



Introduction

1. Wildlife Trusts Wales (WTW) represents the six Wildlife Trusts in Wales – Brecknock, Gwent, Montgomeryshire, North Wales, Radnorshire and South and West Wales (hereafter referred to as the ‘Wildlife Trusts’) working together in partnership to achieve common aims. The Wildlife Trusts collectively speak on behalf of more than 24,000 members and manage over 200 nature reserves, covering more than 8,000 hectares of prime wildlife habitat, from rugged coastline to urban wildlife havens.
2. Nature is fundamental to everyday life; it provides the air we breathe, the food we eat, the fuel we use for warmth, and the resources we consume for shelter and modern life. Nature and people are not separate; nor is nature separate from our economy. Without a healthy environment, society cannot be resilient but for nature to look after us, we need to look after nature.
3. The Wildlife Trusts in Wales strive for a **Living Landscapes** and **Living Seas**, recognising this as an inspirational end point where our environment, society, and economy coexist for the benefit of wildlife and people.
4. The EU’s record on environmental issues is arguably one of its greatest achievements. It has developed world-leading legislation on a range of issues, which have helped tackle water and air pollution, protected endangered species, protected our pollinators through bans on dangerous pesticides and cleaned up our beaches.
5. For example, the Birds and Habitats Directives are a major success story for nature conservation. They were responsible for the creation of the largest and most coherent network of protected areas in the world (the ‘Natura 2000’ network). They represent the cornerstone of UK and EU-wide efforts to halt and reverse the loss of biodiversity, providing vital protection for rare and vulnerable species and habitats throughout their range.
6. Much of the Welsh environment is dependent on EU standards and regulations. We need these standards and regulations (and enforcement) to continue to confront the headwinds associated with climate change, resource depletion and biodiversity and ecological loss as well as public health issues.
7. The Common Agricultural Policy (CAP) has enhanced some on-farm biodiversity through agri-environment measures, it has created significant perverse outcomes for biodiversity. For example, the payment of subsidy linked to grazeable land area has led to the loss of woodland, scrub and trees and its associated wildlife.
8. Food and farming need to play a central role Wales’ legal obligations to reduce carbon emissions by 80% by 2050 and reverse the loss of biodiversity¹²³. Due to the scale of the degradation of biodiversity and ecosystem

¹ Marsden, T *et al* Public Policy as Food Policy <http://ppiwi.org.uk/files/2016/06/PPIW-Report-Food-Policy-as-Public-Policy.pdf>

² Welsh National Assembly Environment and Sustainability Committee. (2014). Report of Enquiry into Sustainable Land management

³ European Commission. (2016). A strategic approach to EU agricultural research and innovation. Draft paper. Brussels 26-28th January Conference: Designing the path: a strategic approach to agricultural research and innovation

services, it makes sense that we must develop not just sustainable but **ecologically restorative policies** as called for by Professor Terry Marsden⁴.

9. Therefore, our top priorities are

- ensuring continued and strengthened protection of the environment' (including enforcement and scientific research and expertise) – it is this area that the **proposed Great Repeal Bill (Grbil) might have particular implications for wales**
- the creation of new domestic **Integrated Natural Environment Policy** to replace CAP which help Welsh Government fulfil its obligations under the both the **Well-being of Future Generations (Wales) Act 2015** and **Environment (Wales) Act 2016**. This should be an innovative, integrated framework for the ecologically and economically sustainable resource management should include **Welsh forestry** and **marine natural resources**.

These areas are explored more fully below.

Q - CAN YOU PROVIDE EXAMPLES OF WHERE THE UK'S PROPOSED APPROACH TO TRANSFERRING THE ACQUIS COMMUNAUTAIRE (THE BODY OF EUROPEAN LAW), THROUGH THE PROPOSED GREAT REPEAL BILL, INTO DOMESTIC LAW MIGHT HAVE PARTICULAR IMPLICATIONS FOR WALES?

10. The Great Repeal Bill (Grbil) will, upon exiting the EU, repeal the European Communities Act 1972 and convert existing EU law into domestic law, where possible. It is set to be brought forward in the next parliamentary sessions, but will not take effect until the formal process (Article 50) of leaving the EU is complete.
11. The Grbil provides a degree of certainty but is not without its risks. We identify some (by no means all) concerns below.
12. It's worth noting that farming and fishing policy is not envisioned to be included in the Grbil and maybe topics of primary legislation. Consultation on such legislation is likely to be launched in 2017 so both topics require fairly early attention.
13. The extent to which the Welsh Government is able to promote its own particular response to Brexit will be a major indicator of its own ability to promote environmentally sustainable development within its territory. Given the enormous legal uncertainty, it almost matters as much what values and goals the Welsh Government and the Assembly choose to promote.

It is unclear how Grbil will transpose "parent" EU law (eg directives) into UK law and "save" current UK laws

14. Transposing EU law and regulation not already in UK law will be a complex task. The purpose of this exercise would be to ensure that current areas of UK law that are of EU origin will continue to function after the UK leaves the EU. It is likely the Grbil will use a legal device called a **savings provision** in combination with a series of **transitional measures**.
15. A savings provision could:
 - transpose elements of EU not currently captured in UK domestic law into UK law, and
 - 'save' UK domestic law that implements EU law. This is particularly important for secondary domestic regulations (especially those made under the European Communities Act).
16. The scope of the savings provisions is not known at this stage.

⁴ Marsden, T <http://blogs.cardiff.ac.uk/sustainableplaces/2016/09/22/brexit-towards-building-a-new-consensus-for-an-integrated-food-and-rural-development-policy/>

- Will it include the text of directives?
 - Will it extend to the jurisprudence of the European Court of Justice interpreting and applying EU law?
17. It is, however, unlikely to bring across from the EU Treaty those general principles that have underpinned environmental policy, such as the **Precautionary Principle**. There is a specific issue about the future place, if any, regarding the precautionary principle and 'principles' more generally. More work is needed to understand how they can be brought into UK law in a way that ensures continued integrity, impact and purpose.
 18. There is also a concern
 - that Wales would **be forced into deregulation or unwise changes to environmental policy** that lower environmental standards in line with what goes on elsewhere in the UK.
 - that Wales would lose the European Union's array of scientific expertise, resources and agencies – this is especially worrying when we've seen public services facing cuts. So, there's a question where will we get the capacity and knowledge to create our own policy?
 - about where the decision to keep or lose environmental provisions will rest - Ministerial decision or be subject to the scrutiny of an Assembly committee? This is an issue as the Grbil may include **sunset clauses** and **executive powers** to amend laws of EU origin. These pose big risks to continued maintenance of current environmental laws
 - What happens to targets – aspirational targets drive environmental protection forward e.g. recycling targets. But if Government is looking to jettison requirements it would be very easy to say 'let's not be bound by these targets'.
 - About how to fill gaps (e.g. **the enforcement gap**) on a transitional and long term basis.
 19. The Grbil is likely to set a date (presumably the date the UK leaves the EU) up to which EU law will be transposed and saved in UK law.
 20. More analysis is required of how savings provisions could best ensure current environmental laws are maintained post Brexit and the scope of such savings.

Some environmental issues do not lend themselves to straightforward transposition

21. EU Law is not static but is frequently updated based on new science, advice from EU Agencies and further reinterpretations of those obligations by the European Court of Justice (ECJ). As such there is an issue about whether we continue to follow the decisions of the EU and its agencies or on leaving the EU or will the new Welsh / UK law be frozen in time. The **authorisation of chemicals** highlights this issue as it is dynamic and relies on a specialised EU Agency; new chemicals are approved and banned all the time and the process involves recognising the decisions of the European Chemicals Agency. It does not appear very simple to transfer the arrangements into UK law. For example there is a key question about whether we will simply accept the EU list of approved chemicals as of the date we leave and then proceed to create our own framework and equivalent institution(s), or instead continue to follow the decisions of the EU and its agencies. If the latter, it would be preferable for the UK to remain associated with the respective agencies and decision making processes.
22. However, there is an **opportunity** for Wales to update environmental policy in the light of new science more rapidly than we can do in an EU context at the moment.
23. Wales could decide that the views of the European Court of Justice might be binding or just persuasive. Wales could consider the principles that have come through the ECJ decisions and whether to clarify those principles as part of the Welsh legislation or Policy going forward. So, for example, with the Habitats Regulations there are interpretations of that legislation where the ECJ has clarified and confirmed the meaning of certain phrases or principles, and there may be an opportunity to retain certainty by bringing

those into the Legislation or Policy rather than relying on them not being overturned by a court at a later date.

The Grbil will need to specify which institutions take on the roles of monitoring and enforcement, oversight, reporting etc.

24. Currently oversight and reporting is performed by and to the European Commission. The Grbil will need to specify which UK and Welsh institutions take over these functions, and what the process for modifying both existing and newly transposed law will be.
25. Lots of EU directives also have an active and continuing role for the European Commission. For example, approving time extensions for compliance and other kinds of derogations, making implementing measures etc.
26. The European Commission is also the policeman: it has enforcement powers against Member States, which it can take to the European Court of Justice e.g. Aberthaw, and where ultimately ‘**infraction**⁵’ fines can be imposed for failure to comply. **Therefore, should Wales want something that would enable enforcement domestically or at the UK level?**
27. Certain roles, such as supervising reporting and receiving data will need to be replaced by domestic arrangements; some other roles may not be, with detrimental consequences.

Will we continue to follow ECJ case law during the transition phase?

28. After transposition, and prior to the ‘unpicking’ process beginning, clarity is needed regarding whether our courts will **continue to follow ECJ case law**, which is the preferable outcome in environmental terms. This comes with political difficulties, but to do otherwise could see a loss of coherence in some areas and a divergence in approach, undermining the purpose of the Grbil. Lack of certainty is a concern across most of the environmental and climate policy spectrum.

Will we continue to adopt new EU law after transposition?

29. After transposition, and prior to the ‘unpicking’ process beginning, clarity is needed regarding whether the UK and Wales will continue to adopt amendments to existing EU law or newly created EU environmental law so as to maintain regulatory equivalence. If the UK is outside the decision making process this entails accepting the authority of the EU without formal rights to participate in decisions; which is unlikely to be palatable politically at least at a UK level. However the alternatives are voluntary equivalence or simply divergence, both reducing certainty and confidence, leaving aside any issues of substance.

Questions of accountability, both during the transposition and after

30. Grbil can be expected to provide the basis for the UK to pick and choose which EU laws to keep after the UK leaves the EU. This unpicking process could be huge – if the UK wants to get rid of certain or many laws of EU origin. The danger is that to facilitate this process, Grbil could
 - Include sunset clauses: a date by which laws transposed and “saved” under Grbil has to be reviewed.
 - Create lots of executive powers to review, amend and repeal such laws by statutory instrument.

⁵ EU Infractions - If they have evidence that a Member State has either failed to transpose a directive properly, or is not enforcing legislation correctly, then they will begin legal proceedings to rectify the situation, known as infringement proceedings. The Commission has powers to apply financial sanctions to the UK where, following infringement proceedings for a breach of EU law, the Court of Justice has found the UK to be in breach of its obligations. Such financial sanctions may consist of both a daily penalty to induce the remedy of the breach (of up to circa €237,864 per day, a figure which is then multiplied by the duration of the breach) and a lump sum (based on an assessment of the effects of the breach for which the minimum for the UK is currently €9,938,000).

31. Amending the laws concerned will require much technical work in what has been described as “*the largest scale legislation and policy exercise that has ever been carried out*”⁶. The body of EU environmental law is particularly large and accounts for a hefty slice of the transposition exercise.
32. George Peretz QC characterises the Grbill as a giant **Henry VIII clause**⁷⁸.
33. Not only is there a risk that new legislation will be hurriedly, and inadequately, rushed into statute by overworked civil servants, it also leaves open the possibility that, due to much of EU law having been transposed by statutory instrument, the future unpicking could be done by Ministers, with reduced UK parliamentary and devolved administration participation. This concern holds both for newly transposed EU law, and for environmental directives already enacted by secondary legislation (newly vulnerable absent EU obligations).
34. In order to mitigate these risks, **the Grbill should contain measures which ensure that any changes to EU law - during transposition or after - that significantly alter its original scope, or intended purpose, are made by primary legislation** – giving a full and proper role to Parliament or Devolved Parliaments as the sovereign law makers.
35. Additionally, in order to facilitate parliamentary and civil society input, there is an argument to be made that the Grbill should be subject to pre-legislative scrutiny. This would accord with the **Aarhus Convention**, which enshrines rights for people to have easy access to information and to participate effectively in decision-making in environmental matters as well as both the
 - **Well-being of Generations (Wales) Act 2015** which includes Collaboration and Involvement in the Sustainable Development Principles.
 - **Environment (Wales) Act 2016** which includes making appropriate arrangements for public decision making and promote and engage in collaboration and co-operation as part of the Principles of Sustainable Management of Natural Resources.

Concerns around accountability and enforcement

36. Currently, if a member state is not deemed to be compliant with EU law the European Commission can bring infringement proceedings, which can ultimately lead to large ‘**infraction**’⁵ **fin**es. This independent accountability mechanism has provided the impetus for implementing EU based law with a degree of commitment not necessarily applied to other legislation and **led directly to many of the UK’s key environmental improvements** – including action on cleaner beaches and cleaner air. This has also provided an effective assurance for private investors e.g. in energy and water infrastructure. There is to-date little indication as to what institution or mechanisms would perform this role post-Brexit. The default position is that there would be no mechanism.
37. Depending on where negotiations lead us, it may be that such a body will be created as part of our future bilateral relationship with the EU. Alternatively, it may be that the UK needs to create new domestic institutions, or perhaps we simply need to increase and expand the remit of those domestic institutions that exist.

⁶ UCL Constitution Unit Briefing Paper The Constitutional Consequences Of Brexit: Whitehall And Westminster - Nicholas Wright and Oliver Patel who quote a former Parliamentary draftsman, Daniel Greenberg. <https://www.ucl.ac.uk/constitution-unit/research/europe/index/edit/constitution-unit/research/europe/briefing-papers/briefing-paper-1>

⁷ Henry VIII clause - The provision enables primary legislation to be amended or repealed by subordinate legislation with or without further parliamentary scrutiny. Such provisions are known as Henry VIII clauses, so named from the Statute of Proclamations 1539 which gave King Henry VIII power to legislate by proclamation.

⁸The Great Repeal Bill: a giant Henry VIII clause? <https://www.monckton.com/the-great-repeal-bill-a-giant-henry-viii-clause/>

38. The EU and the UK are both signatories to the **Aarhus convention** of participation in environmental decision making. Participation in environmental decision making is very important. This has underlined the Directives on access to environmental information, and participation in decision making, and access to justice.
39. However, we would most probably still be relying on our processes of **Judicial Review** (which does not necessarily comply with the Aarhus Convention). The **Judicial Review** process relies on a private individual or an NGO bringing those proceedings at their own cost (and if they lose, costs can be awarded against them). **To fall back solely onto existing domestic provisions – such as Judicial Review, which is too narrow an instrument to do the job on its own – would represent a significant weakening of protections.**
40. More work needs to be done to scope out different options. For example, a **statutory appeals process to remain**, so that it makes it very clear in the legislation
 - who can bring an action and for what
 - the consequences so that we continue to hold the Government and the decision makers to account.

Additional consideration: Devolution

41. Writing for the UK Constitutional Law Association, Sionaidh Douglas-Scott says:

*“One of the most immediate problems that the ‘Great Repeal Bill’ is likely to face arises with respect to devolved matters. The aim of the Bill is to convert EU law into national law. However, a good part of EU law relates to competences that have been devolved – for example in the case of Scotland, devolved competences include: agriculture, fishing within Scottish waters, public procurement, environmental law. **If the ‘Great Repeal Bill’ translates EU law on matters that have been devolved into UK law this would amount to legislation on devolved areas.** Under s 28(7) Scotland Act 1998, the UK Parliament, as a sovereign legislature, retains the power to make or unmake any law for Scotland whatever. However, under the ‘Sewel convention,’ legislative consent of the Scottish Parliament would be needed when Westminster legislation touches on devolved matters. In the June referendum, in the case of Scotland, 62% of those voting, voted to remain in the EU and the Scottish government has stated its opposition to ‘Scotland being taken out of the EU against its will’, so consent may well not be forthcoming.*

As the term suggests, the ‘Sewel Convention,’ as a constitutional convention, takes the form of a political as opposed to a legally binding undertaking. However, s. 2 Scotland Act 2016 inserts a new subsection (8) into s. 28 Scotland Act 1998, giving statutory recognition to the Convention in the following form: ‘But it is recognised that the Parliament of the United Kingdom will not normally legislate with regard to devolved matters without the consent of the Scottish Parliament.’ This renders its status as a ‘mere’ convention somewhat less clear. At the very least, it may be argued that the express inclusion of the Sewel convention in the Scotland Act 2016 makes it impossible to ignore politically. To be sure, the provision is that Westminster will not ‘normally’ invade devolved competences without their consent, and much has been made of this. But if ‘normally’ simply means the UK Government’s stipulated interpretation of the term, then the provision is pointless. Legislative consent motions only make sense if they go beyond trifling and commonplace issues.”⁹

⁹ <https://ukconstitutionalaw.org/2016/10/10/sionaidh-douglas-scott-the-great-repeal-bill-constitutional-chaos-and-constitutional-crisis/>

Q - WHAT SHOULD BE THE TOP PRIORITY FOR WALES IN ADVANCE OF THE UK GOVERNMENT TRIGGERING OF ARTICLE 50 (WHICH STARTS THE FORMAL PROCESS OF EXITING THE EU)?

Introduction

42. The Common Agricultural Policy (CAP) has enhanced some on-farm biodiversity through agri-environment measures, it has created significant perverse outcomes for biodiversity. For example, the payment of subsidy linked to grazeable land area has led to the loss of woodland, scrub and trees and its associated wildlife.
43. Professor Dieter Helm, Chair of the Natural Capital Committee, highlights some of the significant issues with current short-term focussed unsustainable land management practises¹⁰ which include
 - Fertilisers, pesticides and herbicides flowing into, and polluting, our reservoirs and water courses requiring water companies to clean up and to charge their customers accordingly.
 - Poorly stored and inappropriately handled slurry resulting in effluent leaching into the water systems.
 - Agricultural intensification methods (e.g. draining peat soils, ploughing steep slopes) which increase flooding risks downstream, emit greenhouse gases and diminish our soil resources
 - Inappropriate use of antibiotics putting the health of the wider society at risk.
 - Significant adverse impacts upon biodiversity
44. This view is further supported by the evidence both nationally (e.g. Water Framework Directive investigations¹¹ and the recent *State of Nature* report (2016)¹²) and internationally¹³.
45. Farming is not of course the only reason why wildlife is declining and there are many examples of good farming practice¹⁴. Other contributors include development, climate change and invasive species. However, as the farmed environment covers over 80% of Wales these unsustainable practises have a significant impact on the ecology of the Welsh landscape but this impact is not currently reflected in the economics.
46. We need to confront the headwinds associated with climate change, resource depletion and biodiversity and ecological loss as well as public health issues. Therefore, food and farming need to play a central role Wales' legal obligations to reduce carbon emissions by 80% by 2050 and reverse the loss of biodiversity^{15,16,17}.

¹⁰ Dieter Helm (September 2016) British Agricultural Policy after BREXIT - Natural Capital Network –

<http://www.dieterhelm.co.uk/natural-capital/environment/agricultural-policy-after-brexite/>

¹¹ NRW Water for Livelihoods <https://naturalresources.wales/media/678795/western-wales-river-basin-facts-and-statistics.pdf>

¹² State of Nature 2016 <http://www.wildlifetrusts.org/stateofnature16>

¹³ WWF Environmental impacts of farming http://wwf.panda.org/what_we_do/footprint/agriculture/impacts/

¹⁴ FWAG Silver Lapwing Award <http://www.fwag.org.uk/silver-lapwing-2016/4593040354>

¹⁵ Marsden, T <http://blogs.cardiff.ac.uk/sustainableplaces/2016/09/22/brexit-towards-building-a-new-consensus-for-an-integrated-food-and-rural-development-policy/>

¹⁶ Welsh National Assembly Environment and Sustainability Committee. (2014). Report of Enquiry into Sustainable Land management

¹⁷ European Commission. (2016). A strategic approach to EU agricultural research and innovation. Draft paper. Brussels 26-28th January Conference: Designing the path: a strategic approach to agricultural research and innovation

47. Due to the scale of the degradation of biodiversity and ecosystem services, it makes sense that we must develop not just sustainable but **ecologically restorative policies** as called for by Professor Terry Marsden¹⁸.
48. In order for farmers and farming practices to shift towards a longer-term focused, ecologically and economically sustainable system capable of delivering for wider societal need, the economics of the system will also have to shift. Therefore, there is a need to create new market systems that can support this new approach. Government, industry and corporate backing for these emerging market systems will help to prevent them from becoming marginalised and trivialised (as support for ‘butterflies and birds’)¹⁹.
49. Brexit will require us to develop our own common principles upon which future combined agricultural, environmental and public health policies should be based. Wales is ideally placed to do this by developing and implementing an innovative, **Integrated Natural Environment Policy**. This should enable those working within a resilient natural environment to deliver economic, social and environmental value to Welsh society. These new policies and systems should look to help Welsh Government fulfil its obligations under the both the **Well-being of Future Generations (Wales) Act 2015** and **Environment (Wales) Act 2016**.
50. It is worth highlighting that this should be an innovative, integrated framework for the ecologically and economically sustainable resource management should include **Welsh forestry** and **marine natural resources**.

Integrated Natural Environment Policy

51. To create a **sustainable and high quality natural environment** Wales needs an economically viable landowning community working within the natural environment to ensure that it is capable of providing both for the needs of wildlife and of society. The two cannot and should not be separated.
52. Wales should have an **Integrated Natural Environment Policy** which would invest and support our natural environment and be based upon the following key principles:
 - a) **Creating multiple outcomes** for example supporting sustainably produced food, reversing habitat and wildlife declines, conserving soil and carbon and managing the movement of water,
 - b) **Investment and not subsidy** investing public money in public need,
 - c) Fostering greater **public understanding** of the value of the natural environment and the role of consumer choice,
 - d) Promoting **high quality, high welfare, ecologically sustainable** food production,
 - e) **Upskilling** for those who work in the environment including land owners and managers and measures to support innovation.
53. If these principles were delivered appropriately it would deliver against multiple Welsh Government policy and legislative areas. Critically, it would secure the recovery of biodiversity and ensure sustainable economic, cultural, ecological and (wider) environmental management of the Welsh environment into the future.
54. The following headings comprise the evidence behind the development of the core principles of the Integrated Natural Environment Policy.

¹⁸ Marsden, T <http://blogs.cardiff.ac.uk/sustainableplaces/2016/09/22/brexit-towards-building-a-new-consensus-for-an-integrated-food-and-rural-development-policy/>

¹⁹ iBid

Creating multiple outcomes

55. The last seventy years has broadly seen an industrialisation of our countryside with a reductionist approach to land management, with increasing geographical specialisation and single-outcome land parcels. For example,
- large swathes of agricultural land have been given over to intensive single-use livestock or crop production to the exclusion of all other outcomes,
 - large areas of upland Wales planted with conifer crops without consideration to potential benefits from that land other than timber production.
56. Land management still generally operates under a system where efficiency in the primary outcome is considered more important than delivering multiple outcomes. If the 'value' of a field is measured in crop yield alone, the collateral damage to the wider environment becomes an irrelevance.
57. It is the decoupling of ecosystem processes from agricultural practice that has caused problems for our wildlife²⁰ and degraded the delivery of ecosystem services (e.g. water quality and quantity). Sayer *et al*²¹ states that "*agricultural expansion and intensification threatens environmental goods and services, which could in turn undermine efforts to meet future food demands, while also affecting livelihoods and health*".
58. It is damaging to silo one area to production and another to wildlife or environment. The 'value' of a field should instead incorporate;
- the **multiple societal benefits** accrued from sustainable management (e.g. clean water, reduced flood risk, reduced greenhouse gas emissions, wildlife),
 - the **true 'costs' associated with production** (externalities such as cleaning up pollution²²). As a consequence unsustainable practises which negatively impact upon the delivery of the associated benefits would reduce the overall value of what is being produced, shrinking the profit margin and resulting in economic instability. Some evidence already exists to document how multiple outcomes can be integrated into land management²³.
 - **restore biodiversity on all farmland systems** and avoid geographically restricting biodiversity action.
59. To help deliver the above we need to avoid being reductionist. We also need to exercise caution in the use of proxies for simple indices of quality or change. Effort needs to be expended in understanding local

²⁰ "By using and contaminating land and water, agriculture is a greater threat to biodiversity than any other human activity".

Garnett, T, Appleby, M.C. et al (2014). **Sustainable Intensification in Agriculture: Premises and Policies. Science 341 pp. 33-34**

²¹ "Global demand for agricultural land is on a collision course with environmental protection goals. We face a "perfect storm" as we struggle to feed a burgeoning population on a diminishing supply of land, water, nutrients, and biodiversity.. Despite global efforts, ambitious targets and massive expenditure, there are as yet no general and effective solutions for meeting both nature conservation goals and human needs". Sayer, J., Sunderland, T., et al (2012) **Ten principles for a landscape approach to reconciling agriculture, conservation, and other competing land uses. PNAS 110 (21) 10.1073/pnas.1210595110**

²² Professor Dieter Helm states this has not been the case for farming with the private costs of farming not reflecting the full social or environmental costs. Farmers can avoid costs, by passing on their wastes to others to clean up e.g. diffuse pollution cleaned up by water companies {and Natural Resources Wales}. As the polluter, they should pay, just as other parts for the economy are confronted with the external costs they impose on the rest of us. Yet the current CAP works the other way around: farmers are paid to do less environmental damage. **Dieter Helm (September 2016) British Agricultural Policy after BREXIT - Natural Capital Network** – <http://www.dieterhelm.co.uk/natural-capital/environment/agricultural-policy-after-brexit/>

²³ "It [the UK National Ecosystems Assessment (NEA)] has also highlighted some of the ways in which wetland ecosystem services can be beneficially exploited, for example as buffer zones, as a means to protect freshwater resources or in flood risk management, as well as the trade-offs inherent in different land uses" **Maltby, E., Acreman, M. et al (2013) The challenges and implications of linking wetland science to policy in agricultural landscapes – experience from the UK National Ecosystem Assessment. Ecological Engineering 56 pp. 121-133**

environments and tailoring solutions and monitoring programmes²⁴ to local circumstances. We need to address the reasons that have contributed to poor outcomes in the past such as

- the slow reduction of expert input,
- poor monitoring,
- use of simple proxy indices such as species richness²⁵,
- delivery of one-size-fits-all solutions,
- single outcome approaches
- ‘computer’s word is final’

60. **The production of food, the recovery of nature, climate mitigation and adaption is compatible going forward.** The food and farming sector need to have a central role in Wales’ obligations under the new legislation to reduce carbon emissions and reversing the loss of biodiversity. Multiple outcomes are possible even when taking into account concerns from the agricultural industry about the scale of domestic food production. In some cases the local solutions may reduce agricultural productivity, but in other cases sustainable intensification could be achieved, based on established options²⁶. It is worth noting that the relationship between farm size and ecosystem services is complex²⁷.

61. The principles for a landscape approach to reconcile agriculture, conservation, and other competing land uses have already been identified by Sayer *et al* (2012)²¹. One of Sayer *et al* ten principles is **multi-functionality**, advocating addressing trade-offs in land use in a “*spatially explicit and ecosystem-driven manner that reconciles stakeholders’ multiple needs, preferences, and aspirations*”. It is essential that any new investments (rather than subsidies) require multi-functionality and **bespoke solutions to local circumstances but cumulatively able to deliver national priorities.**

Investment not subsidy

“The Common Agricultural Policy spends €1 billion a week of taxpayers’ money across the EU31 – a vast amount that could be doing so much more to support and incentivise those farmers doing the right thing for society and the environment and push up standards across the board. But only a tiny proportion of this expenditure represents good value for money by being targeted at sustainable farming. Much of the rest

²⁴ Overall, the validity of different proxies for ecosystem function and service provision has been the focus of much research but few proxies have been shown to work well across a wide range of scenarios. Proxies should be used cautiously in situations in which they have been shown to work, or subjected to further validation beyond those circumstances” Stephens, P.A., Pettorelli, N. *et al* (2015) Management by proxy? The use of indices in applied ecology. *Journal of Applied Ecology* 52 (1) pp. 1-6

²⁵ *ibid*

²⁶ “Successful SI [Sustainable Intensification] will require (a) establishing how land-sharing can deliver sufficiently high yields and multiple ecosystem services, (b) quantifying trade-offs between yields and different environmental benefits and assessing how best to resolve them across different circumstances and spatial scales, and (c) exploring policy and market mechanisms that enhance implementation of sharing or sparing initiatives.” Garnett, T., Appleby, M.C. *et al* (2014). Sustainable Intensification in Agriculture: Premises and Policies. *Science* 341 pp. 33-34

²⁷ “Small farmers are more likely than their larger counterparts to see farming as essential to the local community and contributions to the call for evidence provided many examples of their support to local social capital. The available empirical evidence suggests however, that the contribution of small farms to the environment is more complex. Contributors made the case for their farming in an environmentally friendly manner and while small farms only manage a small proportion of the land, they do play a fundamental role in the collective provision of rural environmental services, although small farms appear to be less equipped than larger ones to meet the challenges of soil and water quality management. For the most part, the evidence suggests that the relationship between farm size and environmental value, community connections and so on is highly complex rather than clear cut. There is a complex interplay of size, farm type, attitudes and behaviour and in favourable conditions this interplay can result in a very positive role for small farms.” and “Further declines in the number of small farms could mean fewer local suppliers of food and other services. The environmental implications would depend very much on what replaces small farms and it would be just as dangerous to assume that all large farms are environmentally damaging as it would to assume that all small farms are environmentally beneficial. Ultimately, rather than privileging one set of farm structures over another it a question of maintaining a diversity of farm size structures. And it is this diversity that is now under threat.” Winter, M., Lobley, M. *et al* (2016) Is there a future for the small family farm in the UK? A report to The Prince’s Countryside Fund.

ends up in the coffers of big business or capitalised in agricultural land prices, delivering little more than private profit or too often is supporting unsustainable farming systems, stifling innovation and hampering competitiveness”

A Square Meal Report²⁸

62. One of the key issues for agriculture, post-Brexit, is the level of future financial provision from the government for the industry. Public money has traditionally used to pay for things that are for the greater public good but which may not be in any one person’s short term interests at any one time (NHS, roads etc.).
63. There can be little doubt that short term decision making is a problem for current land management which leads to cumulative negative impacts affecting everybody. For this reason there is merit in arguing for **public investment in goods and services** that have both inherent value and societal benefit beyond the landholding (including targeted interventions for wildlife and provision of ecosystem services). This would be more defensible to the electorate than a subsidy for individual businesses. The public investment in goods and services would also adhere to the **Well-being of Future Generations (Wales) Act 2015** and **Environment (Wales) Act 2016** requirements.
64. Therefore, future taxpayer support should pay explicitly for outcomes which are of public good and should be framed as **investment and not subsidy**. This would decouple the money entirely from food production and prevent it being regarded as compensation for income forgone. This would involve removing both
 - Basic Payment Scheme system which is based on the old entitlements (historically linked to head of livestock)
 - Good Agricultural Environmental Condition
65. This subsidy should be replaced with a more positive, targeted **Payments for Ecosystem Services (PES)** investment model (unlike agri-environment schemes, PES are not constrained by World Trade Organisation rules). This model should also incorporate **targeted interventions for biodiversity** which complement the delivery of ecosystem services, reflecting the intrinsic and cultural values associated with wildlife. Such funding to the industry might even prove logistically easier to design and deliver than adapting current systems bound up in EU rules.

Foster greater public understanding of value of natural environment and role of consumer choice

66. There are a number of areas of concern under this heading that need to be addressed by a future Integrated Natural Environment Policy, namely:
 - Food is currently under-valued by society, and may be sold for less than the cost of production²⁹,
 - There is disconnect between consumers and producers, leading to consumer choices in the absence of understanding of the impacts of those choices³⁰,
 - Environmental costs (externalities) are not represented in the retail price³¹,

²⁸ Square Meal: Why we need a new recipe for the future – RSPB, the Wildlife Trusts, Friends of the Earth, Sustain, the National Trust, Better Eating, Compassion in World Farming, Food Research Collaboration, Food Ethics Proposal, Soil Association - July 2014 <http://foodresearch.org.uk/wp-content/uploads/2014/07/squaremealfinalpdf-1.pdf>

²⁹ “The average milk price farmers received in December 2015 was 23.71ppl. Two years ago this price was 34.25ppl. Some farmers are now receiving milk prices of production is nearer 30ppl. So most UK farmers are losing money on every litre of milk they produce”. NFU (2016), Backing British dairy: Our Q&A. <http://www.nfuonline.com/back-british-farming/news-channel/backing-british-dairy-our-qa/> accessed 26-08-16 around 15ppl, while the average cost of

³⁰ “Consumer knowledge regarding farming practices in the poultry sector is limited and leads to various misconceptions about the poultry industry. Consumer perceptions of animal welfare in the poultry sector and producer perceptions are not always the same. The final two points appear to suggest a disconnect between the consumer and the poultry industry that may be an issue of increasing concern in the future.” **Burton, E., Gatcliffe, J. et al (2016) Sustainable Poultry Production in Europe / Poultry Science Symposium Series Vol 31**

³¹ “The real cost of the per capita UK food basket (£24.79) is calculated to be £2.91 more per person wk⁻¹ (11.8%) if externalities and subsidies are included, with farm externalities (81 p), domestic road transport (76 p), government subsidies (93 p) and shopping transport (41 p) contributing the most.” Prett, J.N., Ball, A.S. et al (2005) Food Policy 30 (1) pp. 1-19

- Cheap imports put pressure on British products that are currently produced to a higher environmental and welfare standard. We are also seeing increasing cases of ‘upselling’ poor environmental and welfare conditions, capitalising on more general environmental awareness (unmatched by scrutiny) such as Tesco ‘branding’ their fresh fruit and vegetables with British sounding farm names, even when the products are from overseas.
67. This could be addressed by a move towards retail prices reflecting more closely the ‘true cost’ of food (e.g. incorporating the cost of externalities) and costs associated with producing high welfare, ecologically sustainable food. In this scenario, the industry would be less dependent on subsidy or environmental investment. For those on lower incomes, subsidy could occur at the point of purchase, rather than production. In that way the farmers receive the full value of what they produce, and those who are unable to afford it are supported by the government. This allows the true cost of food to be recognised, and the true value of these high quality food stuffs can be received by all. Under this mechanism all food would be produced to a high welfare and ecological standard and all people would be able to benefit.
68. Public policy should look to support small, diversified farms whose holdings contribute significantly to farmland biodiversity and sustainable production.
69. The Square Meal Report²⁸, states *“the countryside, farming and food deserve a far higher priority in public policy and must be treated as issues central to people’s lives and their wellbeing... {we need to adopt an approach of} a culture of fairly priced, sustainable, seasonal British produce and diets based on more fresh fruit and vegetables, less (and more sustainably produced) dairy and meat, and less junk food”*. This will be best delivered by two approaches –
- 1) By increasing public awareness of the true current cost of industrial production, as outlined above,
 - 2) By increasing understanding by engaging more people in local food production.
70. In addition, community food production has been growing in recent years³² with 300 community food co-ops running across Wales from places such as schools, allotments, community centres, church halls, workplaces and many other different venues. They help people eat more healthily and save money and can be better for wildlife than the countryside³³. Therefore, there should be support for community food production; this would not be very demanding on national budgets, in relative terms, and would tie in to the need to increase
- value of food,
 - understanding of how it is produced,
 - the wider health and wellbeing benefits.
71. Community food production also needs to be tied into the same ecological principles as more commercial farming but with a focus on understanding of the public. To help achieve this aim, we should encourage wider stakeholder participation by increasing or widening agri-food community.

Promote high quality, high welfare, ecologically sustainable food production

72. Our relationship with food has become unhealthy and unsustainable. Half of food purchased is wasted and our over consumption results in 58% of us being overweight (22% obese)³⁴ (this is related to processed food), which costs NHS Wales £73 million a year³⁵. However, there has been growing recognition of the relevance of food policy for example, the increasing concern about food poverty and poor diet¹⁸.

³² Community Food Coop <http://www.foodcoopswales.org.uk/>

³³ University of Bristol - <http://www.theguardian.com/environment/2014/oct/28/first-great-british-bee-count-reveals-allotments-make-best-bee-habitats>

³⁴ Welsh Health Survey: 58% of adults overweight or obese <http://www.bbc.co.uk/news/uk-wales-32994381>

³⁵ Welsh NHS <http://www.wales.nhs.uk/news/33731>

73. Sustainable food is now forming a major part of the new UN Sustainable Development Goals and Sustainable Cities and Regions agenda. It is no longer seen as a narrow sectoral issue, but a major vehicle for delivering low-carbon sustainable transitions more generally¹⁸.
74. Over 80% of the land area in Wales is under agricultural production³⁶. It has been estimated that the external costs (impact upon the natural environment) of agriculture in the UK are over £3 billion per year, as a result of air and water pollution, soil erosion, and loss/degradation of wildlife and wildlife habitats³⁷. However, the UK currently spends more than £3.26 billion a year of public funds on subsidising the existing unsustainable agricultural system³⁸.
75. Consequently, the manner in which food is produced has a significant impact upon UK wildlife. As stated in the Square Meal report²⁸, we need to
- support people to reconnect with the countryside,
 - understand where their food comes from,
 - how it has been produced,
 - why this is so important.
76. Farming can and should do better for society and the natural environment. **Food, health and the environment should be the three cornerstones of future policy, with none being advanced at the expense of another.** We should be creating the right conditions to produce more high quality, healthier food, produced to high welfare and environment standards.

Advocate upskilling, professionalisation of those who work with the natural environment

"In the end, we will conserve only what we love, we will love only what we understand, and we will understand only what we are taught."

Baba Dioun - Director of the Agricultural Policy Unit, Ministry of Agriculture, Senegal

77. Despite their responsibility for the management of over 80% of the Welsh land area, the agricultural workforce (plus forestry and fishing) in Wales comprises less than 3% of the Welsh population³⁹. Only 20% of this workforce has a qualification which equates to a Level 4 (equivalent to a Foundation Degree or Higher National Diploma) or above, compared to 40% in other sectors of the economy⁴⁰. This workforce is not required to achieve any educational training beyond secondary education.
78. As a consequence of this and the now multi-generational dependence on industrialised methods, the agricultural sector in Wales relies heavily on anecdotal approaches and suffers from the loss of ecological awareness. For example, it has been shown that for farmers to move from a conventional to an organic food supply chain, they must *"forget many of the practices so characteristic of the conventional chain in order to (re)learn how to farm in an ecologically benign fashion"*⁴¹. This paucity of ecological understanding within the

³⁶ Assembly Research Briefing The Farming Sector in Wales (sept 2016)

<http://www.assembly.wales/research%20documents/16-053-farming-sector-in-wales/16-053-web-english2.pdf>

³⁷ Figure from Eaton MA, et al, 2012. The state of the UK's birds 2012. Sandy, Beds: RSPB, BTO, WWF, CCW, NE, NIEA, SNH and JNCC

³⁸ Rotherham L (2010) Food for Thought: How the Common Agricultural Policy costs families nearly £400 a year. London: The Taxpayers Alliance. <http://www.taxpayersalliance.com/cap.pdf> Accessed 25 June 2014

³⁹ The Welsh Workforce Employment in Wales August 2014 <http://www.assembly.wales/research%20documents/rn14-020%20the%20welsh%20workforce%20%E2%80%93%20employment%20in%20wales/rn14-020.pdf>

⁴⁰ Jones, W. 2015. Independent Review of Learning delivered by FE colleges and the Relevance of that delivery supporting Farm businesses in Wales

⁴¹ Morgan, K & Murdoch, J (2000) Organic vs. conventional agriculture: knowledge, power and innovation in the food chain. *Geoforum* 31 (2) pp. 159-173

agricultural sector combined with the growing demand for a multifunctional countryside highlights the profound need for upskilling and professionalisation of the agriculture sector.

79. In addition, education will be required if landowners are to become innovative and benefit financially from a shift towards new markets which promote wider societal benefit (ecologically and economically sustainable systems). This will help different sectors adhere to the principles and goals of the **Well-being of Future Generations (Wales) Act 2015** and **Environment (Wales) Act 2016**.