

Health and harmony: the future for food, farming and the environment in a Green Brexit

Consultation response from the Institution of Environmental Sciences (IES), May 2018

Background

The Institution of Environmental Sciences (IES) is a membership organisation that represents professionals from fields as diverse as air quality, land contamination and education, wherever you find environmental work underpinned by science. The organisation leads debate, dissemination and promotion of environmental science and sustainability, and promotes an evidence-based approach to decision and policy making. The Institution stands up for science, scientists and the natural world.

Our approach to this consultation

In our submission to this consultation we have focused our responses around the topics and questions on which the IES and its members have greatest expertise, omitting those where others are better placed to provide evidence. As such, our submission is organised around headings corresponding to the chapters of the consultation paper, with specific questions highlighted as subheadings where appropriate.

Summary

- The IES wholeheartedly supports an approach based on the principle of "public money for public goods".
- For this approach to succeed, a nuanced, evidence-based understanding of the complex socio-environmental systems which deliver these goods (and their capital stocks and flows) is required. As such, we would urge that public goods from agriculture are considered in relation to the ecosystem services concept.
- The new policy should be based on an understanding of payments as 'investments' (linked to the delivery of bundles of ecosystem services) rather than 'subsidies'. Payments should effectively drive practices that deliver a range of public goods and over time grow the natural capital base from which these goods and services flow. This will lead to a virtuous and expanding spiral, in stark contrast to historical trends.
- As far as is feasible, the Government should ensure the new management system is futureproofed (for example, by analysing the scheme and its likely impacts under different potential future scenarios, such as those developed under the UKNEA).
- A new environmental land management policy should be based on a shared set of coproduced principles and common UK (legislative) frameworks to establish and ensure
 minimum standards (of for instance, environmental protection and animal welfare). Within
 these frameworks there must be the flexibility for individual devolved institutions to
 innovate and improve above and beyond these minimum standards.
- We agree that the powers proposed for inclusion in an Agriculture Bill are necessary, but feel the outlined scope is currently insufficient. Greater clarity is required regarding how this Bill interacts with other elements of the Government's legislative programme.



3. An 'agricultural transition'

The direct payments system under the Common Agricultural Policy (CAP) has been largely ineffective. Nevertheless, removal of these payments in the UK presents uncertainty, particularly given the structure of the new future environmental land management system is as yet unknown. It will be important that government conducts a full and extensive risk assessment before implementing the new policy, to understand the effects it may have, and to engage all stakeholders in continuing consultation beyond this paper as to the scheme's design, to avoid unintended consequences.

5. 'Public money for public goods'

The IES wholeheartedly supports this new approach, and has called for some time for a shift to a model based on "public money for public goods". This principle should sit at the heart of a new approach to environmental land management. Rather than subsidies, payment to farmers should be based on investments which deliver returns for society.

More than 70% of the UK's land area is under some form of agricultural management. The 2016 State of Nature Report¹ found that policy-driven agricultural changes were by far the most significant driver of declines in the UK's wildlife in recent decades. Given this context, there is a clear need for a new, redesigned investment scheme which rewards farmers for delivering public goods and promotes sustainable management practices to enhance natural capital. A policy should be based on an understanding of payments as 'investments' (linked to the delivery of bundles of ecosystem services) rather than 'subsidies'. This could effectively drive practices that deliver a range of public goods and grow the natural capital base from which these goods and services flow, leading to a virtuous and expanding spiral, in stark contrast to historical trends.

Frameworks and lists of public goods can be useful in demonstrating the diversity of outcomes which the new scheme must promote. Nevertheless, these do not replace the need for a nuanced, evidence-based understanding of the complex socio-environmental systems which deliver these goods, and their capital stocks and flows. As such, we urge that public goods from agriculture are considered in relation to the ecosystem services concept. It is vital that non-consumed supporting and regulatory services which underpin ecosystem resilience are fully taken into account.

Ranking outcomes and public goods

This consultation paper asks participants to rank the relative importance of a range of different environmental outcomes and public goods. We consider this a weakness of the paper, as to do so would be to misunderstand the multi-faceted nature of the natural and human systems involved, and the complex interlinkages between natural capital stocks and the ecosystem services which are

¹ Hayhow et al. (2016) *State of Nature 2016*. The State of Nature partnership. https://www.rspb.org.uk/globalassets/downloads/documents/conservation-projects/state-of-nature/state-of-nature-uk-report-2016.pdf



derived from them. For instance, climate change mitigation is closely linked to soil health - a functioning peat moorland can be a net carbon-store (as well as helping to clean water, provide biodiversity and create cultural value). Of course, it will be necessary to prioritise the delivery of certain public goods when designing local management plans, but this should be done in a targeted way determined by local context, seeking to deliver bundles of services (rather than individual services), and informed by science and evidence from the natural and social sciences and economics. As such, we urge the Government to adopt a holistic approach.

'Are there any other public goods which you think the government should support?' In response to this question, we reiterate our previous point, that all ecosystem services, including supporting and regulatory services, should be taken into account.

More specifically, we welcome the Government's recognition in this paper of the significance of ammonia emissions from agriculture for air quality. Ammonia has impacts on both important seminatural ecosystems and public health when released into the air, and a new environmental land management policy represents an opportunity to tackle this longstanding problem.

6. Enhancing our environment

Incentivising action across a number of farms or land parcels

A strategic, systems approach will be required, based on an holistic evidence-based understanding of local contexts at varying spatial and temporal scales. Recognising the interconnected nature of environmental and social systems operating across multiple scales, landowners and managers should be incentivised to co-operate at scales beyond the single farm, aiding in the delivery of desired outcomes both locally and regionally. Such an approach is vital to delivering, for example, improved water quality and flood management through catchment management.

'What role should outcome based payments have in a new environmental land management system?'

The IES believes that the new policy should take an outcome focused approach. This means schemes should be based on payment by results (where results can be demonstrated within a reasonable timescale following investment), rather than a prescriptive approach to environmental land management. It is important that land owners and managers and wider local communities and stakeholders are involved in the design and implementation of future agri-environment schemes. These schemes should allow flexibility to determine how to meet shared objectives, supported by practical and technical advice from appropriately experienced, independent and competent advisors working to recognised standards.

A robust system will need to be developed to determine which features and management interventions contribute to the delivery of which ecosystem services and public goods. This will require a focus on process, rather than solely assets. For example, a field margin hedge which follows a contour line is likely to have a greater impact on runoff than a hedge perpendicular to a contour, therefore contributing more to the delivery of water related ecosystem services and



erosion control. It will also be important that the system developed to track and reward land managers for delivering specific outcomes is transparent.

'How can an approach to a new environmental land management system be developed that balances national and local priorities for environmental outcomes?'

Some regional and local differentiation in approach and implementation should be considered within a broader strategic framework. This national framework must be underpinned by a strong regulatory baseline of environmental protections and principles. Most importantly, Government should seek to establish transparently sustainable production as a non-substitutable underpinning principle of the policy. The national framework should take account of the public goods derived from all ecosystem services, including regulatory and supporting services which underpin both ecosystems and our economy. As far as is feasible, the Government should also ensure the new management system is future-proofed (for example, by analysing the policy and its likely impacts under different potential future scenarios, such as those developed under the UKNEA). When developing the national framework, the Government should also seek opportunities to align the policy with other national and international commitments, such as on climate change under the Paris Agreement and the Climate Change Act, 2008. The Government's 25 Year Environment Plan clearly recognises the need for joined-up policy to tackle environmental challenges, and government must now seize this opportunity to put this into practice.

Of course, it is not possible – nor is it necessarily desirable – to try to deliver everything everywhere. Context is important, and as we have noted above, it will be necessary to identify specific objectives, and the bundles of services and mechanisms which can deliver them in different locations. Local delivery plans must be targeted, developed in collaboration with local stakeholders, and informed by science and evidence from the natural and social sciences and economics. Socio-environmental systems are complex and interconnected, so a degree of adaptability to reflect local system dynamics will be required.

When considering how local delivery plans fit within a national strategic framework, we urge the Government to adopt an approach which more explicitly recognises the connectivity between rural and urban systems, and the impact of land management decisions beyond the immediate locale. There is now a broad body of evidence that highlights that many people, located mainly in towns and cities, are not accessing or enjoying the benefits of a healthy natural environment. Indeed, there is evidence of a disproportionate burden of harm emerging for those without ready access to healthy natural greenspace in or close to where they live. In recognition of this growing body of evidence, the new policy framework should promote schemes that can deliver benefits to large numbers of people. This would mean ensuring that the schemes were able to support land management practices that improved natural capital in or close to towns and cities, as well as in more rural areas more traditionally associated with agri-environment investment.

'How can farmers and land managers work together or with third parties to deliver environmental outcomes?'

As highlighted above, we believe that landowners and managers should be incentivised to cooperate at scales beyond the single farm. There are certain ecosystem services and public benefits (such as flood protection) which it will only be possible to deliver in this way, through coordination



between land managers in particular areas or catchments. The new environmental land management policy should be designed to incentivise these collaborations, but should also facilitate them where possible, bringing local stakeholders together with scientific evidence and expertise to define local priorities and action plans within a strategic national framework.

9. Changing regulatory culture

'Which parts of the regulatory baseline could be improved, and how?'

We welcome the recognition in this paper of the importance of good regulation to people, the environment and the economy. Regulation can be a positive driver for innovation and growth in the environmental sector and green economy, and it is important that high standards of environmental protection are maintained, or strengthened, in UK law after we leave the European Union.

We also welcome the Government's proposal to maintain a baseline of standards that reflects the polluter pays principle. However, we call on the Government to go further; this principle and its counterparts, the precautionary principle and the principle that preventive action should be taken, have formed the fundamental foundations of environmental protection in Europe, and should be embedded in primary legislation when the UK leaves the European Union. The IES looks forward to seeing the proposals the Government brings forward regarding a new set of fundamental principles for UK environmental law and policy in the context of the promised consultation on a new governance and enforcement body. However, we also urge that these principles are not considered solely the preserve of this body, but are embedded across government and explicitly stated in all policies to which they might apply.

'How can we deliver a more targeted and proportionate enforcement system?'

Effective enforcement will be fundamental to the success of the new policy. In turn, effective enforcement is dependent on effective monitoring. Significantly greater investment in monitoring and evaluation than the current level (less than 1% of agri-environment scheme value) will be required to implement an effective enforcement regime. Crucially, monitoring and evaluation should also sit at the heart of an adaptive management cycle, actively and explicitly using the results of evaluations to feedback into improvements in delivery, objective setting and scheme design. In order to deliver on the aspirations outlined in this paper and in the Government's 25 Year Environment Plan it will be essential that monitoring, research and evaluation are embedded in the policy at scheme level, including the collection of baseline data and studies of interventions. The potential applications of technology – including remote sensing and earth observation tools – to complement and enhance traditional monitoring methods, should be explored. The Government should seek to capitalise on the UK's position as a world-leader in environmental science and research, and draw on the best scientific evidence and expertise during both policy design and implementation.

13. Devolution

'With reference to the principles set out by JMC(EN), what are the agriculture and land management policy areas where a common approach across the UK is necessary?'

We welcome the agreement by the JMC(EN) of these principles regarding common frameworks to ensure the functioning of the UK internal market, and the management of common resources.



However, in order to facilitate the implementation of an effective environmental land management policy across the UK, further to these principles, there is also a need for a shared set of principles and common legislative frameworks to set out and enforce minimum standards, for instance on environmental protection and animal welfare. This does not mean that we are adverse to policy divergence in this area: in many areas the devolved nations have been instrumental in driving higher standards. The IES has repeatedly called on the Government to ensure that legislation put in place to facilitate the UK's exit from the EU will not limit the ability of the devolved nations to improve environmental standards over and above any agreed minimum standard. There must be flexibility within any agreed common frameworks for individual devolved institutions to innovate and improve above and beyond these minimum standards. If and where divergence in approach does occur, this should be carefully monitored, with an awareness for unanticipated system impacts (both environmentally and socio-economically). The process of developing shared principles and frameworks must be initiated in a collaborative spirit to enable joint ownership and the co-creation of mutually acceptable solutions.

Specifically with regard to point iii of the principles agreed by the JMC(EN), we are disappointed that Ministers did not also agree that frameworks will also ensure recognition of the environmental linkages between Northern Ireland and Ireland. Several rivers and catchments cross this land border, and cross-border coordination and cooperation will be essential to ensure effective management for people, wildlife and the wider environment in these regions.

15. Legislation: the Agriculture Bill

We agree that the legislative powers listed in the paper are necessary to facilitate the implementation of the proposed new environmental land management policy. However, we consider that the scope of this list is insufficient in certain areas, and greater clarity is needed with regard to: this Bill's interaction with other elements of the Government's legislative programme, including a potential future Environment Act; activities to establish environmental principles in either UK law or a national policy statement; and the potential establishment of a new environmental governance body, as proposed by the Secretary of State earlier this year.

In terms of the Bill's scope, it is important that consideration is given to key underpinning principles of the new environmental land management system, and future policy in this area, as well as implementation mechanisms. The Bill must make clear how the Government will be held to account to deliver on this vision, ideally through requirements to develop and regularly report on targets.