treaty.

Amongst other issues, plastic pollution, overfishing and destructive fishing practices will feature prominently on the agenda of the upcoming UN High-Level Conference to Support the Implementation of Sustainable Development Goal 14 in June 2016 in New York, co-hosted by the Governments of Fiji and Sweden. The Conference aims to catalyse and scale up implementation of Sustainable Development Goal 14 on conservation and sustainable use of oceans, seas and marine resources. The conference will contribute to the follow-up and review process of the 2030 Agenda for Sustainable Development by providing an input to the high-level political forum on sustainable development. In 2017, the high-level political forum will be held in July in New York, reviewing Goal 14 and some other goals.

The urban environment

At the UN Conference on Housing and Sustainable Urban Development (Habitat III) in October 2016 in Quito, Ecuador, a global legislative conference held every 20 years, the UN's member nations adopted the New Urban Agenda. This global road map to address urbanization is a non-binding document, which will guide policies over the next 20 years with the goal of making cities safer, resilient and sustainable and their amenities more inclusive. The agenda sets out a host of general goals, such as development of sustainable and compact cities that do not harm the environment and redevelopment of informal settlements with the participation of residents. It was criticized by some commentators that the conference did not deliver a clear actionable roadmap for its implementation aligned with the ongoing implementation of the Sustainable Development Goals.

Following Habitat III, the CoP CBD adopted a decision promoting the understanding of health biodiversity linkages, including with regard to human settlements.

The next World Urban Forum, organized and convened by UN-Habitat every two years as a non-legislative technical forum, will take place in Kuala Lumpur, Malaysia in February 2018. The Forum will have a thematic focus on the implementation of the New Urban Agenda. An international conference on cities and climate change will be held in 2018 to further develop the scientific understanding of climate change and cities, in support of the implementation of the Paris Agreement, the New Urban Agenda, and the Sustainable Development Goals.

Additional developments under the Convention on Biological Diversity

Under the theme of mainstreaming biodiversity for wellbeing, the 13th CoP CBD adopted a comprehensive decision on mainstreaming of biodiversity within and across agriculture, forestry, fisheries, aquaculture and tourism sectors. Importantly, the decision encourages Parties to consider amending or developing new national policies, legislation and/or administrative measures, in particular with a view to modifying those that may have adverse implications for biodiversity, or to fostering new developments on specific topics, such as promoting sustainably sourced goods and services. Furthermore, it was agreed that at the next UN Biodiversity Conference in 2018, in Egypt, will consider mainstreaming of biodiversity in the following sectors: energy and mining, infrastructure, manufacturing and processing industry, and health.

Parties also recognized that the implementation of the 2030 Agenda for Sustainable Development provides a major opportunity for the mainstreaming of biodiversity and thus urge countries to integrate biodiversity in the implementation of all relevant Sustainable Development Goals.

Deriving from the deliberations on synthetic biology, an additional

decision to one on this subject matter was adopted, focusing on digital sequence information on genetic resources. The decision commissions a fact-finding and scoping study to assess the extent and the terms and conditions of the use of digital sequence information on genetic resources, including with regard to the Nagoya Protocol on access and benefit-sharing.

EUROPE

Better implementation of environmental legislation

As part of its 'democratic change' priority under the 2017 work plan, the European Commission will include an 'initiative on implementation and enforcement', which will focus on environmental compliance assurance in Member States; what this means in practice remains to be seen. However, a recent Commission Communication on this subject suggests greater use of the Network for the Implementation and Enforcement of Environmental Law (comprising member-state environmental regulatory officials) to improve member state inspection and enforcement systems. It seems likely that the Commission will now pursue a non-legislative route to improving implementation and enforcement, with the 2014 draft inspections instrument seemingly sinking without trace. The Communication also suggests a streamlined complaint procedure at European Commission level, with a focus on dealing with systematic breaches of EU environmental law. Depending on how this is implemented, this could lead to these strategic cases being handled and resolved more efficiently.

2030 climate and energy framework

The EU climate and energy framework builds on the 2020 climate and energy package and is in line with the longer-term perspective looking towards 2050. The framework covers many areas but the following are of significance for nature.

In early 2016 the European Commission presented two proposals as part of the framework. The proposal on 'Land Use, Land Use Change and Forestry' sets out the accounting rules and the targets that determine how

member states must act between 2021 and 2030. Ensuring land and forests are kept in good condition has been recognised as having an important role in averting climate change. Their role is to become increasingly important for stopping global warming due to the need to remove CO2 from the atmosphere, so called "negative emissions", in order to meet the 2° target, let alone the 1.5° target. This will have important implications for the future of land use and biodiversity. Where decarbonisation is advanced in the energy sector, the land use sector, especially agriculture, is only just starting. The European Commission estimates that by 2050 the agriculture non-CO2 emissions need to be below 2005 levels; based on current policies this target would be missed by a long way. The second proposal is the Effort Sharing Regulation, which sets our binding annual greenhouse gas emissions targets for Member states for their non-emissions trading scheme sectors, these include transport, buildings, agriculture and waste management and together account for almost 60% of total EU emissions. To ensure that the land use sectors make a fair contribution to achieving the EU's climate targets these regulations need to ensure that the EU is on track to meet the long-term climate goals, promote sustainable land use and are in line with achieving the EU's biodiversity goals.

In late 2016 the EU published proposals for how it should progress with the transition to a low carbon society out to 2030. These proposals include revisions to the Emissions Trading Scheme, renewable energy and energy efficiency legislation, as well as new legislation on governance of the EU. However, the proposals published in 2016 are unlikely to result in countries delivering enough renewable energy and efficiency improvements for the EU to meet its commitments made at the Paris Climate Summit in 2015. Additionally, there are insufficient environmental safeguards in place in the proposed legislation to ensure that the pursuit of renewable energy does not negatively impact on wildlife. Strategic spatial planning for energy infrastructure seems likely to be needed to avoid conflicts. Furthermore, the global biodiversity impacts of ever-

increasing bioenergy production are a significant concern.

These files are going through the so called "Codecision" process and will be negotiated by the European Parliament and the Council during 2017.

Common Agriculture Policy "Fitness check" initiative

As part of its Regulatory Fitness and Performance Programme, the EC established the "REFIT Platform" in May 2015 "to advise the Commission on how to make EU regulation more efficient and effective while reducing burden and without undermining policy objectives" (i.e. to provide advice on how to improve the effectiveness and efficiency of EU legislation). Set up in 2015 as part of the Commission's better regulation agenda, and chaired by EC First Vice-President Frans Timmermans, the Platform is composed of high-level experts from each Member State including representatives from governments, businesses, and civil society organisations.

In late 2016, the Platform adopted an opinion recommending that the EC undertake a strategic review or 'fitness check' of the CAP as a matter of priority. The opinion was supported unanimously by business and civil society members of the Platform but opposed by the majority of government representatives.

As part of its 2017 Work Programme, the EC committed to consulting widely this year on the "modernisation and simplification" of the CAP in line with opinion of the REFIT Platform. The results of this consultation process, to be launched in early 2017, will be the first step in the process towards a Communication on the future of CAP post-2020 (this should be published before the end of the year). This will consist of an options paper of five scenarios, which will range from the *status quo* to radical reform. It will be followed by an impact assessment process between April and August and then the publication of a proposal in September to November 2017. Legislative proposals will likely follow in early 2018.

Multiannual Financial Framework (MFF) of the European Union

Discussions on the post-2020 MFF of the EU are starting. This is a six-year budget plan, which sets maximum amounts of money to be spent on various priorities, including the fight against climate change, biodiversity and sustainable management of natural resources. The current MFF, geared towards achieving growth and stimulating innovation, will not allow the EU to meet its environmental targets because of other priorities. The EC is expected to consult the public and make a proposal for the next MFF before the beginning of 2018. The proposal will then be discussed by the European Council, and adopted around 2020. Environmentalists are increasingly focussing on the issue, with most of the discussion revolving around whether to ask for environmental protection to be financed through other policies, such as the Agricultural and Fisheries Policies, as is the case now – the so-called "mainstreaming approach" – or separately, which could allow better control and more efficient use, but some argue would result in poorer integration.

Fitness Check of the Birds and Habitats Directives

The Fitness Check of the Birds and Habitats Directives concluded at the end of 2016 with the publication of the Consultants' Final Report and a Staff Working Document from the European Commission, both confirming that the Directives are fit for purpose but that additional action is needed to address poor implementation. The Commission has therefore confirmed that it will develop an Action Plan to correct the deficiencies in implementation of the Directives identified by the Fitness Check. The Action Plan is expected to set out a series of concrete measures such as holding regular meetings with mayors and other local authorities to assess implementation challenges and help Member States take the necessary corrective action. Moreover, the Commission has proposed that the Action Plan will, 'design, in partnership with Member States and relevant stakeholders, appropriate implementation guidelines for regional actors, reducing unnecessary burdens

and litigation, and incentivising national and regional investment in biodiversity.' The EU's Committee of the Regions will be closely involved in these actions.

Invasive non-native species

In 2015, the EU's Invasive Alien Species Regulation came into force. The Regulation follows a 'Black List' approach; whereby, all non-native species are allowed to be present and traded in the EU – unless they are identified as being highly invasive. In which case, they are included on the Regulation's black list.

Species are included on the black list by secondary legislation which the European Commission, the European Parliament and all the Member States can influence. Legislation to include the first 37 species on the black list was passed in 2016. The institutions of the EU anticipate that the list will be updated annually. Legislation to include up to a further 12 species on the black list will come into force in 2017. The exact number of additional species that will be listed is unknown. Secondary legislation to specify the evidence base required for species to be included on the black list will likely come into force in 2017.

Common Fisheries Policy

The Data Collection Framework of 2008 is in final stages of revision and, when adopted, is expected to require Member States to collect data on ecosystem pressures, including an unprecedented duty to report systematic data on seabird bycatch. The Technical Measures Regulation is also being revised and, following the EC's proposal on how, where and when fishing can be done in sea basins (e.g. North Sea), may be adopted in 2017. The proposed new Technical Measures Regulation aims to reduce impacts on not just fish stocks but also the wider marine environment, aligning it with the reformed Common Fisheries Policy in respect of, e.g., multiannual plans, discard policy and environmental legislation (Nature Directives, and Marine Strategy Framework Directive). To implement regionalised decision-making under the reformed Common Fisheries Policy, multiannual plans for each of the sea basins are to be

developed, starting with a new Baltic plan in 2016. The Commission's proposed plan for the North Sea may be adopted by the end of 2017.

UNITED KINGDOM

Higher Education and Research Bill

The Higher Education and Research Bill aims to provide the legislative underpinning to the Government's policies to reform universities and research funding. At the time of writing the Bill is at the Committee Stage in the House of Lords, where it is facing substantial opposition, and a number of amendments have been proposed. It is likely that the Government will need to make some concessions to obtain the support of the House of Lords, however it has not yet indicated its willingness to do so. The Bill is currently scheduled to pass the Lords before Easter 2017 and would be expected to receive royal assent soon afterwards.

The primary aims of the Bill include Establishing a new higher education regulator in England, the Office for Students, replacing the Higher Education Funding Council for England and the Director of Fair Access to Higher Education and integrating the current seven research councils and Innovate UK, into a new single body: UK Research and Innovation. The research councils would no longer possess their own royal charters, but would become committees of UK Research and Innovation.

A number of concerns about the Bill have been expressed by Peers and MPs, including over university and scientific autonomy due to the enhanced ministerial powers the Bill presents, privatisation, the quality of new providers, and the proposed link between the Teaching Excellence Framework and differentiated fees.

Industrial strategy

On 23 January 2017, the UK Government launched its proposals for a "modern industrial strategy", with a Green Paper, "Building our Industrial Strategy", which will be open for consultation until 17 April 2017.

A more interventionist approach to the economy has been highlighted as one of the priorities of Theresa May's

administration, and the objective of the strategy is "to improve living standards and economic growth by increasing productivity and driving growth across the whole country". Science, research and innovation is at the heart of this strategy.

The Green Paper firms up the Government's commitment to spend an additional £4.7 billion on research and development by 2020-21, as announced in the 2016 Autumn Statement, which will be delivered through UK Research and Innovation. Initial proposals for investment priorities include: improving the translation of research into commercial outcomes; new funding streams to support local world-class research and innovation clusters across the UK; substantially increasing the number of PhD and research fellowships in science, technology, engineering and maths; active recruitment of top international talent; new capital spending; sector-specific funding to support business investment in research and development. A new Industrial Strategy Challenge Fund will support technologies where the UK has the potential to take an industrial lead. Relevant suggestions include smart, flexible and clear energy technologies; and bioscience and biotechnology.

Other proposals within the Industrial Strategy Green Paper of relevance to ecologists and conservationists include "greater certainty and long-term direction across infrastructure policy, including, where relevant, how we use and improve our stock of natural capital", and delivering affordable energy and clean growth in a way that can "secure the economic benefits of the transition to a low-carbon economy".

Proposals to ban the use of plastic microbeads in cosmetics and personal care products

On 20 December 2016, Defra, in partnership with the Scottish Government, Welsh Government and Department of Agriculture, Environment and Rural Affairs in Northern Ireland set out its proposals to ban the use of plastic microbeads, in cosmetics and personal care products, which may cause harm in the marine environment. A UK-wide consultation is open until 28 February

2017. As currently proposed, legislation banning solid microplastic ingredients smaller than 5mm in size would come into force in England by 1 October 2017, with Devolved Administrations introducing their own legislation in a co-ordinated manner. The ban on manufacture is expected to come into force on 1 January 2018, with a ban on sale expected from 30 June 2018.

Changes to Environmental Impact Assessment Regulations

Defra, the Scottish Government, Welsh Government, Forestry Commission England and the Northern Ireland Executive are consulting on the approach to implementing European Directive 2014/52/EU, which updates Directive 2011/92/EU, consolidating the original 1985 Environmental Impact Assessment Directive and its amendments. The consultation is open until 30 January 2017. The amendments introduced by Directive 2014/52/EU must be incorporated into national legislation no later than 16 May 2017.

The consultation covers proposed amendments to domestic legislation reflecting these changes and covers agriculture in England only, forestry, water resources, land drainage and fin-fish farming in England and Wales, and marine works in England, Wales, Northern Ireland and Scotland-offshore. The amendments will aim to simplify the rules for assessing the potential effects of projects on the environment, improve environmental protection, and focus procedures on the environmental factors that are significantly affected by projects.

ENGLAND

Much of the recent activity in England is either driven by, or covered in the UK section, following the UK's referendum vote to leave the EU. The Environmental Audit Committee has recently published its report on The Future of the Natural Environment after the EU Referendum. A leading recommendation calls for new legislation – the Environmental Protection Act – to ensure equivalent or better environmental protection than we are subject to while part of the EU.

In early 2017 Defra will release the draft 25-year Environment Plan as a

Green Paper, followed by a period of consultation, with the expectation of producing a White Paper by the end of the year.

In January 2017 the Natural Capital Committee published its fourth report *Improving Natural Capital: An assessment of progress*. Its main recommendations include placing the Defra 25-year Environment Plan on a statutory footing with a specific lead institution and making it part of an overarching framework for the development of agricultural policy from 2020. In addition, it states that the Office for National Statistics has committed to developing national natural capital accounts by 2020.

The latest Climate Change Risk Assessment draws on the independent evidence report of the Adaptation sub-Committee of the Committee on Climate Change, and indicates that a National Adaptation Programme will be published in 2018.

Government commissioned an Independent Review of tidal lagoons published by Charles Hendry in January 2017. This report, while recommending that the Swansea pathfinder project goes ahead to inform the contribution of this renewable energy source to the overall energy mix, recognises that very long-term value needs to be considered in assessing overall cost.

Fifty-one organisations across the environment sector came together to publish the second *State of Nature* report in September 2016. While over half of the species studied have declined since 1970, and specialists continue to do worse than generalists, there are signs that some rates of loss may be slowing. During the year, there were two significant developments for species protection involving Natural England. Firstly, a consultation on new policies for European Protected Species licensing introduced a strategic approach for licensing developments affecting great crested newts operating at a population scale facilitated by e-DNA technology. This is being trialled in southern England – the Woking Pilot. Secondly, the High Court ruled that license applications for the control of buzzards affecting pheasant shoots should be considered no differently than similar applications

for other species, and this resulted in the issuing of a small number of licenses in 2016 for this purpose.

SCOTLAND

The Scottish Government's legislative programme for 2017-18 sets out three Bills directly relevant to nature and landscapes. The Forestry Bill will create a new forestry and land management body for Scotland. The initial focus is likely to be on the National Forest Estate. This may be extended to include other publicly-owned land in the future, such as National Nature Reserves. The Islands Bill is intended to island-proof future legislation and policies especially in Shetland, Orkney and the Western Isles. A 'National Islands Plan' will extend the powers available to the Islands' councils. The Climate Change Bill follows on from the 2009 Act and will increase the emissions reduction target for 2020 from a 42% reduction over 1992 levels to a 50% reduction.

Climate change

Discussions about the Climate Change Bill are at an early stage, with a focus on the international context (post-Paris, COP 21). A consideration is whether Scotland can have a zero-carbon economy by 2050 and what this would look like; there are challenges for agriculture, where emissions are dominated by biological sources. Another issue concerns the roles of carbon capture and storage. There seems to be a consensus that targets need to be simple to motivate people and to inform clear action.

Currently, there is an 18 month lag between the UK and Scottish carbon inventories, and we may see a bespoke Scottish inventory being devised. This could also include blue carbon, adding weight to the need to nurture this significant and important carbon stock.

Delivery is a major theme of the Scottish Government's Climate Change Plan, published for consultation on 19th January 2017, with 60 days for parliamentary scrutiny. It sets out policies and plans for meeting Scottish climate change (emissions reduction) targets over 2017-2032, as required under the Climate Change (Scotland) Act 2009.

The new Plan replaces the earlier 'Reports on Policies and Proposals', and has a more user-friendly name! It covers the period up to 2028-2032. The main emission-reduction challenges lie in heat (in buildings – mainly gas), transport (mainly cars) and land use (especially food and farming).

The Plan requires that 10,000ha of peatland is restored in 2017/18, rising to 20,000ha a year from 2018/19 to contribute to a target of 50,000ha by 2020 and 250,000ha by 2030. On 24th January 2017 Scottish Natural Heritage (SNH) welcomed the announcement by Cabinet Secretary for Environment, Climate Change and Land Reform, Roseanna Cunningham MSP, of a further £8 million for the award-winning Peatland Action initiative. This has run since 2012, as one of the key projects helping to deliver the '2020 Challenge for Scotland's Biodiversity'. The investment enables SNH to continue working with its Peatland Action partners to restore a further 8,000ha of peatlands, to add to over 10,000ha of peatland already restored under the scheme. Peatland restoration involves blocking vast stretches of ditches, as well as other measures, to reduce the rapid runoff of water from bare peat surfaces. This is good news for peatland conservation.

Other policies in the Climate Change Plan with implications for nature and landscapes include woodland and hedgerow planting targets (increasing from 10,000 to 15,000 ha per year) and associated Local Authority locational strategies, renewable electricity generation to support low carbon heat and transport (especially onshore wind), public body contributions (energy efficient buildings and electric vehicle use), and promoting active travel (walking and cycling).

Throughout, the Plan emphasises the co-benefits of action on climate change for other important areas of policy, including population health, air quality and a sustainable inclusive circular economy.

Deer management

In November 2016, SNH published a report to the Scottish Government on deer management in Scotland. This has given rise to considerable debate, and the Scottish Parliament's

Environment, Climate Change and Land Reform Committee has taken much evidence on this. There is likely to be considerable scientific and public commentary on this matter over 2017.

Biodiversity and meeting the 2020 targets

There is already considerable political interest in progress towards meeting the 2020 Aichi targets for biodiversity. The Environment, Climate Change and Land Reform Committee recently took evidence from stakeholders on the publication of Scotland's Biodiversity – A Route Map to 2020 First Progress Report 2015/16 - the first annual review of the Route Map to 2020 and Scotland's Biodiversity Progress to 2020 Aichi Targets Interim Report 2016. There will be growing interest in this nationally and at the UK level as we approach 2019.

WALES

Wales continues to implement its legislative framework for sustainable management of natural resources and to strengthen efforts to tackle key intergenerational challenges, like climate change. All three landmark Acts are being progressed, and now form an interesting foundation for EU-Exit discussions in terms of the future of Wales and its unique brand. For Wales to develop sustainably, the law was changed to put in place the key elements that will enable it to happen.

The Well-being of Future Generations (Wales) Act

The Act became law in April 2015 and many of the duties came into force from April 2016. The Act strengthens existing governance arrangements for improving the well-being of Wales to ensure that present needs are met without compromising the ability of future generations to meet their own needs. The statutory Public Service Boards are now established and have been undertaking, during 2016, an assessment of the state of well-being (as defined in the Act – socially, economically, culturally and environmentally) in their areas. This state of well-being assessment will be consulted on and a final published by March 2017. This will be used to identify the well-being objectives for that area and these will be set

out in a Well-being Plan during 2017-18. This will then be delivered through collaboration of partners at the Public Services Board and wider interests. Wales' first statutory Future Generations Commissioner has also been appointed – one of the first in the world - and her office established. A consultation on the strategic plan for the Commissioner will be undertaken in 2017.

Environment (Wales) Act

The Environment (Wales) Act came into force in May 2016. One of the first products, as part of the statutory framework for sustainable management of natural resources, was the *State of Natural Resources Report* – published by Natural Resources Wales at the end of September 2016. The report makes a first assessment on the extent to which sustainable management is being achieved. It includes an assessment of the resilience of ecosystems in Wales, the benefits that natural resources and ecosystems provide and contribute to Well-being goals in Wales, and it pulls together a risk register linking the management of natural resources and ecosystems to wellbeing, now and in the future. Natural Resources Wales is actively seeking ideas on how to improve their assessment and reporting process.

The report and its high level recommendations are now being considered by Welsh Ministers as they develop their first statutory National Natural Resources Policy. A consultation on the development of the policy was launched in November 2016 and closes on 13 February 2017. The main themes covered by the policy are expected to be accelerating green growth by increasing resource efficiency, renewable energy and supporting innovation, delivering nature-based solutions to improve resilience and the benefits derived from natural resources, and improving community and individual well-being by taking a place- and landscape-based approach. The final policy is expected in April 2017.

Natural Resources Wales is then required to develop Area Statements to help facilitate the implementation of the National Natural Resources Policy. In September 2016, Natural



Resources Wales began a collaborative process with a range of stakeholders to help agree the key steps required in the development of Area Statements – from agreeing the scale at which Statements should be produced, to looking at engagement and evidence requirements, and finally forms of publication. This process is ongoing and iterative, and is designed to ensure that end-users of Area Statements have the evidence they need to inform more sustainable decisions.

Management of marine protected areas of Wales

The seas around Wales make up over half the area of Wales. There are 128 marine protected areas covering over 5500 square miles, or 35% of the Welsh seas and 75% of the coastline. This includes sites such as Skomer Marine Conservation Zone in Pembrokeshire that has been a marine protected area in some form for over 25 years.

In its inquiry into marine policy in Wales, the Fourth Assembly's Environment and Sustainability Committee expressed concern about the level of priority given to the marine environment by the Welsh Government. Amongst its recommendations, the management of marine Protected Areas was highlighted as a priority area for improvement. The Climate Change, Environment and Rural Affairs Committee is calling for evidence to support its inquiry into the management of marine protected areas in Wales. One of the more specific questions focuses on how Area Statements, which will be developed by Natural Resources Wales, should cover Welsh seas. The consultation closes on 10 February 2017.

Welsh emission accounting

The Environment (Wales) Act 2016 set a legal target of reducing emissions by a minimum of 80% by 2050. The Act provides Welsh Ministers with powers to establish statutory emission reduction targets and carbon budgets that will act as stepping stones to ensure that regular progress is made towards the 2050 target. The Welsh Government is establishing an evidence base to ensure in setting the

carbon budgets and interim targets, Wales reduces emissions to deliver on its obligations as well as maximising economic and social benefits for the people of Wales. Wales asked for expert advice from the UK Committee on Climate Change (UKCCC), which has issued a call for evidence on defining what emissions are counted in the Welsh account and looking at mechanisms for delivery. The call for evidence is available on the UKCCC website and closes on 6 February 2017

Welsh Government and clean energy

In December 2016, the Welsh Government set out how it will use its devolved powers to take advantage of opportunities Wales has to deliver secure and affordable low carbon energy. This will include ensuring Wales secures transformational benefits from major energy projects and setting ambitious and realistic targets for renewables, including community energy.

The Welsh Government is already supporting the development of low carbon energy projects in Wales, for example, providing funding towards local renewable energy projects such as the Awel Aman Tawe Community Energy scheme in Swansea.

National Development Framework

The Welsh Government has commenced work on the preparation of the National Development Framework. It will be a national land use development plan and will replace the existing Wales Spatial Plan. It will set out the 20-year spatial framework for land use in Wales, providing a context for the provision of new infrastructure and growth, and setting out how the Government's land use objectives will be taken forward at national, regional and local levels. A call for evidence started in December 2016 and closes on 7 March 2017. Access is online and stakeholder events are being held in late January across Wales.

Wales Bill

This was introduced by the Wales Office and aims to create a stronger Wales within a strong United Kingdom. The draft Bill sets out in detail how the UK Government plans to deliver the St David's Day

commitments to create a stronger, clearer and fairer devolution settlement for Wales that will stand the test of time. The key measures include a reserved powers model so that the people of Wales know precisely what powers the Assembly has and can hold it to account, important new powers for Wales over energy, transport and local government and Assembly elections and greater powers for the Assembly over its own affairs including the ability to change its name.

NORTHERN IRELAND

On January 26 2017 The Northern Ireland Assembly closed for business to prepare for a snap election, which will take place on the 2 March. The Assembly institutions collapsed because of a botched Renewable Heat Incentive (RHI) Scheme, and the resignation of the Deputy First Minister, Martin McGuinness. While there is much political uncertainty, it has been agreed that the Assembly will slim down from 108 members to 90, which means each constituency will now elect five, rather than six Members of the Legislative Assembly (MLA).

The breakdown in political relations between the parties raises some serious questions about if, and when, power-sharing will be restored post-election, presenting significant risk for the environment. Prime Minister Theresa May has been very clear that Article 50 will be triggered by the end of March, signalling the start of formal proceedings to disengage from the EU.

There is real concern that an Executive may not be in place to influence these wider Brexit negotiations. There will be many environmental issues and considerations raised throughout these negotiations and without a functioning Executive to represent Northern Irish interests at a Westminster level.

Before the assembly collapsed two important environmental initiatives had been set in motion.

Environmental Farming Scheme

The Environmental Farming Scheme is a key mechanism in helping improve the sustainability of the wider countryside. This scheme is designed to encourage farmers to protect and enhance the environment on their farmland. This means farmers will be funded to put in place measures that will support threatened breeding wader species, such as curlew and lapwing, seed eating species, such as yellowhammer and linnet, and important habitats, such as peatland. The scheme also seeks to address issues of water quality, expansion of native woodland and options for pollinating insects.

The Environmental Farming Scheme is due to open in February 2017, however there are still major concerns about the timings of applications and how they will benefit key species on the ground. Of particular concern are arable areas suitable for seed-eating farmland birds and wet grassland areas suitable for breeding waders. On both accounts the application window and internal Department of Agriculture Environment and Rural Affairs assessment will be too long to be of benefit to either species in 2017. However, other options which will benefit water quality, forestry and rural heritage will be operational in 2017.

Four new Marine Conservation Zones for Northern Ireland

After several years of detailed deliberation and extensive evidence gathering, the Northern Ireland government has designated four new Marine Conservation Zones as of December 2016. These new designations are now providing vital protection for some of Northern Ireland's most vulnerable marine species and the habitats they rely on.

The new Marine Conservation Zone off Rathlin Island, County Antrim is the first UK Marine Conservation Zone to have a seabird species - the black guillemot - as its primary designation feature. An extension of the southern boundary of the designated area ensured that the entirety of the species' foraging habitat was placed under the protection it needs. Alongside this, long-term monitoring

data allowed the Marine Division to move the conservation status of black guillemots to 'unfavourable', meaning government is now committed to restoring the species back to good health.

Three other marine conservation zones are now protecting seagrass meadows at Waterfoot, Co. Antrim, fragile sea pens and mud communities at Carlingford Lough, Co. Down and the ancient ocean quahog at outer Belfast Lough, Co. Antrim. The latter site, in Belfast Lough, now protects the ocean quahog. This marine clam is considered by science to be one of the longest-living species on our planet and some individuals have been found to be over 500 years old.

2017 will be a key year for these sites, not only because they are new, but because Marine Division has plans to galvanise the Marine Protected Area network through the extension of the European Special Protected Area network. This will add a further 96 Thousand hectares to the marine protected area off the east coast of Northern Ireland.

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