

WELSH GOVERNMENT INTEGRATED IMPACT ASSESSMENT

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Official(s) completing the Integrated Impact Assessment (name(s) and name of team):	Land Management Reform Division
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Cabinet Secretary/Minister responsible:	Minister for Environment, Energy and Rural Affairs
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This document is also available in Welsh.

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SECTION 1. WHAT ACTION IS THE WELSH GOVERNMENT CONSIDERING AND WHY?

Legal framework

As we set out in *Sustainable Farming and our Land*, the Well-being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016 establish an important legislative framework, focused on sustainability, from which to develop proposals for future land management policy in Wales. We have developed a policy approach for all future agricultural support provided by the Welsh Government based upon the requirements of these two Acts. An overview of the key relevant requirements is provided below.

Well-being objectives

Taking Wales Forward 2016–2021 sets out the Welsh Government's objectives in response to its obligations under the Well-being of Future Generations (Wales) Act 2015. The objectives contained within the document of direct relevance to this policy area are:

- *Work with partners to secure a prosperous future for Welsh agriculture, building on our early engagement following the EU referendum;*
- *Make progress towards our goal of reducing our greenhouse emissions by at least 80% by 2050 and continue our work to protect and enhance biodiversity and local ecosystems;*
- *Continue to invest in flood defence work and take further action to better manage water in our environment.*

Ways of working

The Act requires any public body acting in accordance with the sustainable development principle to take account of a set of ways of working. We describe each one and explain how we are giving it effect through the proposals contained in this White Paper.

1. Long-term (the importance of balancing short term needs with the need to safeguard the ability to meet long term needs, especially where things done to meet short term needs may have detrimental long term effect).

The proposed policy supports the delivery of a number of outcomes which promote societal long-term needs such as climate change mitigation and the reversal of biodiversity decline whilst enabling farmers to continue to make a living from agriculture. Our regulatory proposals will support this and will be flexible to adapt to longer term needs.

2. Integration (the need to take an integrated approach, by considering how– (i) the body's well-being objectives may impact upon each of the well-being goals; and (ii) the body's well-being objectives impact upon each other or upon other public bodies' objectives, in particular where steps taken by the body may contribute to meeting one objective but may be detrimental to meeting another).

We have considered the Welsh Government's Well-being Objectives set out in *Taking Wales Forward 2016-2021*, and have identified those relevant to the White Paper. We have concluded an approach integrating the drivers of prosperity for agriculture with actions to enable long-term improvement of the rural environment offers the best way forward for future agricultural support.

3. Involvement (the importance of involving other persons with an interest in achieving the well-being goals and of ensuring those persons reflect the diversity of the population of—Wales (where the body exercises functions in relation to the whole of Wales), or the part of Wales in relation to which the body exercises functions).

This will be the third public consultation on this important subject, the first two having generated in excess of 15,000 responses in total. In addition, we have held public meetings and involved a range of stakeholders through the Brexit Roundtable and its sub-groups. We are developing our co-design programme and are also engaging with key stakeholders.

4. Collaboration (how acting in collaboration with any other person (or how different parts of the body acting together) could assist the body to meet its well-being objectives, or assist another body to meet its objectives).

The development of these policy proposals has involved considerable collaboration between different policy teams within the Welsh Government, Natural Resources Wales and other stakeholders. We expect this approach to continue during the development of the Agriculture (Wales) Bill and ancillary secondary legislation.

5. Prevention (how deploying resources to prevent problems occurring or getting worse may contribute to meeting the body's well-being objectives, or another body's objectives).

Most of the environmental issues associated with agriculture arise from a desire to make land deliver outputs beyond its natural capacity, a narrow focus on economic outcomes (partly as a result of EU and UK Government agricultural policy over the last five decades) and the advent of large scale issues such as climate change. Our proposals attempt to integrate actions which will help mitigate or reverse these environmental impacts with agricultural practice in a way enabling the delivery of truly sustainable farming. Our proposals for enforcing regulatory compliance are intended to deter activities detrimental to the environment, whilst being proportionate to the scale of the offence.

In addition to the Well-being of Future Generations (Wales) Act 2015, the Environment (Wales) Act 2016 also places duties upon the Welsh Ministers which have informed our further work. The Annex to the White Paper provides more detail on this.

Summary of proposals

The White Paper sets out our intention for the Agriculture (Wales) Bill. It is proposed it will be:

“Strategic in scope, setting a support framework which can accommodate the development of agriculture and forestry within Wales for the next fifteen to twenty years¹.”

The Bill will provide a framework of high-level, enabling powers for Welsh Ministers. This will provide flexibility to adapt and respond quickly and effectively to changing circumstances. Where needed, further details will generally be provided in subordinate legislation and/or guidance which would be the subject of consultation in the usual way. This draft assessment considers the impacts likely to arise from the enabling powers and identifies where further assessment should be done where the detail of the policy is still being developed.

The principle of Sustainable Land Management underpins all proposals in the White Paper. This is defined as:

“The use of land resources, including soils, water, animals and plants, for the production of goods to meet changing human needs, while simultaneously ensuring the long-term potential of these resources and the maintenance and enhancement of their environmental benefits”.

The main proposals in the White Paper are to:

- Establish a farm support scheme (the *Sustainable Farming Scheme*) to replace current EU schemes. The proposed scheme will support sustainable food production whilst addressing climate change, public health and environmental issues associated with agriculture;
- Provide support to the wider industry and supply chain where it supports the continued delivery of Sustainable Land Management;
- Reduce regulatory complexity by consolidating legislation into one set of National Minimum Standards, supported by a range of advice and guidance to encourage compliance;
- Improve the way agricultural regulation is enforced by introducing new measures to ensure this is proportionate to the scale of the offence;
- Improve monitoring and data sharing through the effective use of data and remote technology to aid scheme and regulatory compliance monitoring;

¹ Oral Statement in the Senedd by Minister for Environment Energy and Rural Affairs, 7 July 2020.

- Improve animal health and welfare;
- Improve regulation and support for forestry and woodland management;
- Introduce a change to the Wildlife and Countryside Act 1981, enabling Welsh Ministers to regulate the use of snares;
- Transfer powers taken for the Welsh Ministers through the UK Agriculture Act.

Impact

This is a draft impact assessment of the proposals contained in the White Paper. We welcome views on the identified impacts, the evidence presented and any areas we have not yet considered.

Although several issues were identified with the overall policy framework set out in our second consultation, *Sustainable Farming and Our Land*, there was broad agreement the proposed framework was an appropriate response to the requirements of the Well-being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016. Overall, the framework supports the principle of providing future funding to support and reward farmers who operate sustainable farming systems.

Following both consultations some respondents felt the framework did not give due attention or support to ensuring food security by subsidising food production. This perspective informed the strongest opposition to the framework. Whilst it is not possible for Wales to be fully self-sufficient in food production, we intend to work with the sector to provide sustainable, high quality food that meets consumer needs.

We have undertaken a programme of co- design with over 1,900 participants to gather views in order to inform the design of the proposed scheme. The vast majority of participants were farmers. As we develop our thinking further we will continue to work with stakeholders and the wider sector to design a system which can produce sustainable, high quality food that meets consumer needs. The White Paper sets out the legal framework to enable financial support to be provided to the agricultural sector. We will consult further on the detail of scheme design.

In terms of regulation, respondents to the *Sustainable Farming and Our Land* consultation called for simple, effective and proportionate regulation. There was also concern a regulatory environment in Wales which differed from the rest of the UK may reduce the competitiveness of Welsh farms. One of the key principles of regulatory reform will be to make regulation more accessible to farmers and land managers. This includes having clear National Minimum Standards supported by advice and guidance, smarter monitoring and proportionate enforcement to help make regulation less onerous. We were encouraged by the majority of respondents agreeing with these key principles. The White Paper sets out

the legal framework to develop the National Minimum Standards. We will consult further on the detail.

Costs and Savings

There are no immediate costs arising from this consultation document as the focus is primary legislation.

Costs and savings of the proposals will be assessed as part of a Cost Benefit Analysis and Regulatory Impact Assessment which will be published alongside the Agriculture (Wales) Bill.

Mechanism

The proposal is to bring forward primary legislation. A Regulatory Impact Assessment will be completed alongside the Agriculture (Wales) Bill.

SECTION 2. WHAT WILL BE THE EFFECT ON SOCIAL WELL-BEING?

2.1 People and Communities

How (either positively or negatively), and to what extent (significant/moderate/minimal impact), will the proposal affect people and communities?

We expect our proposals to have a positive impact on people and communities. Adopting Sustainable Land Management as the overarching principle for future policy of regulation and support will protect our natural resources and produce positive health outcomes for the people of Wales. Support will enable farmers to be rewarded for the sustainable production of food and for their contribution to the health and wellbeing of our nation. This will bring benefits to farmers, farming families, rural communities, consumers of Welsh produce and the people of Wales.

We consider in more detail the expected impacts on particular individuals, groups and communities in the Children's Rights, Rural Proofing, Equalities and Health Impact Assessments of our proposals. In addition the Welsh Language assessment considers the importance of agriculture to rural, often Welsh-speaking, communities.

2.2 Children's Rights

Please see Annex A for the Children's Rights Impact Assessment of the proposals.

2.3 Equality

Please see Annex B for the Equality Impact Assessment of the proposals.

2.4 Rural Proofing

Please see Annex C for the Rural Proofing Impact Assessment of the proposals.

2.5 Health

Summary of predicted impacts

It is anticipated the White Paper proposals will have a number of health impacts on the general public and on the farming community. Specifically:

- Environmental improvements providing physical health benefits to the Welsh public. Proposals within the White Paper should have a positive impact on the environment with associated health benefits for the people of Wales. In particular, there should be long term benefits regarding air quality, water quality, flood risk;
- Prevention, control and elimination of animal diseases, contributing towards safer food, improved public health and minimising the risk to people from diseases such as salmonellosis;
- Opportunities for increased physical activity (through enhanced public access opportunities and contact with nature) and the positive impacts of this on the physical and mental health of the population;
- Reducing the negative impacts of regulatory and administrative burden on farmers and land managers through more efficient data collection and sharing and through providing clear standards to which all farmers should comply together with a range of advice and guidance to aid understanding;
- The level of change has the potential to have negative impacts on farmer mental health. Clear advice, guidance and support will be important to mitigate this, as will be exploring how transition to the new scheme/National Minimum Standards can be managed in a way to allow farmers time to adapt. We will work with the sector to understand these issues further.

There are a number of potentially significant impacts on health we have identified within our proposals. A more detailed Health Impact Assessment will be undertaken to fully consider the extent to which the health and well-being of the people of Wales, as well as farming and wider rural communities, may be potentially affected positively and/or negatively and how any potential negative impacts can be mitigated by the policy.

Throughout the development of the policy, mitigating actions which have been identified in our initial impact assessment have been incorporated, these are described in the following text.

2.5a How (either positively or negatively), and to what extent (significant/moderate/minimal impact), will the proposal impact health determinants?

♦ Lifestyles

Our proposals should provide moderate benefits to the lifestyle determinants of health of the people of Wales. Increased opportunities for access to, and enjoyment of, the countryside should contribute to better physical and mental health outcomes for the general population as should food safety protections.

Diet and Public Health

The animal health and welfare proposals will help to prevent, control and eliminate animal diseases, contributing towards safer food and improved public health. Minimising the risk to people from diseases such as, for example, salmonellosis can help reduce the demand on health services, and the need for antibiotic treatment²³.

Antimicrobial resistance (AMR) is one of the greatest, long-term threats to human health, both in Wales and globally. The impacts of unchecked AMR are wide-ranging and extremely costly, not only in financial terms, but also in terms of global health, food security, environmental wellbeing, and socio-economic development. Already, AMR is estimated to cause at least 700,000 deaths around the world each year. That figure is predicted to rise to 10 million, alongside a cumulative cost of \$100 trillion, by 2050 if no action is taken⁴.

Globally, unchecked AMR also threatens many Sustainable Development Goals. The World Bank estimates that an additional 28 million people could be forced into extreme poverty by 2050, through shortfalls in economic output, unless resistance is contained.

Wales will also be impacted by AMR if not controlled, though work to quantify the impact in terms of lives lost has not yet been done.

AMR is driven by the use of antibiotics. Part of control is to reduce antibiotic use, both in animals, whether farmed or kept for other purposes, and in people. For farmed animals, this means keeping them as healthy as possible in high health production systems. This reduces the need to use antibiotics and so reduces the risk of AMR development. The animal health and welfare proposals in the White Paper are designed to drive healthy livestock production.

² Welsh Government (2019). Antimicrobial resistance in animals and the environment: implementation plan.

³ Welsh Government (2019). Wales Animal Health and Welfare Framework: implementation Plan 2019-20.

⁴ WHO (2019). No time to Wait: Securing the future from drug resistant infections.

Lifestyles and Physical Activity

Farmers manage approximately 88% of the land in Wales⁵. This includes the hedgerows, dry stone walls and other landscape features the public value whilst visiting the 16,000 miles of footpaths, 3,000 miles of bridleways, 1,200 miles of cycle network and 460,000 hectares of open access land⁶. One of the ways farmers support physical and mental well-being of the general population is through their maintenance of the countryside and these rights of way. The Welsh countryside provides space for physical activity which contributes to mental well-being. Spending time in the countryside has been shown to have positive mental health and well-being effects⁷.

Our proposals support the ongoing regulatory protection of landscape features of reported importance in Wales which will benefit enjoyment of the countryside for all.

Our scheme proposals include improved provision for opportunities for public access to the countryside, and this should enable greater levels of recreation (in the form of walking in, and enjoyment of, the Welsh countryside) by the people of (and visitors to) Wales.

Wider ranging opportunities for public access to the countryside may also generate additional public health benefits. For example:

- A 2007 review⁸ of the links between the natural environmental and well-being concluded “*The natural environment provides physical, mental and social well-being benefits. There are synergistic effects between these benefits*”. It also noted “*increased levels of physical activity are known to have both a preventative role in cardiovascular and musculo-skeletal diseases and inhibiting stroke and cancer. It also has a positive effect on range of health determinants such as body weight, blood pressure, cholesterol levels and so forth*”.
- A 2007 study⁹ looking at the mental health impacts of a range of countryside green activities across the UK concluded “*green exercise generates mental health benefits regardless of the level of intensity, duration or type of green activity undertaken*”. The

⁵ Either through farmland or commons. Source: Welsh Government (2019). Agriculture in Wales.

⁶ NFU Cymru (2017). Farming – Bringing Wales Together.

⁷ Pretty, J., Griffin, M., Peacock, J., Hine, R., Sellens, M., & South, N. (2005). A countryside for health and wellbeing: the physical and mental health benefits of green exercise. Countryside Recreation Network, Sheffield Hallam University.

⁸ Newton, J. (2007). Wellbeing and the Natural Environment: A brief overview of the Evidence, University of Bath.

⁹ The activities included conservation, walking, mountain biking, woodland activities, horse riding, boating and fishing. Pretty, J., Peacock, J., Hine, R., Sellens, M., South, N., & Griffin, M. (2007). Green exercise in the UK countryside: Effects on health and psychological well-being, and implications for policy and planning. *Journal of environmental planning and management*, 50(2), 211-231.

study reported all participants demonstrated “significant improvement in their self-esteem and total mood disturbance.....factors of anger-hostility, confusion-bewilderment, depression-dejection and tension anxiety all significantly improved post-activity.”

- A 2009 study¹⁰ evaluated changes in self-esteem and mood after walking in four different English National Trust natural and heritage sites and found “Feelings of anger, depression, tension and confusion all significantly reduced and vigour increased. Thus, the environment plays an important role in facilitating physical activities and helping to address sedentary behaviours. Walking, in particular, can serve many purposes including exercise, recreation, travel, companionship, relaxation and restoration. However, walking in greenspaces may offer a more sustainable option, as the primary reward is enhanced emotional well-being through both exposure to nature and participation in exercise.”

Farm Safety

Data from the Health and Safety Executive (HSE)¹¹ shows there were six fatalities on farms in Wales in 2017-18, compared to a five year moving average (2013/14 to 2017/18) of four per year. Separately to the Welsh Government proposals for a scheme, the HSE has produced a booklet ‘What a good farm looks like’¹². As our proposals develop, we will consider how Continued Professional Development could incorporate farm safety.

♦ Social and community influences on health

A Public Health Wales report¹³ identifies a number of key uncertainties and challenges with the potential to impact on farmers’ well-being, one of which being isolation and loneliness. There is evidence that involvement in environmental schemes can mitigate some of these well-being issues. For example, the EU LIFE report¹⁴ into the Burren LIFE project (in Eire) noted “Another initially unforeseen benefit of the subcontracted conservation work was its ability to offset the social isolation that many farmers experience as the work was usually carried out by teams of at least two and provided an opportunity for social interaction”.

Similarly, a survey¹⁵ of Environmental Stewardship (ES) participants in England reported ES can “play an important part in developing new social contacts and networks. Of the advisors

¹⁰ Barton, J., Hine, R., & Pretty, J. (2009). The health benefits of walking in greenspaces of high natural and heritage value. *Journal of Integrative Environmental Sciences*, 6(4), 261-278.

¹¹ Health and Safety Executive (2018). Fatal injuries in agriculture, forestry and fishing in Great Britain 2017/18.

¹²Health and Safety Executive. What a good farm looks like. <https://www.hse.gov.uk/agriculture/resources/good-farm.htm>

¹³ Public Health Wales and Mental Health Foundation (2019). Supporting farming communities at times of uncertainty. An Action Framework to support the mental health and well-being of farmers and their families.

¹⁴Technical Final Report (LIFE04NAT/IE/000125). Burren LIFE Farming for Conservation in the Burren.

¹⁵ Mills, J., et al. (2010). Estimating the Incidental Socioeconomic Benefits of Environmental Stewardship Schemes. Final Report. Countryside and Community Research Institute.

used by agreement holders, 40% were not known to them previously, which indicates these agreement holders had to reach out beyond the established social networks around their farm or business for this expertise. This was particularly the case for HLS [Higher Level Stewardship] agreement holders and for the lowland dairy and livestock farms. These new linkages and flows of information can potentially lead to profound changes in social and business activity.” The survey found ES schemes, particularly HLS, have also brought agreement holders in contact with more farmers and the general public. It appears the social contact prompted by scheme membership (hosting or attending farm walks, meetings to discuss options, advisor visits) can be greatly valued.

The above evidence suggests our proposals to fund collaborative SLM action amongst farmers, and amongst farmers and members of the wider community, has the potential to reduce social isolation and loneliness for scheme participants, and therefore contribute to better mental health amongst farmers.

♦ *Mental wellbeing*

As mentioned above, our proposals support opportunities for access to, and enjoyment of, the countryside contributing to better physical and mental health outcomes for the general population. The positive well-being impacts landscape features have on those spending time in the natural environment are outlined in “*A Countryside for Health and Wellbeing: The Physical and Mental Health Benefits of Green Exercise*” report¹⁶.

As well as general societal health and well-being, the mental health of farmers is an important consideration. International data demonstrates farming has some of the highest incidents of suicide compared to other occupations, and social isolation at work may be an important factor in this¹⁷.

The Public Health Wales¹⁸ report mentioned above notes “*dealing with uncertainty can increase anxiety and have a detrimental impact on mental well-being amongst farmers, their families and rural communities. Farmers experience high levels of stress and anxiety due to a lower sense of control over farming sector processes (competition, regulation and price margins) and the wider environment effecting farming practice (disease and weather). Farmers are at increased risk of feeling at times that life is not worth living, having a lack of social support, and have been identified as an occupational group at increased risk of suicide*”.

¹⁶ Pretty, J., Griffin, M., Peacock, J., Hine, R., Sellens, M., & South, N. (2005). A Countryside for Health and Wellbeing: The Physical and Mental Health Benefits of Green Exercise- Executive Summary. *Countryside Recreation Network*.

¹⁷ Roberts SE, Jaremin B, Lloyd K. High-risk occupations for suicide. *Psychol Med*. 2013;43(6):1231-1240.; Stark, C., Gibbs, D., Hopkins, P., Belbin, A., Hay, A., & Selvaraj, S. (2006). Suicide in farmers in Scotland.

¹⁸ Public Health Wales and Mental Health Foundation (2019). Supporting farming communities at times of uncertainty. An Action Framework to support the mental health and wellbeing of farmers and their families.

The report identifies six key uncertainties and challenges with the potential to impact of farmers' mental health and well-being:

- The uncertainty and viability of farming in Wales;
- Succession planning;
- Regulation, administration and digitalisation;
- Farmer's prioritising their own health;
- Isolation and loneliness (*detailed above under 'Social and community influences'*);
- The underlying culture and expectations in farming.

We comment on each issue below in relation to our proposals.

The uncertainty and viability of farming in Wales

Public Health Wales notes *"the Brexit process so far has resulted in significant financial and regulatory uncertainty, in particular for farmers Post-Brexit trading scenarios and future funding mechanisms are recognised as challenges to the Welsh farming industry"*. Whilst the principles and policy direction for future support have been set out in the White Paper and in *Sustainable Farming and our Land*, there is still uncertainty about the nature of the post-Brexit trading relationship in agricultural produce. We have commissioned independent consultants to analyse the effects of our scheme proposals on farm businesses in Wales. This will include consideration of the impact of post-Brexit trading scenarios.

Proposals for the National Minimum Standards are based around maintaining the existing legal requirements, whilst making it easier for farmers to understand what they must do in order to comply. It is anticipated this will contribute to reducing the uncertainty surrounding future regulation.

The proposed scheme is a significant change to agricultural policy and support and may be a cause of uncertainty for the farming sector. We propose to mitigate this by designing and implementing a comprehensive communication plan which encourages stakeholder engagement, so the industry can take some ownership of the development of the proposals. More details of the proposed scheme will be shared with stakeholders as part of the ongoing co-design process. This will contribute to greater knowledge and reduced uncertainty of the proposed scheme within the farming community.

Succession planning

A major review¹⁹ of farm succession strategies found “*the probability of intra-family succession increases with farm performance, which was measured in annual farm revenues*” and “*family farms that pursue innovative and sustainable business strategies are expected to have a higher probability of succession because they are more attractive for the next generation*”. We have previously outlined²⁰ our intention the scheme should be available to all farms and should provide an important revenue stream for participating farms. This should help support farms to undertake long-term planning for their businesses. As we note above, we have commissioned independent analysis to examine the effects of our scheme proposals on farm businesses. As part of the work we are doing to reform agricultural tenancies we will consider issues around lease succession and any impacts identified will form part of the Regulatory Impact Assessment. We have no evidence the wider proposals will impact negatively on farm succession planning.

Regulation, administration and digitalisation

The Public Health Wales report cites understanding and complying with regulation as a key challenge to maintaining good mental health and well-being of farmers and land managers. It also recommended the Welsh Government revisit the progress made following the *Working Smarter 2011* report²¹. Our proposals for the introduction of National Minimum Standards, streamlining collection and processing of data from farms and proportionate enforcement are intended to address a number of these recommendations.

The *Working Smarter* report suggested a culture of fear amongst farmers was born out of the complexity of regulations and the ease with which rules can be accidentally broken resulting in a financial penalty. Within our previous consultations, *Brexit and our Land* and *Sustainable Farming and our Land*, we outlined our thinking on the future of agricultural regulation. We proposed the development of set of clear National Minimum Standards supported by accessible advice and guidance to help farmers understand what they need to do to comply. Our White Paper proposals set out further detail.

The *Working Smarter* Report identifies administrative burden as a cause of stress for land owners/managers. Our proposals include provisions to allow regulators to share information and streamline data collection from farmers in order to reduce the need for farmers to provide the same or similar information to multiple regulators. Onsite inspections are another cause of stress cited by the report. To reduce the regulatory burden on farmers we want to ensure the monitoring of compliance with the National Minimum Standards is smarter and more streamlined. We propose to improve the access regulators have to a range of data to help them gain a more accurate understanding of a farmer’s compliance, reducing the

¹⁹ Suess-Reyes, J., & Fuetsch, E. (2016). The future of family farming: A literature review on innovative, sustainable and succession-oriented strategies. *Journal of rural studies*, 47, 117-140.

²⁰ Welsh Government (2019). Sustainable Farming and our Land consultation.

²¹ Welsh Government (2012). Written Statement - Welsh Government Response to ‘Working Smarter’ – a report of recommendations to the Welsh Government on better regulation in farming.

reliance on onsite visits and enabling targeted inspections. Through this, our proposals should help reduce the negative impacts of regulatory burden on farmers' mental health and well-being.

The threat of enforcement, particularly criminal prosecution, can have an adverse effect on farmers' mental health and well-being. Our proposals for enforcement seek to avoid criminalisation where possible, but retaining this as a last resort for the most serious offences. It is not our intention to penalise farmers unnecessarily, but it is important any enforcement is proportionate to the severity of the offence and that clear guidance is provided for farmers on the consequences of non-compliance. It is also important regulation is applied equally to all farmers in Wales (regardless of whether they are part of a payment scheme). We believe the best way to achieve this is to introduce civil sanctions (such as notices and monetary penalties) as part of a range of mechanisms to enforce less serious offences. Part of this suite of sanctions would include allowing farmers to offer an Enforcement Undertaking in place of a criminal or civil sanction to carry out restorative work in the manner the farmer proposes.

The untimely culling of any animal, and in some cases complete depopulation of entire holdings resulting in the loss of established bloodlines and years of breeding, can have a significant detrimental impact on the mental well-being of livestock keepers, which financial compensation alone cannot address. Stress and depression are linked to such events²² (and in turn can also affect physical well-being). The means to attempt to reduce the risk of large-scale disease outbreaks through additional enforcement mechanisms, as set out in the White Paper, can avoid the negative impacts of more severe disease control measures.

The Welsh Government, acknowledging the impact of Bovine Tuberculosis (TB) breakdowns on the mental health of farmers and farming families, introduced the Cymorth TB programme to provide Government funded veterinary support from local specially trained private veterinarians. The Welsh Government also contracted with the Farming Community Network (FCN) to deliver bespoke Mental Health and Farmer Welfare support for those effected by TB. More recently there has been cross divisional collaborative work undertaken to support the development of third sector group that includes FCN, Tir Dewi, the Daniel Picton-Jones Foundation and Mind Cymru.

The animal health and welfare proposals set out in the White Paper include the introduction of Movement Control Zones and a system of fixed penalty notices (civil sanctions) for non-compliance with animal disease controls and animal welfare requirements. For this area, civil sanctions will provide for enforcement which is proportionate to the risk and severity of the action that requires correcting. They should be the initial means of enforcement for minor offences and encourage compliance, decreasing the risk of large or escalating outbreaks of

²² Institute of Rural Health and University of Glamorgan (2003). Report to the Welsh Assembly Government: The impact of the foot and mouth outbreak on mental health and well-being in Wales.

disease, which are costly for livestock keepers, industry and the taxpayer. The total cost to Government of the 2001 Foot and Mouth Disease outbreak was £3 billion, of which £102 million related to Wales. A significant amount of this was compensation to livestock keepers for animals culled to control the disease and stop the spread. The average cost of a TB breakdown to the farmer (in England and Wales) is £6,600²³.

Our proposals for civil sanctions will need detailed consideration and to be developed in collaboration with farmers and regulators. We intend civil sanctions to be an effective deterrent but it is not intended these would be used to target fines at vulnerable individuals. For this reason, we would need to carefully consider how enforcement is applied across Wales to reduce the negative mental health impacts on farmers.

Farmer's prioritising their own health

In terms of the impact on farmers' mental health of participation in an agri-environment scheme, other evidence²⁴ suggests *"the self-reported mental health of farmers adopting agri-environmental schemes in Wales was significantly better than non-adopters. Although correlation was shown, rather than causation, interpretation of the results suggest that poor mental health of farmers may be one cause of non-adoption of agri-environment schemes."* As our policy proposals develop, we will be considering in more detail the causes of non-adoption in previous schemes to reduce barriers to entry to the new scheme.

The underlying culture and expectations in farming

An analysis²⁵ of the role of small businesses (not just farm businesses) in contributing to household income in rural areas in the context of household well-being notes *"households whose members all thrive and enjoy well-being have microbusinesses which are combined with other activities to generate the household livelihood..... In the worst case, the business can provide the household with enough income to get by, but lives become so constrained by this form of making a living that well-being in its widest sense is limited. In the best case, the business becomes embedded in broader household activities, playing a part in opening new opportunities rather than imposing constraints."* Our proposals to support farmers to take advantage of diversification opportunities (for example, linked to agri-tourism²⁶) could

²³ Report to Defra (2019). Estimating the consequential cost of bovine TB incidents on cattle farmers in the High Risk & Edge Areas of England & High and Intermediate TB Areas of Wales. Project number SE3139.

²⁴ Hounsom, B., Edwards, R. T., & Edwards-Jones, G. (2006). A note on the effect of farmer mental health on adoption: The case of agri-environment schemes. *Agricultural Systems*, 91(3), 229-241.

²⁵ Oughton, E., Wheelock, J. & Baines, S. (2003). Micro-businesses and social inclusion in rural households: a comparative analysis. *Sociologica Ruralis* 43(4):331-348.

²⁶ For example, a study in Scotland concluded *two additional niche markets that incorporate direct interaction between visitors and agriculture have been identified,.... these types of agritourism have significant potential to generate public as well as private benefits; including increased public awareness of food and farming, promotion and sale of locally produced farm foods, and through supporting the implementation of agri-environmental and conservation measures.* Flanigan, S., Blackstock, K., & Hunter, C. (2015) Generating public and private benefits through understanding what drives different types of agritourism, *Journal of Rural Studies*, 41: 129-141.

broaden the activities of the household, and so could impact positively on well-being of the broader farming household as well as that of the farmer. Along with our proposals to support collaboration and co-operation between farmers and others, the scheme may impact positively on this determinant of farmer and farming household mental well-being.

♦ *Living/environmental conditions affecting health*

Our proposals are underpinned by the principle of Sustainable Land Management (SLM). Through contributing to better air quality (in particular through reductions in ammonia), reduced flood risk, and enhanced biodiversity, the proposals should contribute to better physical and mental health outcomes in the general population.

Key environmental determinants of health, which will be impacted by the proposed regulatory reform and future scheme, include:

- Harmful emissions;
- Flood risk and water quality;
- Biodiversity;
- Opportunities for public access.

We consider each of these determinants below in relation to our proposals.

Reducing harmful emissions

Each year in Wales, an equivalent of 1604 (5.4%) deaths can be attributed to PM_{2.5} exposure, and 1,108 deaths to NO₂ exposure²⁷. National air quality objectives have been set out for the UK based on European Directive limit and target values for the protection of human health. The detail of these is set out in evidence from our Environment and Rural Affairs Monitoring and Modelling Programme (ERAMMP)²⁸.

Public Health Wales²⁹ notes the air pollutants of greatest public health concern are particulate matter (PM) and nitrogen dioxide (NO₂). Air pollution combines with other aspects of the social and physical environment to create an inequitable disease burden on more deprived parts of society. Public Health Wales also notes most local air pollution problems are caused by emissions from road vehicles. However, other sources may also influence air quality for example industrial, agricultural and residential / domestic sources.

²⁷ Health effects of air pollution: <https://airquality.gov.wales/about-air-quality/health-advice>

²⁸ Jones, L. et al. (2019). Annex 8: Improving Air Quality and well-being. ERAMMP Report to Welsh Government (Contract C210/2016/2017) (CEH NEC06297). See pages 12-14.

²⁹ Public Health Wales and Wales Health Impact Assessment Support Unit (2019). The Public Health Implications of Brexit Technical Annex 2.

Pollution from agriculture has the potential to severely impact physical health through the emission of pollutants such as ammonia or nitrous oxides. Since 2005, ammonia emissions from the sector have not seen significant reductions³⁰. The Welsh Government consultation on the *Clean Air Plan for Wales*³¹ notes in particular:

- **Ammonia (NH₃)** is a colourless gas with a strong odour. It can also form secondary particulate matter through reactions in the atmosphere, travelling large distances and depositing on land and increasing background levels. Its source is mainly agriculture e.g. storage and spreading of manures, slurries and fertilisers. Ammonia is directly harmful to human health.
- **Non-methane volatile organic compounds (NMVOCs)** comprise a large group of organic chemical compounds, excluding methane. One source of NMVOCs is agriculture e.g. fertiliser application, field-burning of agricultural waste. NMVOCs are harmful to human health, some have direct toxic effects and others can worsen respiratory and cardiovascular illnesses.

Ammonia also causes the formation of particulate matter, PM_{2.5}, another harmful pollutant. Reducing emissions will mitigate the health risks. The Welsh Government *Clean Air Plan* consultation states our ambition on PM_{2.5}: “*We want concentrations across Wales to be below the WHO guideline for PM_{2.5} where it is possible, and lower still where there is sufficient potential and there is high public exposure or risk to sensitive groups. Our aim is to put this ambition into Welsh law*”.

The consultation document notes poor air quality can have a disproportionate impact on the health and well-being of children, older, poor and vulnerable people. Reduction of air pollution will have a direct and significant impact on improving human health and welfare for everyone.

Evidence from ERAMMP also notes “*Atmospheric ammonia (NH₃) is a primary pollutant emitted by agricultural activities and, to a lesser extent by processing of organic materials (e.g. anaerobic digestion), transport and industry. The main sources of ammonia from agriculture are (in roughly descending order) manure spreading, animal housing, manure storage, grazing livestock and fertiliser application (especially urea and urea-ammonium nitrate)*”.

Our proposals for a future scheme would offer farmers an incentive to specifically address ammonia emissions. The White Paper proposals also look to maintain existing environmental standards; enhancing standards on soil and rationalising standards protecting habitats. Additionally, a number of the proposals are intended to increase compliance levels by better targeting inspections; facilitating broader use of remote

³⁰ National Atmospheric Emissions Inventory, ‘Ammonia emissions from agriculture’.

³¹ Welsh Government (2019). The Clean Air Plan for Wales. Healthy Air, Healthy Wales.

monitoring technology to pick up non-compliance and issuing advice and guidance making it clearer to farmers how to comply. It is expected that increased compliance levels should have benefits for soil, air and water quality. This in turn should effect an improvement in health of the general public.

Management of flood risk and water quality

Reducing the risk of flooding is a key aspect of the Sustainable Management of Natural Resources. The proposed scheme will contribute to a reduction in flood risk. Improving soil health and structure, together with increasing soil organic matter, will allow more rapid infiltration of surface water and its retention within the soil for longer periods of time than would otherwise be the case. Correctly sited agroforestry also has the potential to increase infiltration to greater soil depth and reduce flood risk.

Soil quality improvements drawn from the delivery of Sustainable Land Management will also contribute to improved water quality. This, combined with proposals for the National Minimum Standards to incorporate measures to reduce water pollution from agriculture and to minimise soil erosion, should have a beneficial result on public health of the people of Wales.

Overall, the proposals should reduce the risk to the public from flooding which should contribute to positive physical and mental health outcomes as well as providing water quality improvements that would have public health benefits.

♦ **Economic conditions affecting health**

The economic impact of our proposals on farm businesses in Wales will be key to determining whether there will be any impacts on unemployment, income and the associated socio-economic and health factors. The full cost benefit analysis of our proposals will, in part, consider this economic impact and this will be published.

♦ **Access and quality of services**

We do not anticipate our proposals will have an impact on the access and quality of services.

♦ **Macroeconomic, environmental and sustainability factors**

Biodiversity

In terms of increased biodiversity, a 2003 review³² of the impact of biodiversity on quality of life specifically considered physical and mental health. It noted many studies of the importance of nature for well-being do not distinguish well between biodiversity-rich natural

³² Lees, S., & Evans, P. (2003). *Biodiversity's Contribution to the Quality of Life: A Research Report for English Nature*. English Nature.

surroundings and more formal green spaces, or indeed cultural influences derived from a sense of place. The overall conclusion from the medical evidence reviewed is *“the weight of evidence shows that contact with nature is good for you”*.

Similarly, a 2005 review³³ concluded *“nature plays a vital role in human health and well-being, and that parks and nature reserves play a significant role by providing access to nature for individuals. Implications suggest contact with nature may provide an effective population-wide strategy in prevention of mental ill health, with potential application for sub-populations, communities and individuals at higher risk of ill health”*.

Proposals within the White Paper have been designed to align with the Welsh Government’s commitment to maintain and enhance biodiversity in the exercise of functions in relation to Wales, as set out in the Environment (Wales) Act 2016. Reversing the decline in on-farm diversity, and supporting increased ecosystem resilience, should enable and enhance the ability of Welsh land to continue to deliver the health benefits outlined in the evidence above.

Climate

Our proposals specifically target the need to support farms to become resilient against climate change outlined in the Climate Change Impact Assessment of the proposals. Reducing farms’ carbon footprint to as close to zero as possible, and increasing woodland cover in Wales, will contribute to climate change mitigation and have positive effects on health. The UK CCC report³⁴ highlights the co-benefits of reducing emissions, including improved health from increased air quality and improvements in flood alleviation.

As the climate changes, the environment, biodiversity needs and the biological ecosystem will also all change. Our proposals will need to be able to respond to these changes in order to remain effective. Therefore, any minimum legal requirements will need to adapt to address the needs of future generations. For example, restricted hedge cutting dates are currently set in Cross Compliance to prevent disturbance of birds during the nesting period. As the climate changes, it is likely this nesting period will change. Additionally, it is estimated farming systems, and therefore the environmental impacts they have, will change to complement the change in climate in Wales. In order for these proposals to improve biodiversity for future generations, the National Minimum Standards will need to be flexible in order to respond to the needs of the climate emergency.

Improvements to biodiversity, and the ability to respond to future biodiversity needs, derived from the White Paper proposals should contribute to positive health outcomes for the general public.

³³ Maller, C., Townsend, M., Pryor, A., Brown, P., & St Leger, L. (2006). Healthy nature healthy people: contact with nature as an upstream health promotion intervention for populations. *Health promotion international*, 21(1), 45-54.

³⁴ UK Climate Change Committee (2020) *Land Use Policies for a Net Zero UK*

2.5b. Could there be a differential health impact on particular groups?

♦ **Age related groups**

The median age for a farmer in Wales in 2016 was 61 years old. The majority of principal farmers in Wales are over the age of 55 (68%), whilst 3% are under 35 years old³⁵. It is possible there could be negative impact on well-being if older farmers feel they are left out of communications/ advice and guidance, including for the National Minimum Standards and the future scheme. Therefore, further policy development on advice and guidance will take into account different forums to provide communication with a range of media.

Research demonstrates children and older people are more vulnerable to air pollution exposure³⁶. As described above, the proposals for the future scheme and regulatory reform are expected to protect and improve air quality, with children and the older generation benefiting most from this.

♦ **Income related groups**

We have commissioned an independent analysis of the future scheme to assess potential economic effects of the proposals, and the results of this analysis will inform this impact assessment in due course. A full cost benefit analysis of the White Paper proposals will, in part, consider economic impacts and this will be published.

♦ **Groups who suffer discrimination or other social disadvantage**

We do not anticipate our proposals will impact specifically on the health of groups who suffer discrimination or other social disadvantage, other than the health benefits for the general population we have described above.

Throughout the development of advice and guidance for the National Minimum Standards and future scheme, officials will work to ensure this is accessible to all farmers and therefore will also consider language and cultural needs.

♦ **Geographical groups**

No specific disproportionate impacts have been identified for the impact of the health of geographical groups. As described in our Equality Impact Assessment, the highest proportions of people aged 50-64 and over 65 are found in rural areas in central Wales such as Powys, Ceredigion and Gwynedd. Whilst there are health impacts for older people living

³⁵ Welsh Government (2019). Agriculture in Wales.

³⁶ Fann N., Roman H., Fulcher C. et al. (2011). Maximising health benefits and minimizing inequality: incorporating local-scale data in the design and evaluation of air quality policies. Risk Anal; 31(6):908-22.

in rural areas, they are focussed on the delivery of key health, social services and transport issues. We have no evidence the proposals in the White Paper will impact negatively on the well-being of general population older people in rural areas.

2.6 Privacy

Will the proposal involve processing information that could be used to identify individuals?

The proposal would enable the processing of personal information. Please see Annex D.

SECTION 3. WHAT WILL BE THE EFFECT ON CULTURAL WELL-BEING AND THE WELSH LANGUAGE?

3.1 Cultural Well-being

The Well-being of Future Generations (Wales) Act 2015's goal for culture is 'A society that promotes and protects culture, heritage and the Welsh language and which encourages people to participate in the arts and sports and recreation'. Culture includes museums, archives, libraries and the arts; heritage includes the built historic environment as well as intangible heritage such as traditions; arts encompasses performance and creative sectors including music, literature, theatre and art, whilst sports and recreation include both elite and community sports as well as opportunities to participate in wider outdoor recreation.

3.1a How can the proposal actively contribute to the goal to promote and protect culture and heritage and encourage people to participate in the arts sports and recreation? (for Welsh Language see section 3.2)

Welsh culture and heritage is intricately linked to the landscape and natural environment. The Welsh Government's *Light Springs through the Dark: A Vision for Culture in Wales* emphasises the importance of the Welsh landscape in framing and inspiring much of the cultural output in Wales. An integral part of this relationship is agriculture.

The Area Statements developed by Natural Resources Wales³⁷ demonstrate this relationship between landscapes, culture and heritage in Wales. For instance, the reclaimed agricultural land of the Gwent levels (South East Area Statement) is of not only historical and archaeological importance, but is also an important habitat for many species. Likewise the North East Area Statement demonstrates how the history of Wales is embedded in the landscape through the medieval field systems of the Clwydian Range and Dee Valley.

Our proposals for the future scheme do not specifically target culture and heritage, but as shown by the examples above, culture and heritage are often intrinsically linked to agriculture and agricultural landscapes. Any landscape changes as a result of the delivery of SLM may therefore have an impact on Wales' culture. Although landscape change is inevitable over time through natural processes, change brought about by SLM practices should not undermine the cultural value derived from individual features or the context provided by their surrounding landscape.

Our proposals will protect culture and heritage in three ways:

³⁷ Natural Resources Wales. Area Statements. <https://naturalresources.wales/about-us/area-statements/?lang=en>

1. Supporting sustainable and resilient farm businesses will help to ensure Welsh farms and land remain a keystone of Welsh culture for current and future generations.
2. Heritage includes “traditions” and traditional landscape features (e.g. hedgerows). Evidence from ERAMMP reveals many actions that deliver SLM outcomes are consistent with what are considered to be “traditional” farming practices. In this sense, our proposals promote and protect the heritage that is represented by traditional farming practice and features.
3. Many of Wales’ heritage sites are found on agricultural land, and the landscape itself is of cultural and heritage importance. National Minimum Standards include the introduction of legislation rationalising the protection of landscape features. To participate in the future scheme, farm businesses will have to abide by all legislation applicable to the historical features on their land.

More detail of the way our proposals promote and protect our natural environment and countryside, and therefore cultural heritage, is included in the Biodiversity Impact Assessment of our proposals.

We have no evidence our proposals will affect, positively or negatively, the participation of people in the arts or in sport.

However, in terms of recreation, as detailed in our Health Impact Assessment, our proposals in the White Paper should provide moderate benefits to the health of the people of Wales through generating increased opportunities for access to, and enjoyment of, the countryside contributing to better physical and mental health outcomes for the general population.

3.1b Is it possible that the proposal might have a negative effect on the promotion and protection of culture and heritage, or the ability of people to participate in arts, sport and recreation? If so, what action can you take to avoid or reduce that effect (for example by providing alternative opportunities)?

We have no evidence the White Paper proposals might have a negative effect on the promotion and protection of culture and heritage, or the ability of people to participate in arts, sport and recreation.

However, farms are of cultural importance to many communities in Wales. We expect our proposals to support the resilience of these businesses and therefore rural communities, as outlined in our Rural Proofing Impact Assessment.

3.2 Welsh Language

Please see Annex E for the Welsh Language Impact Assessment of the proposals.

SECTION 4. WHAT WILL BE THE EFFECT ON ECONOMIC WELL-BEING?

Supporting growth in the Welsh economy, and through this tackling poverty, is at the heart of *Taking Wales Forward*, the Welsh Government's Programme for Government.

4.1 Business, the general public and individuals

How (either positively or negatively), and to what extent (significant/moderate/minimal impact), will the proposal impact business and the public?

Farm and land management businesses

Scheme Proposals

We expect our proposals will have a positive impact on farm businesses.

Our proposals for future scheme funding include enabling and supporting the development of long-term farm business and primary supply chain resilience, through delivery of Sustainable Land Management outcomes. This should enable current and future generations of farm businesses to continue producing food and environmental outcomes.

We recognise that moving from the current entitlement based system to one based on SLM may impact on farm businesses differentially. The independent economic analysis of our scheme proposals will explore the impact of our proposals on farm incomes, and also in terms of wider effects on other businesses in rural communities.

Market measures

We are also proposing to include provision for market intervention measures to help farming businesses cope with extreme market volatility or failure should it arise. Officials will also be looking to explore how appropriate marketing brands can promote the high production standards of Welsh produce. These proposals should have a positive impact on farm businesses.

National Minimum Standards

The development of a set of National Minimum Standards should not require farmers to expend significantly more money to be compliant in order to be eligible for the scheme as these standards are primarily based on what is already in law.

Proposals to streamline data collection from farmers should have a cost benefit for farmers through the reduction in administrative burden and therefore time saving. Before any

regulations are established in secondary legislation, a cost benefit analysis will be undertaken to take into account additional regulation and ecosystem service benefit provided as well as economic effects.

Civil Sanctions

Our proposals for the implementation of civil sanctions for the enforcement of regulatory non-compliance will inevitably have financial implications for farmers/livestock keepers who are issued with financial penalties. However, these penalties are intended to be used as a proportionate enforcement mechanism appropriate for the severity of the offence and to avoid criminalisation where possible. The proportionate approach moves towards a system where regulators can use compliance and restoration notices for appropriate cases to provide farmers the opportunity to comply.

The use of civil sanctions would also include allowing farmers to offer an Enforcement Undertaking in place of a criminal or civil sanction to carry out restorative work in the manner that the land owner/manager proposes. This (including fines) will need to be considered in further detail in secondary legislation and will need to ensure farmers are clear about what they need to do to comply and understand the penalties. We intend civil sanctions to be an effective deterrent but it is not intended these would be used to target fines at vulnerable individuals. For this reason, we would need to carefully consider how enforcement is applied proportionately and fairly across Wales.

Animal Health

The economic cost of responding to a disease outbreak weighs heavily on Government and the taxpayer, in addition to the burden faced by animal keepers. The cost to Government of the 2001 foot and mouth disease outbreak was £102 million³⁸, with the average cleansing and disinfection cost of each affected holding in Wales estimated to be £38,000. With all trade stopped, the financial impact on businesses was considerable, with exports accounting for 40% of all Welsh lamb and sheep production pre-outbreak. Research commissioned jointly by Defra and Welsh Government to estimate the economic cost of bovine TB incidents on cattle farms in the High Risk and Edge Areas of England and Wales was published on 28 August 2020³⁹. The estimated average cost of a bovine TB breakdown is £34,000. Of this, it is estimated £20,000 is borne by the Government, mainly as compensation for animals compulsorily slaughtered and the costs of testing, and £14,000 falls to the farmer as a result of the loss of animals, on-farm costs of testing, and business disruption because of movement restrictions. The proposals set out in the White Paper aim to prevent, control and eliminate animal diseases which will have a positive impact on livestock keepers and their businesses.

³⁸ National Audit Office (2002). The 2001 Outbreak of Foot and Mouth Disease.

³⁹Report to Defra (2019). Estimating the consequential cost of bovine TB incidents on cattle farmers in the High Risk & Edge Areas of England & High and Intermediate TB Areas of Wales. Project number SE3139.

We do not expect proposals to amend felling license provisions to significantly impact on compliance costs for land managers. Powers to add additional conditions have potential to increase compliance costs, but we expect these conditions to be used in limited circumstances such as where felling would otherwise breach environmental legislation. An exemption from the need for felling licenses in the case of ash dieback has the potential to reduce the regulatory burden on land managers and the cost of dealing with ash dieback. We recognise that we would need to consider the full impacts of amending EIA regulations or charging for felling licenses before utilising these powers.

Other Business

Our proposals will also support wider supply chain and business resilience with the aims of:

- Improving the promotional offer for farmers' produce by effectively evidencing sustainability of the products the produce;
- Encouraging greater market alignment;
- Identifying and overcoming barriers in the supply chain;
- Shortening supply chains for Welsh products.

Respondents to the *Brexit and our Land* consultation expressed a variety of views that reflected the importance of rural businesses and rural communities. Examples include reference to the importance of small-scale abattoirs, dairies, grain storage and food processing plants within a local setting. Our proposals for supporting the agricultural industry and supply chain, where it enables the delivery of Sustainable Land Management, should benefit businesses in Wales. Due to uncertainty about the final level of funding we cannot yet say if any impacts will be minimal, moderate, or significant.

General Public and Individuals

The White Paper proposals should impact positively on individuals and the general public. Many of the positive impacts are related to health and well-being and are outlined in the Health Impact Assessment and our Equalities Impact Assessment. There may also be positive effects on employment, as outlined in the Natural Resources Impact assessment under *supporting secure and stable employment*.

In particular, the following impacts are expected:

Future scheme and regulation

- ♦ The maintenance of Welsh food production standards will provide quality food for consumers whilst protecting the Welsh landscape and natural resources;
- ♦ Improved provision for opportunities for public access to the countryside will bring health and well-being benefits;

- ♦ Improved air and water quality, through the delivery of SLM, will also positively impact on health and well-being.

Animal health planning, veterinary interventions and enhanced disease controls

Animal health and welfare make a major contribution to the sustainability of the livestock sector, to the wider food and farming industry, and more broadly to the countryside, the environment, communities and the economy⁴⁰.

Animal diseases are a constant threat to the livestock sector in Wales and an outbreak can have a devastating effect on industry, rural communities and the economy of Wales. Also, for zoonotic diseases (transferrable to humans e.g. salmonella) there is the potential for public health impacts. The proposals set out in the White Paper will help to prevent, control and eliminate animal diseases, contributing towards safer food, improved public health, reduced demand on health services and the need for antibiotic treatment. Healthy livestock kept to high standards of welfare contribute to rural communities by sustaining profitable farm businesses, supporting marketing and trade opportunities and helping farmers increase profit margins, as well as safeguarding and creating jobs.

4.2 Public Sector including local government and other public bodies

How (either positively or negatively), and to what extent (significant/moderate/minimal impact), will the proposal impact the public sector?

We expect the following elements of our proposals to have an impact on the public sector:

Future Scheme

The proposals in the White Paper do not consider delivery models for the future scheme so it is not currently possible to estimate the impact on the public sector.

However, Natural Resources Wales (NRW) currently supports the technical delivery of Glastir schemes, particularly with Environmental Impact Assessment opinion, consents for proposals on designated sites, European Protected Species licences and felling licence applications. We will be continuing to work with NRW as our proposals develop.

At this stage, proposals for the future scheme are unlikely to have an impact. We will be undertaking a full impact assessment of the future scheme and this will include any impacts on the public sector.

⁴⁰ Welsh Government (2019). Wales Animal Health and Welfare Framework Implementation Plan 2019-20.

Animal Health and Welfare

The animal health and welfare proposals set out in the White Paper will reduce the risk of incursion and spread of disease. The reduced cost of dealing with and responding to disease outbreaks will benefit Government, taxpayers and animal keepers.

National Minimum Standards

As described in the White Paper, there are a number of regulatory bodies within the public sector who are responsible for monitoring regulatory compliance. Proposals for the development of a set of National Minimum Standards build on what already exists and are intended to make the administration of monitoring and enforcement more streamlined. Proposals for data sharing will then allow regulators to target resources more effectively. We will need to consider the monitoring requirements across Wales and how consistent application across all farmers will impact public bodies.

Civil Sanctions

Proposals include the introduction of civil sanctions as an alternative option for regulators to take than criminal prosecution. This will be a change to the current enforcement mechanisms in place for regulators in Wales and, as a result, a Justice Impact Assessment and a full cost benefit analysis will take this into account.

Marketing standards

Local Authorities in Wales will be affected by this proposal, due to their role in enforcing minimum market standards in agriculture and food products. If Welsh Ministers were not able to modify marketing standards, this would have an impact on Local Authorities, as their source for authority in this area would change. It is proposed to maintain Welsh Ministers' ability to modify marketing standards, which will mean continuity. This continuity will apply to other public sector bodies, such as the Food Standards Agency.

Market intervention

Crisis intervention payments are made through Rural Payments Wales (RPW), a body within the Welsh Government. As a result, the only public sector body to be affected directly by the proposals for the declaration of exceptional market conditions and the establishment of crisis payments to farmers should be the Welsh Government itself.

Public Intervention and Private Storage Aid schemes have traditionally been run by the Rural Payments Agency (RPA) on behalf of the Welsh Government. The continuation of Welsh Ministers' existing powers to launch Public Intervention and Private Storage Aid schemes means that the RPA will have the same expectations of the Welsh Government in the short term in relation to the establishment and management of these schemes.

4.3 Third Sector

How (either positively or negatively), and to what extent (significant/moderate/minimal impact), will the proposal impact third sector organisations and what they do?

We have engaged with third sector organisations during our two consultations on the proposals, and will continue to consult with them as our proposals develop further to help identify any impacts.

At this stage, we do not expect the proposals to impact either positively or negatively on the third sector.

4.4 Justice Impact

As detailed in the White Paper, we have made proposals to reform the regulation of agriculture in Wales. To ensure regulation can be enforced proportionately, we propose to introduce primary powers for a range of civil sanctions, which are described in the Regulatory Enforcements and Sanctions (RES) Act 2008. This would enable regulators to take a more proportionate approach to regulatory non-compliance equally applicable to all farm businesses, regardless of whether they are scheme claimants. Enforcement measures should be used to encourage compliance and include: official warnings, stop notice, compliance notice, restoration notice, fixed monetary penalties, and variable monetary penalties.

We propose powers for civil sanctions should be available to enforce the following areas of agricultural regulation:

- National Minimum Standards;
- Animal health and welfare regulation;
- Forestry and woodland management regulation.

As the proposals for enforcement detailed above are bringing forward new primary legislation for the use of civil sanctions, creating and amending offences, it could have resultant impacts on the justice system. It is anticipated these impacts could include an increase in the number of appeals against the decisions of public bodies. Therefore, a full Justice Impact Assessment will be required to fully consider these impacts. We intend to work with the Ministry of Justice to identify the costs for the justice system and will publish a Justice Impact Assessment with adequate time for consideration prior to the introduction of the Bill.

SECTION 5. WHAT WILL BE THE EFFECT ON ENVIRONMENTAL WELL-BEING?

Under Section 9 of the Environment (Wales) Act 2016, the Welsh Ministers are required to prepare, publish and implement a natural resources policy and to take all reasonable steps to implement it and to encourage others to take such steps. The Natural Resources Policy was published in August 2017.

5.1 Natural Resources

5.1a How will the proposal deliver one or more of the National Priorities in the Natural Resources Policy (NRP)?

- Delivering nature-based solutions;
- Increasing renewable energy and resource efficiency; and in doing so,
- Taking a place based approach.

Our proposals are focused on the framework of Sustainable Land Management, and will help deliver on each of the three National Priorities:

Nature-based solutions: Our proposals aim to contribute towards healthy soil, clean air and a resilient environment with increased biodiversity. These aims will be achieved through nature-based solutions, as the outcomes we are seeking can be delivered from changes in management practice. For example, incorporating trees into the farming system should help to reduce flood risk, and restoration of peat bogs and increasing organic matter in improved agricultural land will contribute towards decarbonisation.

These proposals for nature-based solutions will be underpinned by our proposals for the creation of a set of National Minimum Standards. These standards will consolidate existing legislation protecting the environment and our natural resources and look to introduce protections for soil which are already included under Cross Compliance Verifiable Standards. This will be supported by proposals for proportionate enforcement through civil sanctions.

Increasing resource efficiency: Proposals for the future scheme include supporting farms to become sustainably productive, making the best use of their natural resources and improving the efficiency of that sustainable production within the bounds of the SLM framework. This will include reducing soil loss, and reliance on inputs. We therefore expect our proposals to increase resource efficiency of farm businesses.

Place based approach: We will be taking into account a range of evidence, including SoNARR and NRW's Area Statements, to identify local priorities and support collaboration at a catchment or landscape scale. We are also working locally around Wales within our co-design programme to further develop proposals.

5.1b Does the proposal help tackle the following national challenges and opportunities for the sustainable management of natural resources?

- ♦ **Reverse the decline in biodiversity – by developing resilient ecological networks;**

Our proposals explicitly address the decline in biodiversity, and are intended to deliver a range of biodiversity outcomes. The expected impacts are outlined in our Biodiversity Impact Assessment.

We additionally address the importance of improving soil health and biodiversity in our proposals. Evidence from the Royal Society⁴¹ notes *“Biodiversity and soil structure are closely linked; soil structure influences the nature and activity of soil organisms, while soil organisms affect the physical structure of the soil. Good soil structure benefits a number of species and habitats. In addition, soil biodiversity, and its associated influence on soil structure, contributes to a range of ecosystem functions such as decomposition of dead matter and nutrient cycling. Soil also contributes to ecosystem services such as support of above-ground biodiversity, control of plant, animal and human pests and diseases, and climate regulation”*.

- ♦ **Safeguard and increase carbon stores in soils and biomass;**

Proposals for the National Minimum Standards provide protections for soils by limiting soil erosion and compaction which should maintain and protect soil carbon stores and biomass.

Our proposals for the future scheme further aim to increase soil health and soil organic matter, and evidence from SoNARR shows the importance of this:

- The soils of best quality and most productive agricultural land are a scarce and finite resource in Wales; accounting for less than 7% of land area⁴²;
- Soil quality has deteriorated across all habitats apart from woodlands where there has been some improvement;
- The severity and spatial extent of soil erosion has not been directly quantified in Wales. Around 10-15% of grassland fields in England and Wales are thought to be affected by severe soil compaction and 50-60% are in moderate condition.

⁴² Natural Resources Wales (2016). State of Natural Resources Report (SoNaRR): Assessment of the Sustainable Management of Natural Resources. Technical Report.

Our habitat management proposals will lead to the management and restoration of natural habitats which act as carbon stores, leading to an increased capacity for different ecosystems to retain carbon. Evidence⁴³ shows:

- Welsh soils currently have intermediate levels of soil Carbon content relative to England and Scotland suggesting some potential for improvement;
 - Increases in Soil Organic Carbon (SOC) due to a given change in management or land use are finite. SOC stocks will tend to saturate as a new equilibrium state is reached. Similarly, potential SOC gains may be greatest in areas which currently have low SOC stock which are undergoing land use changes, rather than minor management changes;
 - Increases in SOC due to a given change in management or land use may not be permanent. Returning to original management is likely to release accrued SOC so long-term changes in practice is important;
 - Increasing Soil Organic Matter (SOM) could also have synergistic effects through agricultural GHG emissions reduction; small increases in SOM could improve soil properties and plant productivity while reducing dependency on Nitrogen fertiliser.
- ♦ **Maintain productive capacity, in particular by improving soil quality and biosecurity;**

As described above, proposals for the National Minimum Standards would set in legislation protection of soil quality in Wales through maintaining minimum soil cover as well as measures to minimise soil erosion and compaction.

Our scheme proposals include increasing soil organic matter and promoting a sustained improvement in soil health. Increased resource efficiency and reduction in inputs will further contribute to maintaining and improving the productive capacity of Welsh soil.

In terms of the importance of soil quality to productive capacity, the Royal Society⁴⁴ notes *“there is a correlation between improvements in soil structure and increasing grain yield of cereals. A well-structured soil can improve crop productivity through providing a habitat for earthworms and other soil organisms. Compacted soil is often associated with a decrease in yield through detrimental effects on the crop’s root system. Improved soil structure can help to prevent soil erosion, where the upper layer of soil is displaced. Soil erosion*

⁴³ Alison, J., et al. (2019). Annex 3: Soil Carbon Management. ERAMMP Report to Welsh Government (Contract C210/2016/2017) (CEH NEC06297).

⁴⁴ The Royal Society (2020). Soil structure and its benefits.

significantly affects the productivity of soil, with Defra estimating that the total cost of erosion in England and Wales is in the region of £150 million a year⁴⁵”.

A report by ERAMMP⁴⁶ advises “*Taking account of nutrients supplied by organic materials is crucial to minimise nutrient losses to water and air from agricultural systems. Manure nutrient use efficiency can be improved by ensuring manures are applied at application rates that do not supply nutrients in excess of crop demand. Targeting manure applications to soils that require phosphate applications to maintain soil fertility will reduce the risks of phosphate losses to water, along with avoiding applying manure to soils that already have adequate P levels*”. Targeted application of fertiliser (i.e. through injection) would lead to benefits including increased crop yields, whilst at the same time minimising nutrient loss and runoff, which has led to environmental effects harmful to biodiversity including eutrophication.

♦ **Reducing the risk of flooding;**

Our proposals for the future scheme, through the delivery of SLM, will enable increased habitat resilience and biodiversity at both farm and landscape level which should deliver reductions to flood risk. Our proposals of promoting soil husbandry as part of the National Minimum Standards and scheme should also contribute to reduced flood risk.

A wide variety of different ecosystems have a demonstrable benefit to flood control when in good condition. One example of this is raised by Natural Resources Wales in relation to the areas of Ffridd in South Central Wales, where flood mitigations are mentioned as one of several benefits from the ecosystem being managed well⁴⁷. Evidence from ERAMMP⁴⁸ shows “*restoring floodplain wetlands has Flood Risk Management benefits in terms of reduced frequency and increased time lag of flood events, although there is also a potential risk (shared by most WWNP interventions) of peak synchronisation leading to flooding downstream. Their effectiveness is influenced by site-specific factors, especially how well they are connected to the river, and also their location, landscape topography, soil characteristics and type of management*”. The ERAMMP evidence also notes the biodiversity benefits of restored floodplains, which “*can provide a wide range of habitats (including priority habitats such fens, reed beds and lowland raised bog) and benefits for*

⁴⁵ Graves, A., Morris, J., Deeks, L., Rickson, R., Kibblewhite, M., Harris, J., Farewell, T. & Truckle, I., (2015). The total costs of soil degradation in England and Wales. *Ecological Economics*, 119, pp.399-413.

⁴⁶ Williams J.R., et al. (2019). Annex 1: Soil nutrient management for improved land. ERAMMP Report to Welsh Government (Contract C210/2016/2017) (CEH NEC06297).

⁴⁷ Natural Resources Wales. South Central Wales Area Statement: Building resilient ecosystems. <https://naturalresources.wales/about-us/area-statements/south-central-wales-area-statement/building-resilient-ecosystems/?lang=en>

⁴⁸ Keenleyside, C.B. et al. (2019). Annex 9: Flood mitigation. ERAMMP Report to Welsh Government (Contract C210/2016/2017) (CEH NEC06297).

species that use these as feeding, breeding and resting areas. Benefitting species and taxa include waders, wildfowl, fish, mammals, amphibians and invertebrates. Three quarters of restored wetlands are used by migrating birds”.

Soil management can also contribute to reduced flood risk. The Royal Society⁴⁹ notes “*Soil can act as ‘natural flood management infrastructure’ by increasing water infiltration into the ground and also by providing natural water storage, for example through uptake into root systems. However, both these benefits are negatively affected by compacted soil structure. Compaction of the pores within the soil reduces the ability of rainfall to infiltrate the soil and acts as an obstacle to root penetration. The degree to which soil can contribute to flood prevention is strongly reliant on it being well-structured”.*

Additionally, hedgerows perform a natural flood management function and can contribute to mitigation of floods⁵⁰. Proposals for the National Minimum Standards will rationalise existing legislation protecting hedgerows and provide additional protections for soils, including to reduce compaction.

♦ **Supporting climate change mitigation and adaptation through ecosystem approaches:**

Proposals for the National Minimum Standards include considering the discrepancies between Cross Compliance and the legislation that underpins it. The proposed National Minimum Standards are intended to be flexible to ensure changes can be made to respond to climate change.

The principle of Sustainable Land Management underpins the future scheme and National Minimum Standards proposals. This should enable the restoration of ecosystems and the services they provide. NRW has advised, in the North West Wales area statement, that the effects of climate are already occurring in Wales with severe drought, wild fires and stress on our native habitats becoming more common⁵¹. Below we outline some evidence on actions and outcomes consistent with SLM which would support climate change mitigation:

⁴⁹ The Royal Society (2020). Soil structure and its benefits.

⁵⁰ Jackson, B., Wheeler, H., McIntyre, N., Chell, J., Francis, O., Frogbrook, Z., Marshall, M., Reynolds, B. and Solloway, I., (2008). The impact of upland land management on flooding: insights from a multiscale experimental and modelling programme. Journal of Flood Risk Management, 1(2), pp.71-80; <https://businesswales.gov.wales/farmingconnect/news-and-events/technical-articles/potential-tree-and-hedgerow-planting-reduce-frequency-and-impact-flood-events-uk>

⁵¹ Natural Resources Wales. North West Wales Area Statement. <https://naturalresources.wales/about-us/area-statements/north-west-wales-area-statement/climate-and-environment-emergency-adaptation-and-mitigation/?lang=en>

- **High Soil Carbon content.** The Royal Society⁵² note *“Soil is the largest terrestrial store of organic carbon and its potential as a carbon sink means it could have an important role in climate change mitigation.....The capacity for soil carbon sequestration depends on soil type and land use. For example, the soil of wetlands and peatlands accumulates carbon at faster rates, due to high soil moisture and decreased rates of microbial decomposition.....the restoration of former crop fields to grassland or forests can restore soil carbon;*
- **Peatland restoration.** Evidence⁵³ shows restoring peatlands is 3.4 times less nitrogen costly and involves a much smaller land area demand than mineral soil carbon sequestration, calling for a stronger consideration of peatland rehabilitation as a mitigation measure;
- **Agroforestry**⁵⁴. Evidence⁵⁵ shows agroforestry systems can contribute to slowing down those increases [in atmospheric carbon dioxide (CO₂) concentrations] and, thus, contribute to climate change mitigation..... The soil organic carbon (SOC) pool, in particular, is the only terrestrial pool storing some carbon (C) for millennia which can be deliberately enhanced by agroforestry practices. Up to 2.2 Petagrams (Pg) of Carbon (1 Pg = 10¹⁵ g) may be sequestered above and below ground over 50 years in agroforestry systems;
- **Woodland.** The UK Committee on Climate Change⁵⁶ note the importance of increasing woodland cover (at a UK level) *“Our analysis shows that using land released from agriculture for carbon sequestration and restoring natural habitats can deliver deep emissions reduction to 2050. Alternative uses of land could lead to emissions reductions of as much as 35-80% (20-40 MtCO₂e per annum) by 2050. The key measures to deliver this are: afforestation (increasing forest cover from 13% of all UK land today up to 19% by 2050) and better management of existing forests; restoring 55-70% of peatlands could reduce emissions by 4-11 MtCO₂e annually by 2050; sustainable energy crops representing up to 5% of land where wider*

⁵² The Royal Society (2020) Soil structure and its benefits.

⁵³ Leifeld, J., & Menichetti, L. (2018). The underappreciated potential of peatlands in global climate change mitigation strategies. *Nature communications*, 9(1), 1-7.

⁵⁴ Agroforestry refers to the production of crop, livestock, and tree biomass on the same area of land.

⁵⁵ Lorenz, K., & Lal, R. (2014). Soil organic carbon sequestration in agroforestry systems. A review. *Agronomy for Sustainable Development*, 34(2), 443-454.

⁵⁶ UK Committee on Climate Change (2018) Land use: Reducing emissions and preparing for climate change.

environmental risks are managed; and more diverse uses of land that include trees on farms and hedgerow planting. Afforestation and restoring peatlands would also provide a range of additional benefits, including increased biodiversity, improved water quality and flood alleviation". The UK Committee on Climate Change advise a cross UK implementation will lead to a benefit of £61 Billion in total from Carbon Sequestration, without even taking into account the social benefits of these actions.⁵⁷

♦ **Reducing noise pollution and pollution levels in our air, and enhance air quality;**

Many of the ecosystems and natural resources in Wales act in ways to reduce pollution. This includes carbon sequestration from woodlands along with a number of benefits from different landscapes. We propose the future scheme should reward farmers for the delivery of SLM outcomes, including increased air quality.

Annual nutrient losses from Welsh agriculture are estimated at around 20,000 tonnes of ammonia and 8,000 tonnes of nitrous oxide to air. Evidence⁵⁸ shows there are many interventions consistent with SLM which would deliver enhanced air quality:

- Managing nitrogen (N) losses on the farm and improving N use efficiency (NUE) are the key components for overall reduction in NH₃ emissions. For example, on mixed livestock farms, between 10% and 40% of the N loss is related to NH₃ emissions⁵⁹;
- The use of fertiliser recommendation systems (i.e. matching nutrient supply from organic manures and manufactured fertilisers to crop nutrient requirements) has the potential to reduce nitrogen and phosphorus losses to water and ammonia and nitrous oxide emissions to air by c.5%;
- Other ammonia abatement options have the potential to reduce ammonia losses from the targeted loss pathway by up to 80% (e.g. rigid covers on slurry stores - covering liquid manures stores combined with the use of precision application technologies for spreading liquid manures will reduce ammonia emissions).

⁵⁷ Committee on Climate Change (2020), Land use: Policies for a Net Zero UK. pg.58.

⁵⁸ Williams J.R., et al. (2019). Annex 1: Soil nutrient management for improved land. ERAMMP Report to Welsh Government (Contract C210/2016/2017) (CEH NEC06297).

⁵⁹ Jones, L. et al. (2019). Annex 8: Improving Air Quality and well-being. ERAMMP Report to Welsh Government (Contract C210/2016/2017) (CEH NEC06297).

Other evidence from ERAMMP⁶⁰ notes “*focus can be placed on five broad areas where ammonia abatement has already been well researched and proven as an effective method. These are:*

- *Livestock feeding strategies;*
- *Decreasing ammonia emissions from animal housing;*
- *Preventing emissions from slurry storage facilities;*
- *Low-emission slurry application techniques;*
- *NH₃ emission from mineral fertiliser application can be reduced by opting for low-emission N fertilisers, such as ammonium nitrate, avoiding urea which is associated with much higher emissions.”*

In terms of noise pollution, a report by Eftec for Defra (2018) found natural capital assisted with the mitigation of road noise levels of between 8,000 – 22,000 homes in Wales⁶¹. Through the continued restoration of ecosystems this benefit could increase.

♦ **Improve the quality and ensure the quantity of our water;**

Evidence⁶² shows annual nutrient losses from Welsh agriculture are estimated at around 37,000 tonnes of nitrate-N and 700 tonnes of phosphorus to water.

Many actions consistent with SLM would reduce harm to the quality of waterways, in particular through measures such as targeted fertiliser application and the encouragement of practices such as hedgerow regeneration and soil management. These aim to reduce the level of nutrient runoff resulting from soil erosion along with natural barriers being created to reduce pollution from entering waterways. We therefore expect our proposals to have a positive impact on water quality.

♦ **Taking action to reduce the pressures on natural resources, such as through resource efficiency and renewable energy;**

Through SLM we aim to support farms to become sustainably productive, by improving the efficiency of their production within the natural capacity of the land. We also propose to improve resource efficiency within the wider supply chain, in support of SLM.

Improved efficiency can not only improve farm business resilience, through reducing costs and waste e.g. through reduced fertiliser use, but can also deliver SLM outcomes and help reduce resource pressure for future generations.

⁶⁰ Jones, L. et al. (2019). Annex 8: Improving Air Quality and well-being. ERAMMP Report to Welsh Government (Contract C210/2016/2017) (CEH NEC06297).

⁶¹ Eftec & CEH (2018) Modelling noise mitigation for UK urban natural capital accounts. Report. Pg. 38.

⁶² Williams J.R., et al. (2019). Annex 1: Soil nutrient management for improved land. ERAMMP Report to Welsh Government (Contract C210/2016/2017) (CEH NEC06297).

The wider delivery of SLM outcomes, such as clean air, water and increased carbon sequestration, will also reduce the pressure on natural resources and increase the resilience of our ecosystems.

We expect our proposals to have a positive effect on resource efficiency and pressures on natural resources.

- ♦ **Supporting preventative approaches to health outcomes, with a particular focus on key public health issues of transport related air and noise pollution, tackling physical inactivity and mental health;**

The SLM framework, proposed scheme and regulatory reform should reduce air pollution, improve air quality, and improve provision for opportunities for public access to the countryside. We have set out the evidence in our Health Impact Assessment the main areas where our proposals will contribute to mental and physical health.

- ♦ **Supporting action to tackle health and economic inequalities;**

The proposals will contribute to better air and water quality, and to the extent poor air and water quality disproportionately affect those living in low income households (in deprived areas), our proposals should positively impact on the health inequalities of low income households. Parts of Wales still have some of the worst air quality in Britain, contributing to around 1,000-4,000 deaths every year. Alongside this, Public Health Wales has described the situation as a public health crisis, with an estimated cost to the Welsh economy of £1 billion related to lost work days and costs to our health service⁶³. Many potential actions consistent with SLM would result in management of the land in a way that will assist in improving this situation while also widening access to the Welsh landscape, which could benefit those from poor or deprived areas.

Our Equality Impact Assessment notes the environmental outcomes delivered by the proposals will impact positively on each of the three physical environment sub domains (air quality; flood risk; and access to green space) of the Welsh Index of Multiple Deprivation (WIMD)⁶⁴. As such this could reduce the number of areas⁶⁵ in Wales shown as being environmentally deprived under the physical environment domain in the WIMD. This would impact positively on the well-being of those people living in those areas, and contribute positively towards reducing environmental inequality.

⁶³ Natural Resources Wales. South Central Wales Area Statement – Improving our Health. <https://naturalresources.wales/about-us/area-statements/south-central-wales-area-statement/improving-our-health/?lang=en>

⁶⁴ Welsh Government (2019). Welsh Index of Multiple Deprivation (WIMD) Results Report.

⁶⁵ Lower Super Output Areas (LSOAs)

♦ **Supporting community cohesion:**

Evidence shows the proposals have the potential to contribute to social capital and community well-being:

- **social capital:** a review⁶⁶ of agri-environment schemes in the Peak District National Park notes *“upland farming communities are also seen as being important to maintaining social capital (community inter-linkages and institutions), and for many years governments have offered additional supports to upland farmers in an attempt to sustain incomes, rural services and populations in these areas.”*
- **community environmental well-being:** a 2007 review⁶⁷ of the links between well-being and the natural environment refers to *“the positive impact of engagement with the natural environment (particularly green spaces) on psychological well-being individually and at the community level”*.

Our proposals might also impact positively on community businesses which in turn would support community cohesion, as outlined in our Rural Proofing and Economic Wellbeing Impact Assessments.

♦ **Supporting secure and stable employment.**

Latest estimates for 2019⁶⁸ show the total number of people working on agricultural holdings in Wales is 52,900. Of this total, there are 39,700 principal farmers, directors, business partners and their spouses. The total includes 13,000 regular full time, regular part time and seasonal/casual farm workers (This does not include self-employed people or contractors who may also work on the farm).

We expect our proposals may contribute positively towards employment. Evidence from Tir Gofal in Wales⁶⁹ and Entry Level Stewardship in England⁷⁰ has found these agri-environment schemes were associated with an increased labour demand. Additionally, at

⁶⁶ Acs, S., Hanley, N., Dallimer, M., Gaston, K. J., Robertson, P., Wilson, P., & Armsworth, P. R. (2010). The effect of decoupling on marginal agricultural systems: implications for farm incomes, land use and upland ecology. *Land use policy*, 27(2), 550-563.

⁶⁷ Newton, J. (2007). Wellbeing and the natural environment: a brief overview of the evidence. *Bath: University of Bath*.

⁶⁸ June Survey of Agriculture and Horticulture (2019).

⁶⁹ Agra CEAS (2005). Socio-economic evaluation of Tir Gofal, report for CCW and Welsh Government. A sample of 251 participants in Tir Gofal (just over 20% of the 1,166 participants who had received payments at project inception) were surveyed.

⁷⁰ Mills, J., Courtney, P., & Gaskell, P. (2010). Assessing the Incidental socio-economic impacts of Environmental Stewardship.

UK level, it is suggested *the contribution of Pillar 2 to rural employment is higher (1.2%) compared to the contribution of Pillar 1 (1.0%)*⁷¹.

Through Sustainable Land Management, a resilient agricultural sector will also contribute to secure and stable employment by enabling current and future generations to continue to produce food and environmental outcomes. This should support jobs in the agricultural sector, wider supply chain and rural communities.

Additionally, the protection and increased sustainability of Welsh natural resources may lead to a number of additional tertiary benefits related to the creation of secure and stable employment. This may be particularly applicable in the area of agri-tourism where Welsh natural resources have created a natural environment which is world renowned. This is evidenced by the Wales Visitor survey which highlights the natural environment as the key reason for tourists to choose Wales as a holiday destination⁷².

To understand the effects of our proposals, we have commissioned independent analysis of the economic impacts of the future scheme on farm businesses and this will inform further assessment of impacts.

5.2 Biodiversity

Please see Annex F for the Biodiversity Impact Assessment of our proposals.

5.3 Climate Change

Climate change has been identified as one of the biggest threats facing our future generations. We need to reduce our emissions through decarbonisation action (5.3a) and to adapt to the impacts of climate change by increasing our resilience (5.3b).

⁷¹ Rizov, M., Davidova, S., & Bailey, A. (2018). Employment effects of CAP payments in the UK non-farm economy. *European Review of Agricultural Economics*, 45(5), 723-748.

⁷² McAllister & McDonough (2017). Wales Visitor Survey 2016 Report: UK Staying Visitors. Welsh Government, GSR report number 14/2017. Available at: <http://gov.wales/statistics-and-research/wales-visitor-survey/?lang=en>

5.3a Decarbonisation

How (either positively or negatively), and to what extent (significant/moderate/minimal impact), will the proposal affect emissions in Wales?

The impacts of climate change on agriculture and forestry in the UK have been extensively detailed⁷³. Likewise, in Wales the impact of climate change on Wales' Natural Resources⁷⁴, and on Wales' protected sites⁷⁵, have been detailed.

The UK Climate Change Committee⁷⁶, in their report on land use, conclude "*Throughout the UK there is an urgent need for a new approach: the legislative opportunities for real change are available and should progress immediately*".

The Welsh Government *Land Use, Land Use Change & Forestry: Sector Emission Pathway* report⁷⁷ recognises we need to increase our woodland creation activity and ensure the management of our soils is sufficient to be compatible with our statutory obligation. We also recognise there are wider opportunities for carbon storage through safeguarding and increasing carbon stores in soils and other biomass.

The report further shows we need to develop a resilient and prosperous agriculture industry, which reduces its greenhouse gas emissions through a range of approaches, including the development of improved efficiency in livestock and crop production, nutrient management and increasing the sustainability of farm assets.

The proposals in the White Paper have the direct aim of increasing decarbonisation and reducing emissions in the agriculture sector in Wales. We aim to reduce the footprint of each farm to as close to net zero as possible. Below we outline where specific proposals are likely to have an impact on these aims.

⁷³ Morison, J. & Matthews, R. (eds.) (2016): Agriculture and Forestry Climate Change Impacts Summary Report, Living With Environmental Change.

⁷⁴ Natural Resources Wales (2016). State of Natural Resources Report (SoNaRR): Assessment of the Sustainable Management of Natural Resources. Technical Report.

⁷⁵ Natural Resources Wales (2018). Natura 2000 Thematic Action Plan Climate Change and Habitat Fragmentation, LIFE Natura 2000 Programme for Wales.

⁷⁶ UK Committee on Climate Change (2020). Land use: Policies for a Net Zero UK.

⁷⁷ Welsh Government (2019). Land Use, Land Use Change & Forestry: Sector Emission Pathway.

Animal health planning, veterinary interventions and enhanced disease controls

Healthy animals are more productive. Fewer healthy animals are required to produce the same amount of produce compared with unhealthy ones, resulting in fewer greenhouse gas emissions (GHGE).

The Welsh Government commissioned a unique study, using life cycle analysis techniques, to determine the impact of TB on GHGE⁷⁸. The study showed eradication of TB in Wales would reduce GHGE from the cattle sector by approximately 2% through reduced wastage and greater efficiency – a small but significant contribution to the overall goal of reducing GHGE from farming.

There are many endemic diseases whose control would bring about – very probably greater – GHGE reduction. However, quantifying the impact is complex and expensive and until now resource has largely been focussed on making health improvements, rather than measuring GHGE impacts of those improvements.

We propose to utilise the Agriculture (Wales) Bill as a means of delivering improved and enhanced animal disease controls, as part of the civil sanctions proposals to be developed, and to give Welsh Ministers greater flexibility in each species we apply disease controls to. As outlined above, prevention of disease should result in healthier and more productive animals, with fewer animals emitting fewer emissions. Preventing large scale animal disease outbreaks, will reduce the chance and scale of the environmental impact such outbreaks have, both in terms of the outbreak itself, and the actions required in responding to it. The 2001 Foot and Mouth Disease outbreak required the disposal of approximately six million animals, via mass burial, pyre burning and rendering, impacting on the quality of water, air and land. Further, the intensive use of over 1.3 million litres of Government approved disinfectant required to clean infected premises and at road access points across England and Wales by October 2001 accounted for 18% of all pollution incidents recorded during the outbreak, with longer term affects as biological sewer treatment processes at small plants were disrupted⁷⁹. Whilst animal disease outbreaks cannot be predicted, increased preventative action through enhanced and extended disease controls should reduce the likelihood of occurrence and scale, should they occur. This should reduce the environmental impact, and in turn the potential implications resulting from responsive action.

⁷⁸ Williams, A. & Sanders, D. (2016). Greenhouse Gas Emissions from bovine tuberculosis (bTB) in Wales. Report for the Welsh Government (available on request)

⁷⁹ http://environmentdata.org/archive/ealit:4290/OBJ/x69_EA_Footandmouthdisease_2001_0.pdf

Future scheme

The future scheme, through the delivery of SLM, aims to increase soil health, reduce emissions, and increase carbon sequestration through land management. Farms will be supported to deliver these outcomes which will contribute to reduce emissions in Wales.

Due to uncertainty about future funding, we are currently unable to estimate if these emissions reductions will be significant or moderate. However, evidence suggests the future scheme has the potential to deliver significant reductions:

In terms of sward management and grassland, evidence⁸⁰ shows *“Improved pasture lands contain large stocks of C primarily because of their dominance in area coverage in Wales... soil C in pasture land to be equivalent to 47% of Wales’ soil carbon stocks to a 1m depth. Preserving these and all soil C stocks are critical if soils are not to contribute to further climate change when they should be helping mitigate climate change by ongoing C storage”*.

In the case of woodland, for which creation and management would be supported in the future scheme, evidence⁸¹ also suggests *“If a woodland is sustainably managed and each rotation of trees grows to return to the pre-harvest carbon stock, then the forest carbon stock is renewed on a cyclical basis. Furthermore, if the harvested wood is used in products with a long lifespan this can result in a timber production woodland system contributing more to climate change mitigation than an unharvested woodland. This benefit will be magnified further if the use of these harvested wood products: (a) substitutes for materials like concrete, steel or plastic; and (b) substitutes for wood imported from countries where the production forests are not managed sustainably”*.

Therefore, depending on the level of funding and future scheme participation the impact of a scheme on decarbonisation has the potential to be significant. As our proposals develop, we will be examining the impact on decarbonisation in more detail.

Assessment using the HM Treasury Green Book Greenhouse Gas valuation methodology⁸²

The HM Treasury Green Book is being used by consultants as part of the ERAMMP consortium to develop logic chains which will set out the relationship between the social value of ecosystem goods and services and SLM actions undertaken on farms. The logic chains will include the following:

⁸⁰ Emmett, B.A. et al. (2019). Report 10b: Considerations for the new scheme. ERAMMP Report to Welsh Government (Contract C210/2016/2017) (CEH NEC06297).

⁸¹ Emmett, B.A. et al. (2019). Report 10b: Considerations for the new scheme. ERAMMP Report to Welsh Government (Contract C210/2016/2017) (CEH NEC06297).

⁸² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685903/The_Green_Book.pdf

- Climate regulation;
- Increased tree cover;
- Saltmarsh;
- Peatland;
- Grassland;
- Decarbonisation.

This work will inform our impact assessment of the decarbonisation effects of the scheme proposals.

The future scheme will be subject to full Cost Benefit Analysis which will also be consistent with HM Treasury Green Book.

5.3 b Adaptation

How (either positively or negatively), and to what extent (significant/moderate/minimal impact), will the proposal affect ability to adapt to the effects of climate change?

The Welsh Government *Climate Change Adaptation Plan*⁸³ sets out the overall approach to climate change adaptation in Wales. It notes “*Changes in agricultural and forestry productivity are being assessed and mapped across the whole of Wales through the Capability, Suitability & Climate Programme. This will provide a spatial understanding of how cropping potential may change under UKCP18 scenarios for over 100 agricultural and forestry crops*”.

In the context of livestock farming, evidence⁸⁴ suggests “*climate change is a threat to livestock production because of the impact on quality of feed crop and forage, water availability, animal and milk production, livestock diseases, animal reproduction, and biodiversity..... the livestock sector will be a key player in the mitigation of GHG emissions and improving global food security. Therefore, in the transition to sustainable livestock production, there is a need for: a) assessments related to the use of adaptation and mitigation measures tailored to the location and livestock production system in use, and b) policies that support and facilitate the implementation of climate change adaptation and mitigation measures*”.

⁸³ Welsh Government (2019). Prosperity for All: A Climate Conscious Wales. A climate change adaptation plan for Wales.

⁸⁴ Rojas-Downing, M., Nejadhashemi, A., Harrigan, T., & Woznicki, S. (2017). Climate change and livestock: Impacts, adaptation, and mitigation. *Climate Risk Management*, 16, 145-163.

In the context of arable crops, evidence⁸⁵ suggests the “key effects [of climate change] will be felt through changes in the timing of the crop calendar and hence the farming year in: quality, yield, pest and disease management and crop distribution. Farmers may adapt readily to changes in average climate since effects will be gradual, but adaptations to some extremes will require more forward planning. Possible adaptation options by farmers, e.g. changing crop cultivars, and the wider industry, e.g. developing new varieties, need to be considered”.

In the context of dairy farming, evidence⁸⁶ suggests “it is essential to establish and adopt mitigation strategies covering available tools from management, nutrition, health and plant and animal breeding to cope with the future consequences of climate change on dairy farming”.

Further evidence on the need for resilience to be built into the agricultural sector due to the prospect of climate change can be found in the Wales Rural Development Programme SWOT analysis⁸⁷.

Below we outline the elements of our policy expected to have an impact on climate change adaptation:

Future scheme

Our proposals set helping farmers to respond to the climate emergency as a key Welsh Government objective for agricultural policy. We propose supporting farmers to undertake actions that will improve their resilience to climate change, and deliver wider climate change mitigation.

In addition to actions specifically targeted at climate change adaptation, we also want farms to become sustainably productive, managing land within its productive capacity. This sustainable management of natural resources should increase the condition of our ecosystems, which in turn increases the ability of the environment to react to climate change. For example, increased tree cover can have a cooling effect and also mitigate flood risk whilst improving soil health and structure, together with increasing soil organic matter will allow more rapid infiltration of surface water and its retention within the soil for longer periods of time would otherwise be the case. Soil quality improvements will also contribute to improved water quality.

⁸⁵ Hughes, G., & Hossel, J. (2008). Adapting UK arable agriculture to climate change. In *HGCA conference* (pp. 23-24).

⁸⁶ Gauly, M., et al., (2013.) Future consequences and challenges for dairy cow production systems arising from climate change in Central Europe-a review.

⁸⁷United Kingdom – Rural Development Programme (Regional) – Wales. Page 81 onwards.<https://gov.wales/sites/default/files/publications/2019-07/rural-development-programme-document-2014-to-2020.pdf>

We expect our scheme proposals to positively and, for participating farmers, significantly affect their ability to adapt to the effects of climate change such as increased temperatures, stronger winds and more rain.

National Minimum Standards

As outlined in the Natural Resources Impact Assessment, the proposed National Minimum Standards are intended to be flexible to ensure changes can be made to respond to climate change and any resulting changes in biodiversity needs.

Enhanced disease control

Changing climates and rising temperatures increase the risk of certain animal diseases, in particular vector borne diseases. Bluetongue Virus, for example is a disease transmitted by midges, which have a higher survival rate in warmer temperatures. Additionally warmer temperatures alter the migratory pattern, routes and timings of wild birds, presenting an increased risk of avian influenza (AI) to our national flock. The proposed enhanced disease controls and deterrents proposed through National Minimum Standards and civil sanctions, should act to minimise disease risks, including the increased disease risk created by climate change. Fixed penalties to be imposed on those not housing birds for example as a requirement of an AI prevention zone should reduce the exposure of domestic poultry to the increased threat.

5.4 Strategic Environmental Assessment (SEA)

At this stage our proposals are strategic and not ascribed to a specific area in Wales therefore an SEA is not required. We will review this as the proposals develop.

5.5 Habitats Regulations Assessment (HRA)

At this stage we are unable to ascribe any impacts to specific protected sites therefore a HRA will not be needed. We will review this as the proposals develop.

5.6 Environmental Impact Assessment (EIA)

Our proposals may result in change of land use, including afforestation, however at this stage it is not possible to estimate the level of change. We will review this as the proposals develop.

SECTION 6. RECORD OF FULL IMPACT ASSESSMENTS REQUIRED

You have now decided which areas need a more detailed impact assessment. Please list them below.

Impact Assessment	Yes/No	If yes, you should
Children's rights	Yes	Complete the Full Impact Assessments Children's Rights Impact Assessment below
Equality	Yes*	Complete the Equality Impact Assessment below
Rural Proofing	Yes	Complete the C. Rural Proofing Impact Assessment below
Health	Yes	Refer to the Integrated Impact Assessment Guidance
Privacy	A full DPIA will be completed for the Bill	Complete the Data Protection Impact Assessment below
Welsh Language	Yes*	<p>Complete the As outlined in the White Paper, we have made proposals to streamline collection and processing of data on agriculture and the associated supply chain. We propose to clarify in legislation the primary purposes for collecting, sharing and linking data.</p> <p>We also propose to remove barriers to data sharing between regulators, evaluators and future scheme managers. This should reduce the reporting and monitoring burden on farmers and land managers.</p> <p>We also want to ensure continuity by retaining the ability to process historic data (already held by the Welsh Government) when the powers we are</p>

		<p>drawing from the UK Agriculture Act come to an end.</p> <p>These proposals are likely to result in the processing of personal information, and therefore a full Data Protection Impact Assessment is required in order to:</p> <ul style="list-style-type: none"> • Describe the nature, scope, context and purposes of the processing; • Assess necessity, proportionality and compliance measures; • Identify and assess risks to individuals; and • Identify any additional measures to mitigate those risks. <p>We have begun the process of consulting with the Information Commissioner's Office (ICO) and intend to work them to fully consider the impacts of our proposals as they develop.</p> <p>The consultation exercise for the White Paper will inform this assessment, and mitigation of any risks.</p> <p>A full Data Protection Impact Assessment will be completed for consideration prior to the introduction of the Bill.</p> <p>Welsh Language Impact Assessment below</p>
Economic / RIA	An RIA will accompany the Bill	Refer to the Integrated Impact Assessment Guidance
Justice	Not at this stage – a full JIA will	Complete the Justice System Impact Identification form

	accompany the Bill	
Biodiversity	Yes*	Complete the Biodiversity Impact Assessment below
Climate Change	Yes	Refer to the Integrated Impact Assessment Guidance
Strategic Environmental Assessment	Not at this stage	Refer to the Integrated Impact Assessment Guidance
Habitat Regulations Assessment	Not at this stage	Refer to the Integrated Impact Assessment Guidance
Environmental Impact Assessment	Not at this stage	Refer to the Integrated Impact Assessment Guidance

* Mandatory for all proposals in order to meet statutory obligations.

SECTION 7. CONCLUSION

7.1 How have people most likely to be affected by the proposal been involved in developing it?

In July 2018, we published the *Brexit and Our Land* consultation. Over 12,000 responses were submitted. This included over 1,000 substantive responses with the remaining responses coming from 7 unique campaigns.

In July 2019, we published the *Sustainable Farming and our Land* consultation. Over 3,300 responses were received over the course of the consultation. Just over 500 were unique responses from individuals and organisations with the remainder made up of 3 distinct campaigns.

Across these consultations we have engaged directly with farmers and other rural stakeholders at regional agricultural shows and a range of dedicated events to further explain and discuss our proposals.

Those who submitted individual responses represented a diverse range of voices and perspectives. A significant proportion of respondents reported they were directly engaged in farming.

While developing our proposals we have sought the views of stakeholder organisations such as the farming unions, environmental organisations and those who represent specific sections of the sector such as the Tenant Farmer Association and the Country Land and Business Association. We also received consultation responses from the Welsh Language Commissioner and Young Farmer Associations.

We have engaged with over 1,900 stakeholders (the majority of whom were farmers) through a process of co-design to gain insight into their views on our proposals for a Sustainable Farming Scheme to replace existing EU support schemes.

The draft impact assessments in this document, and the proposals in the White Paper, are an important next step in the consultation, engagement and policy process. We welcome views on the identified impacts, the evidence presented and any areas we have not yet considered.

We have established a stakeholder evidence group, so officials can engage with stakeholders as we take forward our programme of analysis.

As we develop our proposals on scheme design and National Minimum Standards we will further consult both formally and informally with our stakeholders. It is our intention to build on the work we have done through the co-design programme to ensure the scheme we deliver is fit for purpose.

7.2 What are the most significant impacts, positive and negative?

Traditionally, support for agriculture has been focussed on policies that have increased agricultural production and provided cheap food. These policies have resulted in increased levels of production per hectare for many, but this increase in production has come at a wider societal cost. The impacts of some intensification practices on farmland biodiversity, air and water quality, public health and the climate are increasingly recognised as issues that must be urgently addressed.

Leaving the EU means the Welsh Government has to design a policy to replace the Common Agricultural Policy to support the agriculture sector but also deliver against the environmental challenges we are facing. The Well-being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016 establish an important legislative framework, focused on sustainability, upon which our proposals for future land management policy are based. This framework also underpins our legislative proposals.

The two most significant aspects of our proposals are to ensure any future support for the sector delivers against the Sustainable Land Management framework and the creation of a set of National Minimum Standards.

Setting an objective of Sustainable Land Management (SLM) for the future scheme is expected to positively impact on farmers and rural communities through increasing the sustainability of farm businesses. This will also help increase resilience to the effects of the climate emergency and future trading environment.

Rewarding farmers for delivering SLM outcomes and creating a set of National Minimum Standards will increase the ecological resilience of the land they manage, and the economic resilience of their businesses. Improving the efficiency of the farm business model within the natural capacity of the land will enable current and future generations to continue farming, offering long-term resilience to the communities they are embedded in.

The proposal to reward farmers for delivering these outcomes will also offer an alternative revenue stream, unaffected by changes in trading conditions. This income stream should also support resilient rural communities.

Concerns were raised, through responses to our previous consultations, about the potential impact of a new scheme on rural areas and the subsequent effect on the Welsh language. Supporting resilient rural communities, through sustainable farm businesses, will help safeguard the use of the Welsh language for current and future generations.

By supporting farming to deliver within SLM framework and introducing a set of National Minimum Standards we should see the delivery of outcomes such as improved air and water quality (where this is currently affected by agriculture). This is vital for the health of our nation.

We recognise the importance of any potential economic impact on the sector and different areas of Wales. These impacts are being considered separately, as part of a comprehensive

(externally commissioned) assessment of the proposals on the agricultural economy of Wales, which will include consideration at farm, sector and regional level. This work will, in due course, inform the design of the future scheme and feed into the cost benefit analysis of our proposals.

7.3 In light of the impacts identified, how will the proposal:

- **maximise contribution to our well-being objectives and the seven well-being goals; and/or,**
- **avoid, reduce or mitigate any negative impacts?**

The SLM Framework proposed in the White Paper provides an internationally recognised basis from which a range of environmental, social and economic outcomes can be achieved in line with the well-being objectives. To maximise these benefits we will be undertaking a range of modelling using ERAMMP which will allow us to explore the relationship between actions within the scheme, delivery of the outcomes we are seeking and the associated cost /impacts. Additionally, the independent economic analysis of the scheme proposals will be considering potential economic impacts on farm businesses of different types and sizes. This will be integral to the scheme design process and assessment of risks and impacts. The analysis will also enable us to identify and mitigate any disproportionate economic impacts which may impact on rural communities and the Welsh language.

Feedback received as part of this White Paper consultation will be used to further identify, explore and minimise any potential negative impacts of our proposals. More detailed consultation will be conducted prior to the development of secondary legislation, such as that for the future scheme, which will further inform policy development and the impact assessment of our proposals.

Our proposals in this White Paper include the provision of a range of advice and guidance for agricultural regulation, the National Minimum Standards and future scheme. We believe a clear understanding of the scheme proposals, regulatory requirements, expectations for monitoring and enforcement mechanisms, should aid transition and help mitigate some of the perceived potential negative effects of the new scheme and regulation on farmers.

The provision of advice and guidance will be strengthened by an advisory service accompanying the future scheme which will support farmers in scheme participation and regulatory compliance. This service could comprise of a mixture of delivery mechanisms, including on-farm visits by an advisor and peer-to-peer knowledge sharing opportunities.

This advisory service will be provisioned bi-lingually, in line with the Welsh Language Standards and in support of *Cymraeg 2050*. This service should further support a managed transition to the new scheme, mitigating potential negative effects.

7.4 How will the impact of the proposal be monitored and evaluated as it progresses and when it concludes?

The Welsh Government will be required to report to the Senedd on the impact of the total expenditure incurred in terms of direct farming support and to separately report on the impact of rural development support.

A monitoring and evaluation strategy will set out how the proposed scheme will be judged in terms of value for money and the outcomes it has delivered for Wales.

The strategy will recognise the long term nature of the outcomes sought and identify interim measures which can demonstrate progress.

SECTION 8. DECLARATION

Declaration

I am satisfied that the impact of the proposed action has been adequately assessed and recorded.

Name of Senior Responsible Officer / Deputy Director: James Owen

Department: Economy, Skills and Natural Resources

Date: 1/12/2020

FULL IMPACT ASSESSMENTS

A. CHILDREN'S RIGHTS IMPACT ASSESSMENT

1. Describe and explain the impact of the proposal on children and young people.

♦ ***How will the proposal affect the lives of children, positively and negatively?***

We expect our proposals to positively impact on the lives of children. Positive impacts relate to the environmental outcomes we anticipate our proposals will generate – better air quality, better water quality, more resilient ecosystems and species recovery, more access opportunities to the countryside and the protection of landscape features. These outcomes should positively affect the lives of children, now and in the future.

We have noted in the Health Impact Assessment the potential of the environmental outcomes we expect from the proposed regulatory reform and scheme to impact positively on the health outcomes of the population generally. Better air quality for example is likely to benefit children – Public Health Wales⁸⁸ notes “*It is well-documented that different people are affected in different ways by air pollution exposure; for example, children, older people and those with chronic lung or heart conditions are considered more vulnerable to the effects of air pollution exposure*”.

An expected positive impact of our proposals on children is also expected from an increase in the resilience of farm businesses. Resilient farm businesses should support resilient rural communities which in turn will benefit children in these areas. There may be an economic impact of the scheme, which could impact on children. We have commissioned an independent analysis of the future scheme to assess potential economic effects, and the results of this analysis will inform this impact assessment in due course.

♦ ***How will the proposal affect different groups of children (e.g. children who have experienced adverse childhood experiences (ACEs), children living in poverty, children with a disability, children living in Welsh speaking households and children in Welsh medium education etc.)?***

To the extent poor air and water quality disproportionately affect those living in low income households (in deprived areas), our proposals should positively impact on the well-being of children in low income households.

We note in our Equality Impact Assessment our proposals will generate environmental outcomes which will impact positively on each of the three physical environment sub

⁸⁸ Public Health Wales and Welsh Government (2018) Working together to reduce outdoor air pollution, risks and inequalities. Guidance to support policy and practice development across the NHS in Wales.

domains (air quality; flood risk; and access to green space) of the Welsh Index of Multiple Deprivation (WIMND)⁸⁹. As such this could reduce the number of areas shown as being environmentally deprived under the physical environment domain in the WIMD, and positively benefit children in these areas.

Our proposals aim to ensure a resilient agricultural sector for future generations which should positively impact on children. As outlined in our Welsh Language and Rural Proofing Impact Assessments, changes to the agriculture industry have the potential to impact both rural communities and the Welsh language which in turn may impact children.

Healthier animals with high standards of welfare help build resilience into rural economies and communities (explored further in the Rural Proofing Impact Assessment), providing opportunities and possible positive impacts for children and young people in those communities.

These outcomes will support the resilience of rural and Welsh speaking communities, thus positively impacting on the lives of the children in these areas and across Wales.

- ♦ ***How have you consulted with children and young people? If you haven't, please explain why.***

Children will not be participants of the proposed scheme nor carrying out agricultural activities regulated by National Minimum Standards, although they will benefit from the delivery of Sustainable Land Management outcomes.

Responses to our previous consultations have included those from organisations representing younger/the next generation of farmers and we will be seeking their views on the current proposals.

2. Explain how the proposal is likely to impact on children's rights.

The proposals relate to Articles 24, 27 and 31 of the United Nations Convention on the Rights of the Child:

- **Article 24 (health and health services):** Every child has the right to the best possible health. Governments must provide good quality health care, clean water, nutritious food, and a clean environment and education on health and well-being so that children can stay healthy. Richer countries must help poorer countries achieve this.

⁸⁹ Welsh Government (2019) Welsh Index of Multiple Deprivation (WIMD) Results Report.

- **Article 27 (adequate standard of living):** Every child has the right to a standard of living adequate for the child's physical, mental, spiritual, moral and social development.
- **Article 31 (leisure, play and culture):** Every child has the right to relax, play and take part in a wide range of cultural and artistic activities.

The proposals aim to increase the delivery of Sustainable Land Management outcomes such as clean air, improved water quality, ecosystem resilience and enhanced access to the countryside. This would provide children with improved opportunities for healthy activities in a safe environment, and good physical and mental health.

A review⁹⁰ of the importance of nature to childhood development concluded “*contact with nature is supportive of healthy child development in several domains – cognitive, social and emotional. Until proven otherwise, we can continue to assume, just as they need good nutrition and adequate sleep, children many very well need contact with nature*”.

The rationalisation of landscape feature protections which form part of Wales' natural environment provided through proposals for the National Minimum Standards and increased opportunities for providing access to the countryside that would be available under the proposed scheme could facilitate children enjoying increased contact with nature, and as such would contribute positively to childhood development, based on the above evidence.

We have identified no negative impacts from our proposals on the rights of children under the UNCRC.

⁹⁰ Taylor, A. F., Kuo, F. E., Spencer, C., & Blades, M. (2006). Is contact with nature important for healthy child development? State of the evidence. *Children and their environments: Learning, using and designing spaces*, 124.

B. EQUALITY IMPACT ASSESSMENT

1. Describe and explain the impact of the proposal on people with protected characteristics as described in the Equality Act 2010.

♦ *How will the proposal promote equality?*

The Equalities Act 2010 places a General Equality Duty on Welsh public authorities to have 'due regard' to the need to eliminate unlawful discrimination, harassment and victimisation, as well as to advance equality of opportunity and to foster good relations between people who share a protected characteristic and those who do not.

The proposed scheme will be available equally to all farmers who wish to participate in the Scheme, underpinned by a set of National Minimum Standards equally applicable to all farmers in Wales. As it is primarily an agricultural support scheme aimed at maintaining economically, socially and environmentally sustainable farm businesses, whilst paying for environmental outcomes not valued by the market, there is limited opportunity to use the proposed scheme directly to foster good relations between people who share a protected characteristic and those who do not. However, we note below proposals in the White Paper are not expected to have any negative impacts on people who share a protected characteristic, and will have some general benefits for the whole population, including people who share a protected characteristic. These generic benefits relate to:

- The impacts on people's health from the environmental outcomes the proposals will generate;
- The benefits of increased opportunities to access the countryside and protection of landscape features.

As scheme proposals develop, we will be giving consideration to how any barriers to access for protected groups can be mitigated.

Protected groups

The Equality Impact Assessment⁹¹ undertaken for the Wales 2014-2020 Rural Development Programme Identified the following key issues for rural Wales:

- **Children:** Much of rural Wales has lower proportions of children than urban areas.
- **Young people:** In rural areas in central Wales, such as Ceredigion, Powys and Gwynedd between 5 and 15% of the population are aged 16-24. The highest proportions of young people are found in many of the more urban areas.

⁹¹ WEFO (2014). Wales 2014-2020 Rural Development Programme Equality Impact Assessment – Final Report.

- **Older working age people:** The highest proportions of people aged 50-64 are found in the rural areas in central Wales, such as Ceredigion, Powys and Gwynedd. In many of these areas, more than one fifth of the population are in this age group.
 - **Older people over 64.** The highest proportions of persons aged over 64 are found in the rural areas in central Wales, such as Ceredigion, Powys and Gwynedd. In many of these areas, more than one fifth of the population are over the age of 64.
 - **Disability.** In many of the more rural central and western areas, in spite of lower numbers of people, the proportion of people with long term health problems or disabilities is higher. This is particularly the case in the Welsh Valleys where as many as 30% of people describe themselves as having a life limiting health condition or disability.
 - **Race and ethnicity:** Data from Stats Wales⁹² show that in 2009, around 4.1% of the Welsh population was made up of people from a mixed background; Asian or Asian British background; Black or Black British background; or other ethnic group. The Equalities IA for the RDP states that ethnic minority groups account for less than 5% of the population in most rural areas. However, *“some consider the number of ethnic minority groups to be under-counted in rural areas”*.
 - **Sex and gender:** The levels of economic activity for males and females in rural Wales have moved in opposite directions in recent years with male inactivity rising by around 5,500 between 2005 and 2011, whilst female economic inactivity declining by 2,400 since 2005.
- ♦ ***What are the possible negative impacts on people in protected groups and those living in low income households and how will you mitigate for these?***

Impact on different groups

Children

As outlined in the Children’s Rights and Health Impact Assessments, our proposals could impact on children, and the wider population, in several ways.

Firstly, the delivery of SLM outcomes expected from the National Minimum Standards and future scheme such as clean air, clean water and increased access to the countryside is likely to provide a positive benefit for children and other groups.

⁹² StatsWales (2010). <https://statswales.gov.wales/Catalogue/Equality-and-Diversity/Equality/Population-Estimates-by-Ethnicity-Year>

Better air quality for example is likely to benefit children – Public Health Wales⁹³ notes that *“It is well-documented that different people are affected in different ways by air pollution exposure; for example, children, older people and those with chronic lung or heart conditions are considered more vulnerable to the effects of air pollution exposure”*.

We also note a review⁹⁴ of the importance of nature to childhood development which concluded *“contact with nature is supportive of healthy child development in several domains – cognitive, social and emotional. Until proven otherwise, we can continue to assume, just as they need good nutrition and adequate sleep, children many very well need contact with nature”*. The landscape feature protections proposed through the National Minimum Standards and the increased opportunities for providing access to the countryside under the future scheme could facilitate children enjoying increased contact with nature.

Second, an increase in the resilience of farm businesses will support resilient rural communities which will benefit children in these areas. There may be an economic impact of the scheme, which could impact on children. We have commissioned an independent analysis of the future scheme to assess potential economic effects, and the results of this analysis will inform this impact assessment in due course.

The impact of the proposals on children is therefore expected to be positive.

Young People

Proposals for the National Minimum Standards include the development of advice and guidance which will be available to all farmers. Our proposals for the scheme include the provision of appropriate Continued Professional Development. These sources of advice and guidance should be particularly valuable for those who are new to the industry, for example, young people who have recently finished education.

Young, and new, entrants to the farming industry currently face a number of challenges including access to land and finance, and gaining the knowledge/skills needed to run a successful business. Farming Connect has led a number of initiatives to address these challenges. These include:

- The Venture Scheme⁹⁵ which matches new entrants with farmers looking to step back from the industry in order to become business partners;
- The Agri Academy⁹⁶ which aims to inspire the next generation of innovators and entrepreneurs by providing a personal development programme for future agricultural

⁹³ Public Health Wales and Welsh Government (2018). Working together to reduce outdoor air pollution, risks and inequalities. Guidance to support policy and practice development across the NHS in Wales.

⁹⁴ Taylor, A. , Kuo, F., Spencer, C., & Blades, M. (2006). Is contact with nature important for healthy child development? State of the evidence. *Children and their environments: Learning, using and designing spaces*, 124.

⁹⁵ <https://www.businesswales.gov.wales/farmingconnect/business/venture>

⁹⁶ <https://businesswales.gov.wales/farmingconnect/business/skills-and-training/agri-academy>

leaders. This includes training, mentoring, networking, support and guidance over three intense residential sessions.

Young Farmer representative groups have engaged in our previous two consultations, and have raised the need to support new entrants into the industry.

Encouraging young, and new, entrants into agriculture is an important part of the future resilience of the industry. We will be considering how to build upon the current offer as we develop our proposals for the future scheme and advisory support.

Older People

Whilst there are issues for older people living in rural areas, they are focussed on the delivery of key health, social services and transport issues⁹⁷. We have no evidence that the proposals in the White Paper will impact negatively on the well-being of older people. In terms of potential positive impacts, we note in our Health Impact Assessment the potential of the environmental outcomes we expect from agricultural regulation and the future scheme to impact positively on the health outcomes of the population generally. We note above the reference to the impact on older people to exposure to poor air quality, for example.

The estimated median age of a farmer in Wales in 2016 was 61 years old with the majority of principal farmers in Wales over the age of 55 (68%)⁹⁸. The proposals for regulatory reform and a future scheme are applicable to all farmers in Wales and therefore these changes need to be reasonably communicated to all farmers. Although online forums are a useful way to keep publications up to date, the Public Health Wales *Supporting farming communities at times of uncertainty* 2019 report, cite digitalisation as a challenge particularly for older farmers. Proposals for a set of National Minimum Standards include the publication of advice and guidance to help farmers understand how to comply. It is clear that in order for this to be accessible to all, options will need to be explored to share this in a variety of formats.

We are also aware that, given Covid-19, many traditional forms of engagement which may be preferred by older stakeholders in previous consultations, e.g. drop-in surgeries and face-to-face meetings, have not been available. We are mindful of this as we develop our plans for consultation.

Disability

Throughout development of advice and guidance for agricultural regulation, officials will work to ensure this is accessible to all farmers and therefore will consider reasonable adjustments for those with vision impairments and other disabilities.

⁹⁷ Older People's Commissioner for Wales (undated) Equality and Rurality Factsheet.

⁹⁸ Welsh Government (2019). Agriculture in Wales.

As noted above, we expect the environmental outcomes delivered by our proposals to impact positively on the health outcomes of the population generally, including people with disabilities.

Race and ethnicity

There are no expected adverse impacts on race and ethnicity from proposals within the White Paper. As noted above, other environmental outcomes we expect from proposals in the White Paper should impact positively on the health outcomes of the population generally. There are disparities in access to the countryside^{99,100} but the extent to which enhanced countryside access within the proposed scheme will encourage more people from BAME backgrounds to access the countryside is unclear.

Marriage and civil partnership

We do not expect the White Paper proposals to negatively affect people because they are married or because they are in a civil partnership.

Pregnancy and maternity

Our proposals for enhanced disease controls should reduce disease within our livestock. Certain zoonotic diseases (transferrable to humans) and infectious agents are a serious risk to pregnant women and their unborn babies in particular.

Gender reassignment

We do not expect the White Paper proposals to negatively affect people undergoing gender reassignment.

Religion and belief

We do not expect the White Paper proposals to negatively affect people because of their religion or faith.

Sexual orientation

We do not expect the White Paper proposals to negatively affect people because they identify as LGBTQ+.

⁹⁹ Jay, M., Peters, K., Buijs, A. E., Gentin, S., Kloek, M. E., & O'Brien, L. (2012). Towards access for all? Policy and research on access of ethnic minority groups to natural areas in four European countries. *Forest Policy and Economics*, 19, 4-11.

¹⁰⁰ Natural Resources Wales (2017). By all reasonable means. Least restrictive access to the outdoors.

Sex/gender

Farm managers and sole holders are predominantly male¹⁰¹. However, women play a key role in the development and sustainability of agricultural businesses in Wales which has traditionally been overlooked and there are barriers to their involvement in the industry.

Farming Connect has, since 2015, launched a Woman in Agriculture initiative to support women in the industry. We will be considering how we can build on this work as our proposals develop.

Low Income Households

Farm business income is subject to volatility influenced by agricultural (including weather) and market conditions. This volatility can bring challenges to long-term business planning. Our proposals for the future scheme aim to provide an income stream based on the delivery of SLM outcomes which will therefore be unaffected by this volatility. This should, for participating farms, have a positive effect on those from low income households.

The possible impacts of our scheme proposals on farm business income are being considered separately as part of a comprehensive (externally commissioned) assessment of the proposals on the agricultural economy of Wales. This will include consideration of different farm types and sizes.

The proposed National Minimum Standards for agriculture will establish a regulatory baseline for all farmers in Wales, based upon the existing legal requirements underpinning Cross Compliance. Compliance with the National Minimum Standards will be a requirement of entry for the future scheme. Our regulatory proposals should not require farmers to expend significantly more money to be compliant in order to be eligible for the scheme. However, we recognise that we would need to consider any potential cost of compliance for farmers which will be considered as part of a cost benefit analysis.

Proposals for agricultural regulation include the introduction of civil sanctions as a proportionate way to enforce agricultural legislation, including the introduction of notices and monetary penalties for less serious offences. Monetary penalties could be seen as unfair for some land owners/managers on a low income who cannot afford to pay. However, the intention of civil sanctions is to ensure any penalties are proportionate to the severity of the offence. These proposals also intend to allow regulators to issue alternative enforcement measures other than monetary penalties such as notices to, where appropriate, to allow farmer to carry out a restorative action which through time and effort spent rectifying could avoid monetary penalty.

¹⁰¹ EU Farm Structure Survey (2016).

Support for the forestry industry will be considered in any decision being made which will take into account the financial impact the measures may have on particular businesses.

Our Economic Wellbeing and Rural Proofing Impact Assessments consider potential economic effects of the proposals further.

Households in deprived areas

The Welsh Index of Multiple Deprivation (WIMD) ¹⁰² includes the quality of an area's physical environment in the measure of deprivation. This physical environment component consists of air quality, flood risk and access to green space.

We expect our proposals, through reduction in emissions, the use of nature-based solutions which reduce flood risk (e.g. agroforestry, improved soil health) and increased access to the countryside, to positively influence the physical environment and therefore this measure of deprivation may be improved. The effect of our proposals on the environment is considered further in the Biodiversity, Climate Change and Natural Resources Impact Assessments.

- ◆ ***What if any, barriers do people who share protected characteristics face? Can these barriers be reduced, removed, mitigated?***

As scheme proposals are further developed we will consider how we can ensure there are not barriers to participation for those with protected groups. In addition, we will take steps to ensure all advice and guidance related to the scheme and National Minimum Standards will be communicated in accessible ways.

Monitoring of the proposals

Our proposals include the placing a duty on the Welsh Ministers to report to the Senedd on the impact of the Sustainable Farming Scheme. A monitoring and evaluation strategy will set out how the Sustainable Farming Scheme will be judged in terms of value for money and the outcomes it has delivered Wales. The strategy will recognise the long term nature of the outcomes sought and report identify interim measures which can demonstrate progress.

Record of Impacts by protected characteristic:

Protected characteristic or group	What are the positive or negative impacts of the proposal?	Reasons for your decision (including evidence)	How will you mitigate Impacts?
Age (think about different age groups)	Older people may particularly benefit from the delivery of SLM outcomes expected from our proposals.	Older people are particularly vulnerable to air pollution, our proposals are expected to improve air quality.	This is a positive impact, no mitigation needed.
	There may be a negative impact on older farmers if communication about the proposals, and implementation, is only conducted through digital means.	The Public Health Wales <i>Supporting farming communities at times of uncertainty</i> 2019 report, cites digitalisation as a challenge particularly for older farmers.	Publication of advice and guidance will need to be available in a variety of formats and we will consider how to reach stakeholders by a range of means.
	The movement from an area-based support scheme to one based on the delivery of SLM outcomes has the potential to impact on new entrants, who may also be younger people.		We will be considering how to build on the current advisory offer for younger people and new entrants to the industry.

Disability (think about different types of disability)	No specific positive or negative impacts have been identified.		At this stage, no mitigation shall be necessary but this will be re-visited as proposals develop.
Gender Reassignment (the act of transitioning and Transgender people)	No specific positive or negative impacts have been identified.		At this stage, no mitigation shall be necessary but this will be re-visited as proposals develop.
Pregnancy and maternity	Our proposals for enhanced disease controls should reduce disease within our livestock. Certain zoonotic diseases (transferrable to humans) and infectious agents are a serious risk to pregnant women and their unborn babies in particular.		This is a positive impact, no mitigation needed.
Race (include different ethnic minorities, Gypsies and Travellers and Migrants, Asylum seekers and Refugees)	No specific positive or negative impacts have been identified.		At this stage, no mitigation shall be necessary but this will be re-visited as proposals develop.
Religion, belief and non-belief	No specific positive or negative impacts have been identified.		At this stage, no mitigation shall be necessary but this will

			be re-visited as proposals develop.
Sex / Gender	Farm managers and sole holders are predominantly male, which could have a negative impact on gender equality in access to financial support.		We will be considering how we can build on initiatives such as Farming Connect's Women in Agriculture programme as our policy proposals develop.
Sexual orientation (Lesbian, Gay and Bisexual)	No specific positive or negative impacts have been identified.		At this stage, no mitigation shall be necessary but this will be re-visited as proposals develop.
Marriage and civil partnership	No specific positive or negative impacts have been identified.		At this stage, no mitigation shall be necessary but this will be re-visited as proposals develop.
Children and young people up to the age of 18	Children and young people are expected to positively benefit from the delivery of SLM outcomes expected from the proposals.	Children are particularly vulnerable to air pollution, we expect our proposals to have a positive effect on air quality.	This is a positive impact, no mitigation needed.

	The movement from an area-based support scheme to one based on the delivery of SLM outcomes has the potential to have economic impacts, this may impact on children particularly in rural areas.		The independent economic analysis of our scheme proposals will be considering economic impacts of the proposed scheme. This will inform consideration of any impacts as proposals develop.
Low-income households	The movement from an area-based support scheme to one based on the delivery of SLM outcomes has the potential to have economic impacts, this may impact on low-income farm households.		The independent economic analysis of our scheme proposals will be considering economic impacts of the proposed scheme on different farm types and sizes. This will inform consideration of any impacts as proposals develop.

Human Rights and UN Conventions

Do you think that this policy will have a positive or negative impact on people's human rights?

Human Rights	What are the positive or negative impacts of the proposal?	Reasons for your decision (including evidence)	How will you mitigate negative Impacts?
Article 8: The right to respect for private and family life and correspondence	<p>The White Paper proposes to clarify legislation on data sharing and processing, ensure historic data can continue to be processed after the relevant powers expire in the UK Agriculture Act, and increase the ease with which data can be shared between different bodies.</p> <p>There is a potential for a negative impact on privacy if data breaches occurred, or data sharing/collection was not proportionate or necessary.</p>	Any proposals involving the processing of personal information carry a risk of impinging on the right to privacy.	<p>We propose to clarify in legislation the purposes of data collection and processing. This will help mitigate the risk of non-proportionate data processing/sharing.</p> <p>We are conducting a full Data Protection Impact Assessment to ensure any data collection or processing occurring as a result of the proposals is proportionate, necessary and secure. We are consulting with the ICO to identify and mitigate any risks as policy develops.</p>

C. RURAL PROOFING IMPACT ASSESSMENT

1. Describe and explain the impact of the proposal on rural people, businesses and communities.

- ♦ *How will the proposal affect the lives of rural people, positively and negatively? For example as service users, workers and consumers.*

Rural communities and agriculture

Estimates for 2019¹⁰³ show the total number of people working on agricultural holdings in Wales is 52,900. Of this total, there are 39,700 principal farmers, directors, business partners and their spouses. The total includes 13,000 regular full time, regular part time and seasonal/casual farm workers (This does not include self-employed people or contractors who may also work on the farm).

The contribution of agriculture to rural communities is not purely economic. As outlined by Dwyer (2018)¹⁰⁴ “*whilst hardly visible in basic statistics, agriculture remains a major driver of economic and community viability in the many remote areas of Wales*”.

Farms in Wales make a significant contribution to the social capital embedded in rural communities. As NFU Cymru¹⁰⁵ emphasise, “*many farmers or individuals involved with the agricultural industry undertake leadership and voluntary roles in rural communities which contribute to community cohesion. There will often be members of the agricultural industry sitting on Community Councils, PTAs or on the board of school governors. They also often assist with the smooth running of the community*”.

The proposals represent a significant change in how farmers will receive financial support. The proposals also represent a change in the way farm businesses are regulated. Given the multi-faceted contribution of agriculture in many rural areas, these changes may also impact on rural communities.

We outline the expected rural community impacts of the White Paper proposals below. As policy develops we will be considering these impacts in more detail. Particularly with regards to the future scheme it is, in part, not currently possible to estimate impacts in detail due to a lack of confirmed budget.

¹⁰³ June Survey of Agriculture and Horticulture (2019).

¹⁰⁴ Dwyer, J. (2018). The implications of Brexit for agriculture, rural areas and land use in Wales.

¹⁰⁵ NFU Cymru (2017). Farming – Bringing Wales Together.

Proposed Scheme

Setting an objective of Sustainable Land Management (SLM) for the future scheme is expected to positively impact on rural communities through increasing resilience.

Rewarding farmers for delivering SLM outcomes will increase the ecological resilience of the land they manage, and the economic resilience of their businesses. Improving the efficiency of the farm business model within the natural capacity of the land will enable current and future generations to continue farming, offering long-term resilience to the communities they are embedded in.

The proposal to reward farmers for delivering these outcomes will also offer an alternative revenue stream, unaffected by volatility in trading conditions. This income stream should also support resilient rural communities.

The possible economic impacts are being considered separately, as part of a comprehensive (externally commissioned) assessment of the proposals on the agricultural economy of Wales, which will include consideration at farm, sector and regional level. This work will in due course, inform the next iteration of this Impact Assessment.

There are also expected to be positive well-being benefits to rural communities through maintenance and enhancement of habitats and landscapes, alongside improvements in air and water quality. Our Health Impact Assessment details the positive impacts on physical and mental well-being from the proposed scheme, and our Natural Resources and Biodiversity Impact Assessments outline the expected environmental benefits.

Regulation

As described within our Health Impact Assessment, our proposals for agricultural regulation will impact on the lives of rural people, specifically farm businesses in the following ways:

- Our proposals aim to reduce regulatory complexity by consolidating the numerous existing agricultural regulations into one set of National Minimum Standards applicable to all farmers in Wales;
- We also intend to reduce administrative and regulatory burden on farmers by improving the monitoring of regulatory compliance by facilitating a more risk-based approach to inspection to better target farm visits;
- Improving regulation for forestry and woodland management;
- Introducing primary powers for a range of civil sanctions to enforce agricultural regulations, such as through notices and monetary penalties. This would avoid criminalisation where possible and enable regulators to take a proportionate approach to regulatory non-compliance equally applicable to all farm businesses, regardless of whether they are scheme claimants.

In order to help minimise the impact of these changes on the farming community, these proposals will require further, more detailed consultation prior to the development of this secondary legislation. Our White Paper proposals will be supported with a range of advice

and guidance to help aid understanding. We believe a clear understanding of the regulatory requirements, expectations for monitoring and enforcement mechanisms, should help alleviate some of the perceived negative effects of regulation on farmers.

Forestry and Woodland

The proposals are not expected to have negative effects on rural communities in Wales, and are likely to have a positive effect both to the economy and the biodiversity and therefore the physical and mental health of people living there.

The removal of infected ash trees from all environments in Wales is a necessity for everybody's health and safety, but this will also provide opportunities for local businesses who will undertake this dangerous work. Although there are negative effects from ash trees being felled, this work is necessary due to the impact of ash dieback, will render areas safe for access and recreation, and will open up opportunities for other native trees and plants to colonise and be planted that will increase the diversity of those areas affected. This will result in the overall improvement to the environment, biodiversity and ultimately will support the general development of the rural economy, enhance access to safe recreational activities which have the potential to improve well-being and provides economic opportunities.

The benefits to the forestry industry of demonstrating compliance with baseline standards provides opportunities for increased use of timber products both internally and for export, and reduces the risk of being compared unfavourably with husbandry standards in other countries.

SMEs and micro-businesses will be able to access work, particularly in dealing with ash dieback work, for landowners who have diseased ash trees on their land. They have also access to various capital funding schemes to buy specialist equipment for this purpose, such as the RDP funded Timber Business Investment Scheme, and more recently through the domestically funded Forestry Industry Recovery Scheme.

- ♦ ***Will access be an issue for rural people? If yes, what will be done to overcome barriers to access?***

We do not consider that access will be an issue under our proposals. With regards to the future scheme, farms are predominantly in rural areas and will be the principal target.

- ♦ ***How has the proposal taken account of the needs of rural people e.g. older population, lack of affordable housing, language requirements?***

Our proposals for the regulation of agriculture will apply to all farmers in Wales regardless of age and participation in any payment scheme. Our proposals for enforcing regulation also seek to ensure enforcement is proportionate and applied equitably across all farmers in Wales.

In developing our proposals further within secondary legislation, we will seek to involve and consult with the farming community. Further policy development on advice and guidance,

both for the future scheme and National Minimum Standards, will also consider how this can be best provided to the farming community, taking into account different needs and ensuring this information is accessible in a range of formats.

Expected impacts on the Welsh Language is set out in our Welsh Language Impact Assessment.

- ♦ ***Will the proposal lead to new services being opened or existing services being closed? How will you maximise positive impacts and mitigate negative impacts?***

Our proposals for the future scheme include the proposal that farms should be provided with advice, training and support to deliver SLM outcomes. At this stage, policy development is ongoing and we are unable to assess what the impact on services may be. This will be subject to further impact assessment as proposals are developed.

- ♦ ***Does the policy require the purchase or use of land? Have you considered rural factors such as land value, availability or restrictive designations?***

The Welsh Government will not require the purchase or use of land to implement the policy.

- ♦ ***Will the proposal work in difficult terrain e.g. narrow roads and steep mountains? If no, how will you overcome barriers?***

We do not anticipate any barriers due to difficult terrain. Welsh Government previous experience delivering support schemes and advisory services to farmers, who are often located on difficult terrain, will be used to inform delivery.

- ♦ ***Is the proposal relevant to SMEs or micro-enterprises? If yes, how have you taken their situation into account? Does the proposal expect businesses to be able to access support? (This may be in the form of advice, training, finance etc.) If yes, what barriers will rural businesses face and how will they be overcome?***

Many farms in Wales are small businesses and contribute to the resilience of rural communities. The proposals for the future scheme will support farms across Wales to deliver SLM outcomes and will provide advice and support in order for them to do so. Impacts on small businesses will be considered once we have further clarity on the budget and further policy development has been undertaken. The independent economic analysis of the scheme proposals will be considering potential impacts on farm businesses of different types and sizes, and a cost benefit analysis will be considering the economic impact of the White Paper proposals. However, below is some evidence we have considered.

Evidence¹⁰⁶ on the importance of small businesses to the resilience of communities in Scotland concluded rural businesses contribute to building the resilience of rural Scotland in direct and indirect ways. The evidence found there is a “*clear link between the activities of rural businesses and the resilience of rural communities*”, related to employment creation and service/product delivery. It also found growing and diversifying the private business sector can:

- Help to maintain the working-age population in a local area, contributing to the ‘demographic balance’ and thus support local (public, private and third sector) service provision;
- Utilise and develop existing resources increasing the quality of life and well-being of rural residents, increasing the attractiveness of a place as a tourism destination and improving community cohesion.

A review¹⁰⁷ from the West Midlands notes the importance of small businesses contributing to the economic resilience of local communities “*local economies with higher levels of small businesses and local ownership perform better in terms of economic success, job creation (especially in disadvantaged and peripheral areas), local multiplier effect, social inclusion, income redistribution, health, well-being and civic engagement, than economies more dependent on centralised economic actors. Such economies also support local distinctiveness and diversity, which can be seen as being advantageous because these factors contribute to economic resilience*”.

Our proposals for wider industry and supply chain support may also have a positive impact on small business other than farms which will in turn benefit rural communities. We expect to be able to provide support to the wider food and forestry industry. It is currently unclear what level of funding will be available for this so we are unable to conduct a detailed assessment of the impact on small businesses.

Our proposals for the removal of infected ash trees may provide trade for small businesses in the removal of trees. Businesses also have access to various capital funding schemes to buy specialist equipment for this purpose, such as the RDP funded Timber Business Investment Scheme, and more recently through the domestically funded Forestry Industry Recovery Scheme.

- ♦ ***Does the proposal depend on infrastructure such as good road/rail connections or fast broadband or good mobile connectivity? If yes, what provision will be made for communities/businesses in more isolated rural areas?***

As the proposed scheme is an agricultural support scheme, it does not include provision for enhancing rural broadband.

¹⁰⁶ Steiner, A. & Atterton, J. (2014). The contribution of rural businesses to community resilience. *Local Economy*, 29:3. pp. 228-244.

¹⁰⁷ Leach, K. (2013). Community economic development: Localisation, the key to a resilient and inclusive local economy? *Local Economy*, 28(7-8), 927-931.

However, Rural Payment Wales have experience in reaching customers in more isolated rural areas, and we will incorporate this experience into future scheme design and delivery to help overcome any barriers resulting from poor connectivity.

- ♦ ***Although the root causes of poverty in rural areas are the same as in urban areas, the experience of deprivation may be different in rural areas. Some of the main issues contributing to poverty in rural areas are fuel poverty (including both heating and transport fuel), in-work poverty, access to services and digital exclusion. How does your proposal help to tackle poverty in rural areas?***

We anticipate the proposed scheme will provide a meaningful income stream to participating farmers.

Our proposals for wider industry and supply chain support may have a positive impact on poverty in rural areas by providing support to increase resilience in the wider food and forestry industry. We will be conducting further assessment of the impact of any Programme once the funding envelope is known and further policy development has been completed.

- ♦ ***What contact have you had with rural stakeholders? Please briefly describe any events targeted at rural stakeholders or any consultation engagement you have had with rural stakeholders. Did any other issues come up as a result of the engagement with stakeholders or any consultation around this proposal? If yes, what were they and how have you modified your proposal to take them into account?***

We have published two consultations on our proposals for the future scheme and regulation. The first of the two consultations was published in July 2018 and was titled *Brexit and our Land*¹⁰⁸. We published a full, independent summary the responses to the consultation¹⁰⁹. Our response to the consultation responses was also published¹¹⁰. In the light of the consultation exercise, we made a number of changes to our policy proposals which were set out in our second consultation, *Sustainable Farming and our Land*¹¹¹ and was published in summer 2019. An independent summary of the responses to that consultation was also published¹¹².

Across these consultations we have engaged directly with farmers and other rural stakeholders at regional agricultural shows and a range of dedicated events to further explain and discuss our proposals.

¹⁰⁸ Welsh Government (2018). Brexit and our Land consultation.

¹⁰⁹ Welsh Government (2018). Brexit and our Land: Summary of Responses. <https://gov.wales/support-welsh-farming-after-brexit>

¹¹⁰ Welsh Government (2018). Brexit and our Land: Our Response <https://gov.wales/brexit-and-our-land-our-response>

¹¹¹ Welsh Government (2019). Sustainable Farming and our Land consultation.

¹¹² Welsh Government (2019). Sustainable Farming and our Land: Summary of Responses. https://gov.wales/sites/default/files/consultations/2020-05/sustainable-farms-summary-of-responses_0.pdf

We have conducted a programme of co-design. The engagement events took place between March and October 2020. Insights gathered will be collated in a report, a final version of which will be made available to Welsh Government officials in December 2020. This will be used to inform policy development for the future scheme.

In total, over 1,900 stakeholders engaged with the co-design programme, the vast majority were farmers. We will be further engaging with the industry to help shape the developing proposals.

♦ ***What evidence have you used to inform your assessment, including evidence from rural people or their representatives?***

Our proposals, and our assessment of them, have been informed by the responses to the two consultations, set out above, as well as other evidence sources which are referenced in footnotes.

♦ ***What other evidence would inform the assessment?***

Policy development is ongoing, and we will re-visit this impact assessment as further details are developed. Below are a number of projects that may be particularly informative for this work:

- The programme of co-design;
- The independent economic analysis of our proposals;
- Cost Benefit Analysis;
- Consultation responses to the White Paper.

D. DATA PROTECTION IMPACT ASSESSMENT

As outlined in the White Paper, we have made proposals to streamline collection and processing of data on agriculture and the associated supply chain. We propose to clarify in legislation the primary purposes for collecting, sharing and linking data.

We also propose to remove barriers to data sharing between regulators, evaluators and future scheme managers. This should reduce the reporting and monitoring burden on farmers and land managers.

We also want to ensure continuity by retaining the ability to process historic data (already held by the Welsh Government) when the powers we are drawing from the UK Agriculture Act come to an end.

These proposals are likely to result in the processing of personal information, and therefore a full Data Protection Impact Assessment is required in order to:

- Describe the nature, scope, context and purposes of the processing;
- Assess necessity, proportionality and compliance measures;
- Identify and assess risks to individuals; and
- Identify any additional measures to mitigate those risks.

We have begun the process of consulting with the Information Commissioner's Office (ICO) and intend to work them to fully consider the impacts of our proposals as they develop.

The consultation exercise for the White Paper will inform this assessment, and mitigation of any risks.

A full Data Protection Impact Assessment will be completed for consideration prior to the introduction of the Bill.

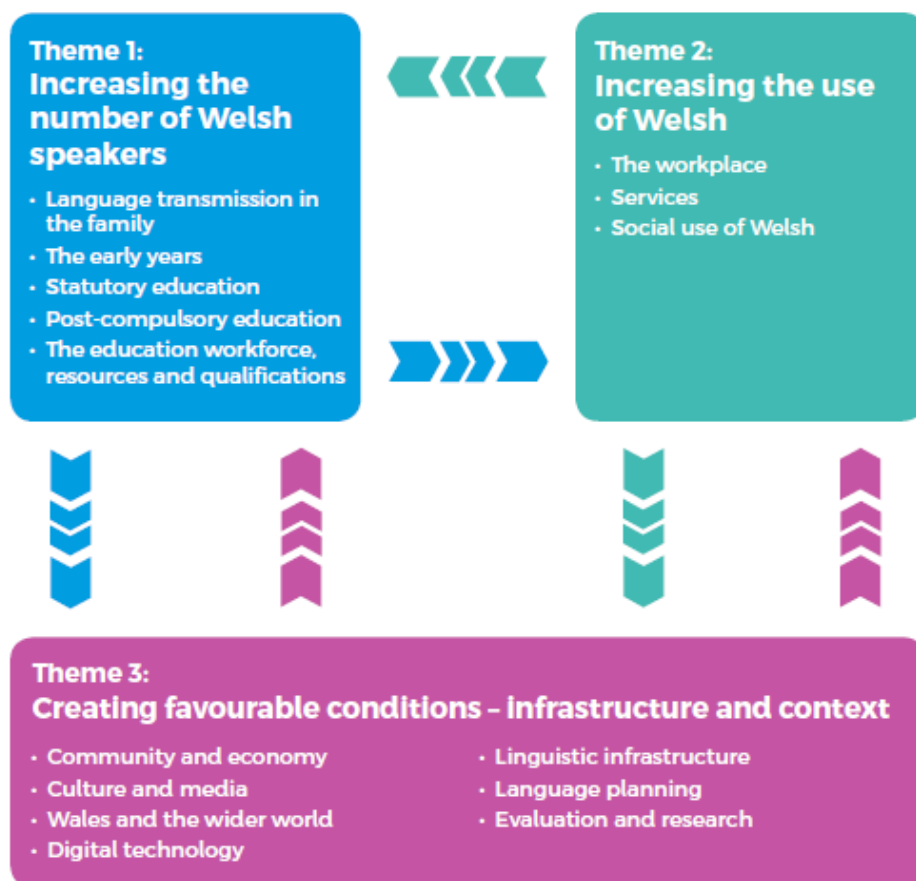
E. WELSH LANGUAGE IMPACT ASSESSMENT

Cymraeg 2050 is our national strategy for increasing the number of Welsh speakers to a million by 2050.

The Welsh Government is fully committed to the new strategy, with the target of a million speakers included in the *Taking Wales Forward* Programme for Government and *Prosperity for All: the national strategy*. A thriving Welsh language is also included in one of the 7 well-being goals in the Well-being of Future Generations (Wales) Act 2015.

We also have a statutory obligation to fully consider the effects of our work on the Welsh Language. This means that any Welsh Government policy should consider how our policies affect the language and those who speak it.

The *Cymraeg 2050* strategy has three themes:



The headings under each theme outline the scope of activities that can affect the language.

As a general rule, if your policy has the potential to impact on people, it will impact in some way on Welsh speakers and therefore on the Welsh language.

1. Welsh Language Impact Assessment reference number (completed by the Welsh Language Standards Team, email: Safonau.Standards@gov.wales):

04/11/2020

2. Does the proposal demonstrate a clear link with the Welsh Government's strategy for the Welsh language? and the related Work Programme for 2017-2021?

19% of people aged 3 and over are able to speak Welsh (Census, 2011). There are Welsh speakers in all parts of Wales, but the numbers and proportion of the population vary. The local authorities with the highest proportion of Welsh speakers are Gwynedd (65.4%), Isle of Anglesey (57.2%), Ceredigion (47.3%) and Carmarthenshire (43.9%). These local authorities are all largely rural in nature. The local authority with the highest number of Welsh speakers is Carmarthenshire (78,000), followed by Gwynedd (77,000).

Cymraeg 2050 identifies areas with a high density of Welsh speakers as central to the Welsh Government vision for increasing the number of Welsh speakers because they are likely to create favourable conditions for the use of Welsh. The higher the number and proportion of Welsh speakers in an area, the higher the chances of being able to use Welsh in daily life.

The percentage of people aged 3 and over able to speak Welsh has been on a downward trajectory for the past century, decreasing from 43.5% of the population in 1911 to 19.0% in 2011. Across age groups, the percentage able to speak Welsh is highest amongst 5 to 15 year olds.

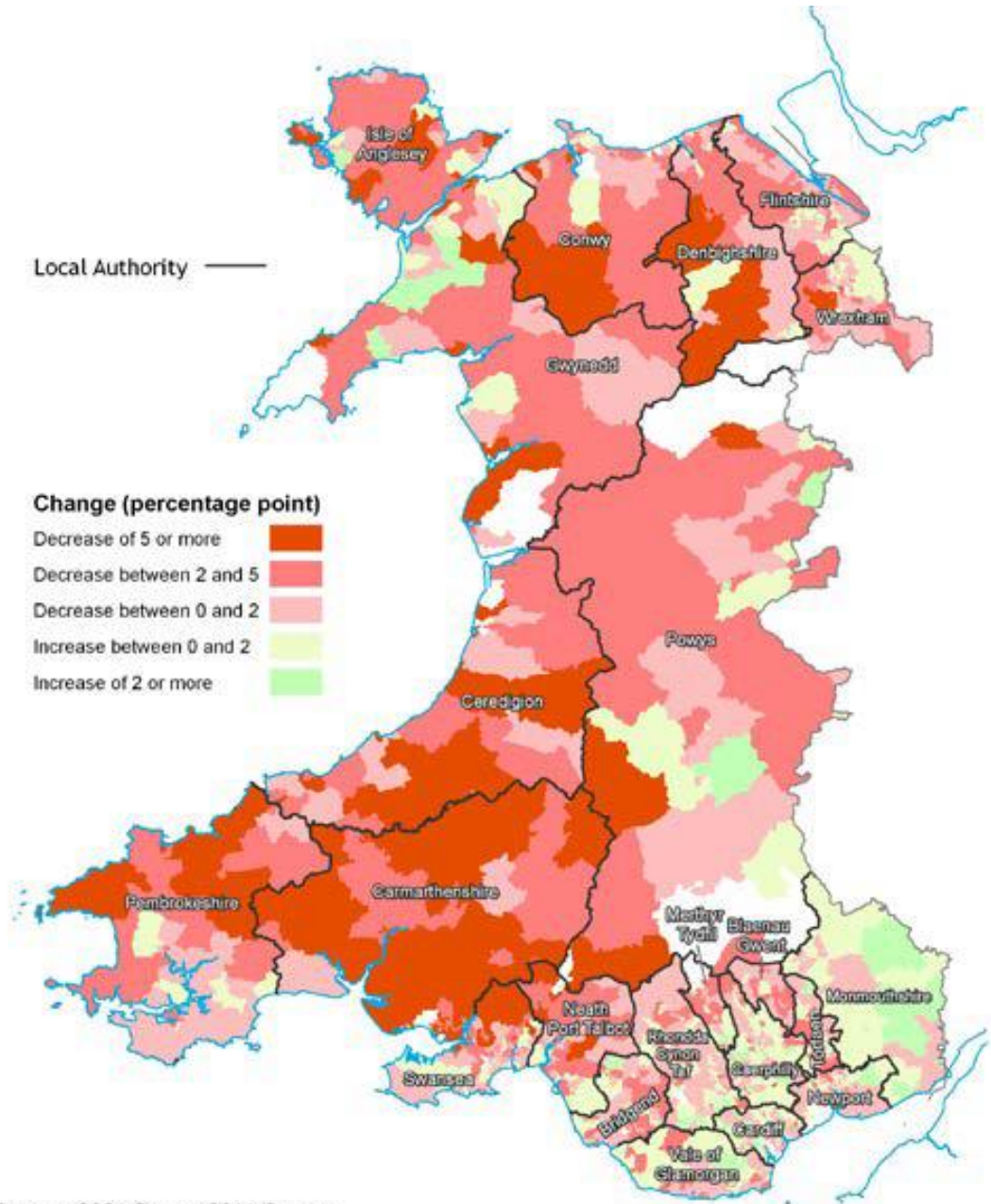
Figure 1 shows that between 2001 and 2011, the proportion of people aged three and over able to speak Welsh decreased in nearly all local authorities. The largest decreases were in areas with higher proportions of Welsh speakers, often rural areas.

Carmarthenshire saw the largest percentage point drop – from 50.3% in 2001 to 43.9% in 2011, meaning less than half the population could speak Welsh by 2011. In addition to Carmarthenshire, other local authorities in the west of Wales (Isle of Anglesey, Gwynedd, Conwy, Powys, Ceredigion, Pembrokeshire, Swansea and Neath Port Talbot) all saw a decrease of two or more percentage points in the proportion of Welsh speakers. The decreases in the proportions of people able to speak Welsh were smaller for east Wales authorities.

It is important to note changes in the proportion of Welsh speakers can be caused by both an increase/decrease in the number of Welsh speakers and an increase/decrease in the number of non-Welsh speakers.

For many of the local authorities that saw a decrease in the proportion of Welsh speakers, there was also a decrease in the total number.

Figure 1. Percentage change in Welsh speakers between 2001 and 2011



Source: 2001 Census 2011 Census

(a) Presented for LSOAs that did not change between 2001 and 2011 only.

193.12-13

Geography & Technology

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Agriculture and the Welsh Language

Despite the small size of the sector (Figure 2a), 2% of all workers in Wales, it accounts for a relatively larger share of all Welsh speakers (5% of all speakers).

The agriculture sector (including fishing and forestry) has the highest share of Welsh speaking workers in Wales at 43%, also shown in Figure 2b. This is in comparison to the average for workers across all sectors at 16.6%.

Figure 2a.

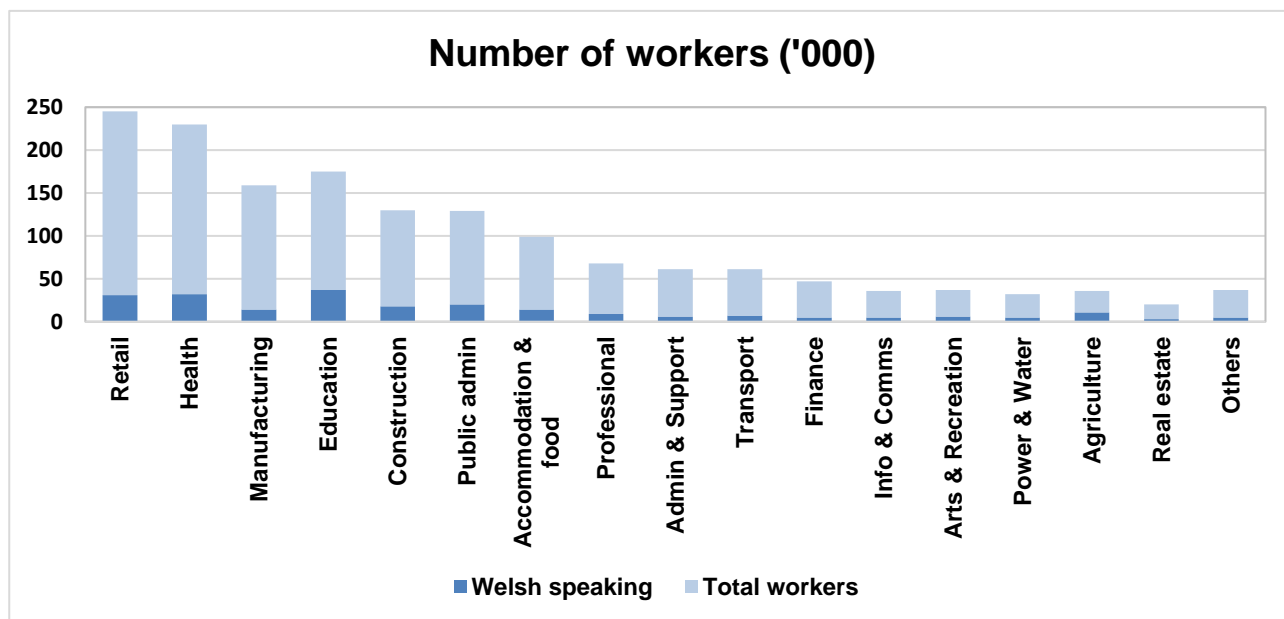


Figure 2b.

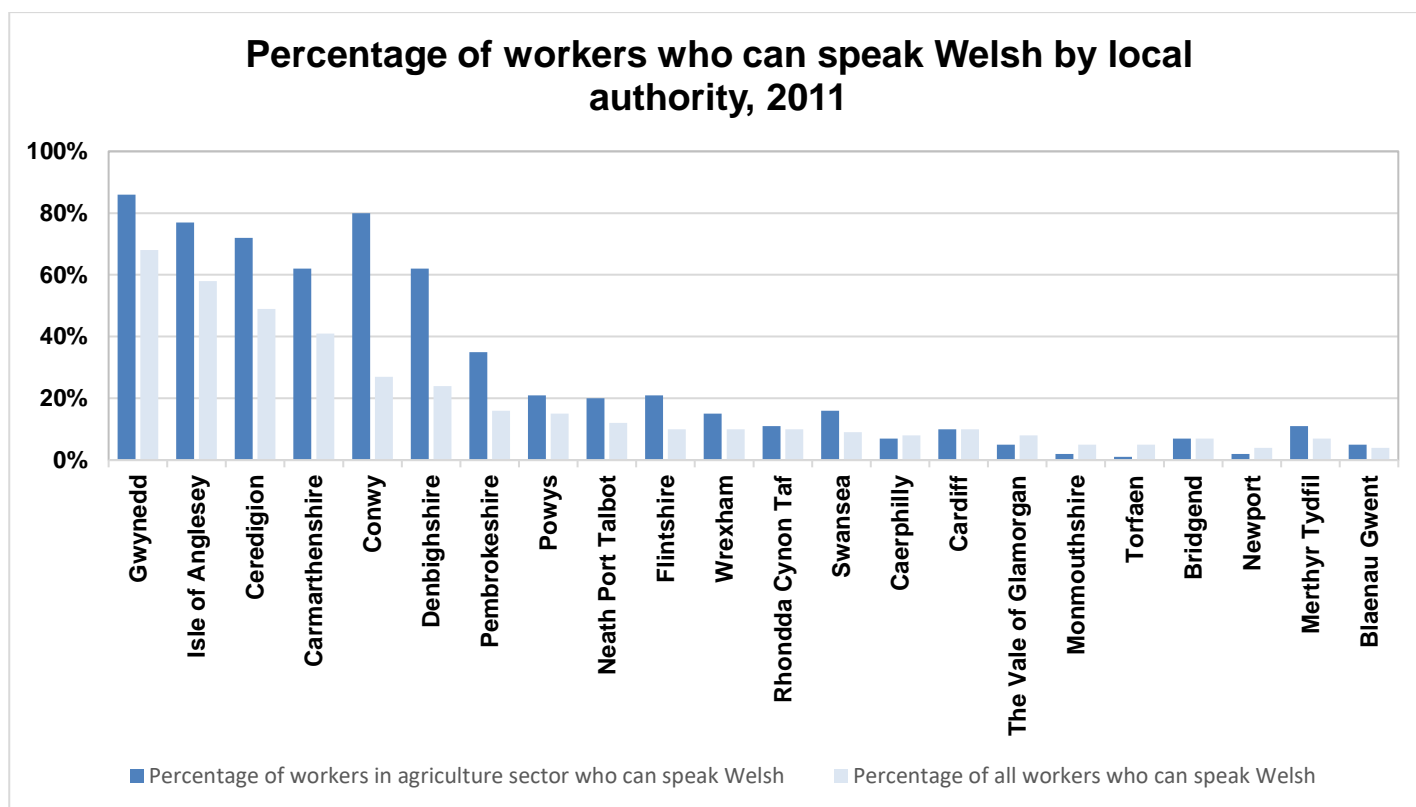


Source: Census of Population, 2011

Looking across all local authorities, 86% of agricultural workers in Gwynedd speak Welsh compared to 1% in Torfaen (Figure 3). There is also variation amongst more rural local authorities where agriculture is a prominent industry. For example, 21% of agricultural workers in Powys speak Welsh compared with 72% in Ceredigion. These more rural local authorities are in many cases the same areas which saw larger decreases in the proportion of Welsh speakers between the 2001 and 2011 censuses (Figure 1).

Higher shares of Welsh speakers within the agriculture industry are often found in rural local authorities that also have higher shares of Welsh speakers across the whole work force (Figure 3). However, there is a trend for the share of Welsh speakers within agriculture to be higher than the share for all workers in these local authorities. For example, Anglesey has a high share of the total workforce speaking Welsh (58%) but the share of agricultural workers in the local authority is higher (77%).

Figure 3.



Source: Census of Population, 2011

Within local authorities there is further variation. In Gwynedd all the LSOA¹¹³ with at least 10 agriculture sector workers have a majority who can speak Welsh. In Monmouthshire all the LSOA with at least 10 agriculture sector workers have Welsh speaking rates below the all sectors average. In Powys, the LSOA show Welsh speaking rates all across the range from very low to very high.

There are 30 LSOA in Wales where Welsh speaking agriculture sector workers make up at least 20% of all Welsh speaking workers. These LSOA are in Powys, Carmarthenshire, Ceredigion, Conwy, Gwynedd and Pembrokeshire.

Favourable conditions for the use of Welsh

Having Welsh language ability does not necessarily translate to using the language in the workplace, for a variety of reasons. The Welsh Government Report 'Welsh Language Needs on Eight Sectors'¹¹⁴ examined the relationship between language ability, use, and employer needs across 8 sectors in Wales. It found:

- 68% of agri-food businesses (including agriculture) had staff with Welsh language skills compared to 66% of all businesses, highest was childcare at 94%;
- 34% of agri-food staff in the surveyed businesses reported to have Welsh language skills, compared to 24% of staff across all businesses, highest was childcare at 66%;
- Advanced level ability was most likely to be reported for staff in agri-food and creative businesses, and agri-food staff had a high level of ability across all domains (reading, writing, speaking, understanding);
- In agri-food businesses, staff were using Welsh; 19% of businesses reported that staff had Welsh language ability but didn't use it, across all businesses it was 31%;
- Where agri-food businesses were using Welsh, they used it for informal and formal purposes, both written and spoken. These businesses were also using Welsh to conduct business with external partners (clients, customers etc). This was not so common in other sectors and suggests Welsh is being used normatively in many agri-food businesses with Welsh speaking staff.

These results provide evidence that agri-food businesses, including agriculture, in Wales are providing favourable conditions for use of the Welsh language and this extends beyond

¹¹³ A Lower Super Output Area (LSOA) is a statistical reporting unit where each has a total population of around 1,600 people. There are 1,909 LSOA in Wales. The LSOA can be added up into other geographies such as local authorities, wards, constituencies etc.

¹¹⁴ Welsh Government (2014). Welsh language needs skills in eight sectors. Project Number: 47/2014.

interactions occurring within the business. For farms, interactions occurring outside of the business will involve trade of animals, fodder, machinery etc. For the 43% of farms¹¹⁵ in Wales that have diversified into other areas (e.g. tourism), these business interactions may also be occurring in a wider range of businesses.

Welsh, agriculture and the local community

Results from the National Survey for Wales 2018-19¹¹⁶ suggest Welsh speakers often feel they are part of strong communities; people who agreed they felt a sense of belonging to their community were more likely to speak Welsh in everyday life compared with those that disagreed. Feeling belonging is also likely to be associated with interactions with other members of the community, and these interactions may occur in Welsh.

Welsh speaking agricultural workers and their families are part of their local community networks. Some of these networks will be agriculture related (e.g. technical groups, YFCs, agricultural shows), whilst some will not be (e.g. local council, parish, sports clubs, community support groups), and other networks will be less formal (friendships, chatting with neighbours). Through involvement in these networks, Welsh speaking agricultural workers and their families are supporting the use of Welsh in informal settings.

Welsh language and our proposals

Due to the links outlined above, changes to the structure of the agricultural industry which in result in movement of people, whether into or out of rural areas, have the potential to alter the contribution the sector makes to the resilience of the Welsh language.

Theme 3 of the *Cymraeg 2050* strategy places an emphasis on creating favourable conditions for the Welsh language to survive and thrive, specifically with the aim of 'Supporting the socioeconomic infrastructure of Welsh-speaking communities'. Many areas of high density of Welsh speakers are those with a dependence on agriculture, the public sector and tourism. *Cymraeg 2050* notes it is important to sustain and grow communities with a high density of Welsh speakers.

The White Paper proposals will support *Cymraeg 2050* primarily in **three** key ways.

First, the proposed scheme will reward farmers for the Sustainable Land Management outcomes they deliver on their land. By doing so, this will create a stable income stream for participating farms in rural communities. This income stream will be unaffected by changes

¹¹⁵ Welsh Government (2019). Farm incomes in Wales, April 2018 to March 2019.

¹¹⁶ Welsh Government (2020). What factors are linked to people speaking the Welsh language? Social Research Number 27/2020.

in wider commodity markets and the trading environment and therefore help to create resilience for both farm businesses and the wider community.

Resilient farm businesses will contribute to employment for younger Welsh speakers both now and in the future, on-farm and in local businesses, therefore supporting the agricultural industry. This will help retain people in Welsh speaking communities.

Second, the proposed scheme will, through the framework of Sustainable Land Management, support farmers to manage their farms in a way that maintains and enhances the capability of agricultural land to support the needs of future generations. This will help to support the long-term resilience of rural, Welsh-speaking communities by ensuring the land can continue to be farmed in the future.

Third, the proposed scheme will be accompanied by an advisory service to support farmers in regulatory compliance and scheme participation. This service could comprise of a mixture of delivery mechanisms, including on-farm visits by an advisor and peer-to-peer knowledge sharing opportunities. This advisory service will be provisioned bilingually, in line with the Welsh Language Standards and in support of *Cymraeg 2050*. This will give Welsh speakers the opportunity to use Welsh in the workplace, and more informally with peers, helping the use of Welsh to be part of everyday life.

3. Describe and explain the impact of the proposal on the Welsh language, and explain how you will address these impacts in order to improve outcomes for the Welsh language. How will the proposal affect Welsh speakers of all ages (both positive and/or adverse effects)? You should note your responses to the following in your answer to this question, along with any other relevant information:

- ♦ **How will the proposal affect the sustainability of Welsh speaking communities¹¹⁷ (both positive and/or adverse effects)?**

As outlined in Section 2, agriculture is a key feature of many rural, Welsh-speaking communities. By supporting farmers to become more sustainable they will become more resilient to the challenges presented by climate change and changes in the trading environment. In addition by managing their land in a sustainable way farmers will help safeguard the future viability of farming in Wales, thus supporting the resilience of Welsh speaking communities.

¹¹⁷ These can be close-knit rural communities, dispersed social networks in urban settings, and in virtual communities reaching across geographical spaces.

- ♦ **How will the proposal affect Welsh medium education and Welsh learners of all ages, including adults (both positive and/or adverse effects)?**

There are no direct impacts on education but maintaining a thriving agricultural industry provides opportunities for Welsh learners of all ages to use the language and develop their Welsh language skills within an industry where Welsh is used in many areas as the main language of communication.

- ♦ **How will the proposal affect services¹¹⁸ available in Welsh (both positive and/or adverse effects)? (e.g. health and social services, transport, housing, digital, youth, infrastructure, environment, local government etc.)**

The proposal includes plans for the provision of an advisory service, tailored to supporting the delivery of Sustainable Land Management outcomes. This service will be delivered bilingually, in line with the Welsh Language Standards.

Proposals for the National Minimum Standards are based on the principle of making it clear to farmers what actions are required to comply with regulation. These proposals include the development of advice and guidance on how to comply with the National Minimum Standards. This will be published in Welsh as well as English and any services will be delivered bilingually.

The current Welsh Government advisory service to the sector is Farming Connect which through its newsletters, knowledge transfer events and face to face support is in regular contact with a large proportion of Welsh Farmers. The service provided via Farming Connect exceeds what would normally be considered bilingual, with many events and activities being delivered in Welsh as the predominant language. This has a significant impact on the Welsh language service provided.

- ♦ **How will you ensure that people know about services that are available in Welsh and are able to access and use them as easily as they can in English? What evidence / data have you used to inform your assessment, including evidence from Welsh speakers or Welsh language interest groups?**

All details in relation to the proposed National Minimum Standards and scheme will be available bilingually. In dealing with farmers through RPW on-line 7.51% of contacts have requested communications in Welsh, however this does not reflect the level of engagement in Welsh; with many who have requested correspondence in English reverting to Welsh when having face to face or telephone conversations.

¹¹⁸ The Welsh Language Strategy aims to increase the range of services offered to Welsh speakers, and to see an increase in use of Welsh-language services.

♦ **What other evidence would help you to conduct a better assessment?**

To date, two consultations (*Brexit and our Land* and *Sustainable Farming and our Land*) have been completed on the future of agricultural support in Wales. In both, respondents were asked to consider the impact of our proposals on the Welsh Language.

Brexit and our Land (2018) received 12,203 responses, 1,043 of which were substantive. Of these responses, a dominant view was that without a thriving agricultural sector rural communities would struggle to sustain themselves and the Welsh language would suffer considerably. Respondents also emphasised the *Cymraeg 2050* vision would only be achieved with a thriving rural economy.

Sustainable Farming and our Land (2019) received 3,322 responses, of which 508 were substantive. As with *Brexit and our Land*, respondents were clear a strong rural economy was vital for the Welsh language, and that agriculture is a crucial part of rural communities. Concern was noted therefore that anything which alters the structure of the agriculture sector has the potential to impact on the Welsh language.

The Farming Connect report '*laith y Pridd/The Language of the Land*¹¹⁹' asked members of the farming community 'How can agriculture contribute to the aim of reaching a target of a million Welsh speakers by 2050?'. Six themes were raised, of which two are directly relevant to our proposals:

- The subsidies system – respondents emphasised that payments supporting the family farm enable families to stay in rural areas which in turn supports the Welsh language;
- Supporting activity on the land – the view was expressed that a move away from active agricultural management of the land would reduce activity in the wider rural economy which in turn lead to a decline in of the Welsh language.

We have proposed the scheme should be available to all types of farm and reward active management of the land. By doing so, we will be supporting farm businesses, the wider economy and helping to sustain resilient Welsh speaking rural communities.

We have engaged in a programme of co-design with farmers and other land managers which will help develop the practical elements of the scheme. Part of this will involve consideration of how the Welsh language may be impacted. The results of this engagement will add further evidence to our assessment.

Further analytical work is being carried out to establish the economic impact of our proposals at the farm business, sector and regional levels. The results of this work will be important

¹¹⁹ Farming Connect (2020). *laith y Pridd Report*. <https://businesswales.gov.wales/farmingconnect/news-and-events/reports/laith-y-pridd-report-22092020>

for assessing the potential impact of the scheme on rural communities, and therefore the Welsh language.

The 2021 Census will provide further valuable information on the number of Welsh speakers, including numbers within agriculture.

This impact assessment is kept under active review as our policy proposals, and the underpinning evidence, is developed.

♦ **How will you know if your policy is a success?**

The proposed scheme and agricultural regulation will be accompanied by a monitoring and evaluation strategy to assess delivery of environmental, economic and social outcomes.

F. BIODIVERSITY IMPACT ASSESSMENT

The Well-being of Future Generations Act 2015 puts in place the ‘Resilient Wales’ goal: ‘*A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change).*’

The Welsh Government’s Nature Recovery Action Plan states our ambition to reverse the decline in biodiversity, for its intrinsic value, and to ensure lasting benefits to society. It sets out how we will deliver the commitments of the EU Biodiversity Strategy and the UN Convention on Biological Diversity’s (CBD) Strategic Plan for Biodiversity and the associated Aichi Biodiversity Targets¹²⁰, to halt the decline in our biodiversity by 2020 and then reverse that decline.

In *Taking Wales Forward 2016 – 2021* a target was set to “*continue our work to protect and enhance biodiversity and local ecosystems*”¹²¹. Related to this, reversing the decline in biodiversity was identified in *Sustainable Farming and our Land*¹²² as one of the three most significant challenges facing Wales today, and has been identified as a key objective of the proposals in the White Paper.

Beyond the intrinsic value, there are a number of key benefits to be derived from increased biodiversity. These include:

- The contribution of biodiversity to ecosystem resilience - biodiversity provides a number of additional ecosystem services such as regulation services and provisioning services, which are key to the continued sustainability of the Welsh farming sector;
- The beauty and sense of place of the Welsh landscape the tourism sector relies on (we provide some detail on the economic importance of the natural environment to Welsh tourism in *Agriculture in Wales*¹²³);
- Personal well-being through contact with nature¹²⁴.

This policy has been designed to align with the Welsh Government’s commitment to maintain and enhance biodiversity in the exercise of functions in relation to Wales, as set out in the Environment (Wales) Act 2016.

¹²⁰ The Convention of Biological Diversity (CBD) and the associated Aichi Biodiversity Targets, for the 2011-2020 period, provides an overarching framework on biodiversity for countries part of the United Nations.

¹²¹ Welsh Government (2016). *Taking Wales Forward 2016-2021*. Pg. 6

¹²² Welsh Government (2019). *Sustainable farming and Our Land* consultation. Pg.5

¹²³ Welsh Government (2019). *Agriculture in Wales*.

¹²⁴ Mental Health Foundation & WWF-UK (2020). *Thriving with Nature. A Guide for Everyone*. <https://www.mentalhealth.org.uk/sites/default/files/Thriving-With-Nature-compressed.pdf>

Embedding biodiversity

1. How will your proposal integrate biodiversity into decision making?

Our proposals explicitly address the need to reverse the decline in biodiversity and increase levels of ecosystem resilience.

The White Paper outlines our approach to future agriculture support and regulation using the Sustainable Land Management (SLM) framework as a basis for funding and proposes Minister are able to fund increasing levels of farm biodiversity in support of the delivery of SLM. Any future scheme will reward farmers for the delivery of outcomes consistent with SLM.

We expect that focusing on the delivery of outcomes, rather than payment for inputs, will help incorporate biodiversity into on farm decision-making. Additionally, our proposal for a single system of farm support will help ensure that environmental, social and economic sustainability is considered in the round.

Our commissioned review (*Building Ecosystem Resilience in Improved Farmland*¹²⁵) has provided evidence on the effectiveness of different management interventions on increasing biodiversity and ecosystem resilience.

As scheme proposals develop, we will consider how our modelling capability (ERAMMP¹²⁶) and other evidence can be used to identify opportunities for increasing on farm biodiversity. This will involve consideration of the relative risks / benefits of any change in land use in terms of biodiversity.

The forestry proposals seek to improve the current regulations and processes affecting the way in which woodlands are created and managed in Wales, thereby contributing to the Welsh Government plan to tackle the climate emergency by significantly increasing woodland creation, and bringing more existing woodland into sustainable management.

Natural Resources Wales (NRW) are responsible for the control of felling and replanting of woodland, Environmental Impact Assessments for new woodland creation, deforestation, forest tracks/ quarries, and verification of Glastir Woodland Creation schemes through their regulatory role.

These proposals will increase NRW's ability to apply their Sustainable Management of Natural Resources objectives to woodland creation and sustainable woodland management.

¹²⁵ Keenleyside, C.B. et al. (2020). ERAMMP Report-25: Annex-4B Improved Land. Report to Welsh Government (Contract C210/2016/2017)(UKCEH 06297)

¹²⁶ Environment and Rural Affairs Monitoring & Modelling Programme. <https://erammp.wales/en>

2. Has your proposal ensured biodiversity is accounted for in business decisions?

Our proposals include plans for a single support scheme for farmers and other land managers. A single support scheme will mean biodiversity is considered holistically alongside sustainable food production in order to increase the sustainability of the farm business in the round.

Many actions which could deliver SLM outcomes will deliver cost savings (e.g. nutrient management planning leading to a reduction in inputs) as well as biodiversity benefits. This will support farmers to build these decisions into business planning.

As we develop our proposals for a future scheme we will be considering how potential interventions can deliver multiple SLM outcomes. We have commissioned environmental economic consultants, as part of the ERAMMP consortium, to construct a series of logic chains for key SLM outcomes, including biodiversity, which will in part explore this relationship.

3. How does your proposal improve understanding and raise awareness of the importance of biodiversity, encouraging others to act?

Proposals for National Minimum Standards set out a regulatory baseline which maintains existing environmental standards and includes additional protections for soil. As detailed within our Natural Resources and Climate Change Impact Assessments, these proposals are expected to provide improvements to biodiversity. In turn, an increase in biodiversity should provide ecosystem services of benefit to farmers. Advice and guidance should outline this cost benefit to business owners.

These National Minimum Standards will be the gateway to the Sustainable Farming Scheme. Proposals for the future scheme include increasing farm level biodiversity and wider habitat resilience. Farm businesses will be rewarded for the delivery of outcomes which are consistent with this aim.

The future scheme will also be based on the principle that farmers should receive support and training where needed to deliver the actions within the scheme and in support of the SLM framework.

As our proposals develop, we will be considering how farm businesses can best be supported through advice, CPD and training to increase levels of on farm diversity and ecosystem resilience.

The proposals in the White Paper also intend to support public access to farm land for leisure or educational purposes. Continued access to Welsh land should encourage wider society to engage with biodiversity, and the need for its protection and enhancement.

Improving our evidence, understanding and monitoring

4. Have you used the best available evidence of biodiversity to inform your proposal and this assessment?

Our evidence pack *Agriculture in Wales*¹²⁷ summarises the evidence from the NRW SoNaRR report, and SoNaRR has informed our priorities. The overall conclusion of SoNaRR is that “*all ecosystems have problems with one or more attributes of resilience. This means that their capacity to provide ecosystem services and benefits may be at risk. No ecosystem, on the basis of our assessment, can be said to have all the features needed for resilience*”. The proposed regulatory reform and future scheme will contribute to halting and to reverse the decline of farmland biodiversity and building resilient ecosystems.

Analysis of data¹²⁸ from SoNaRR shows that in relation to biodiversity:

- The condition of land (as measured by plant indicators indicative of good condition) has improved in the latest period for mountain, moor and heath and woodland after having remained stable over the long term;
- The condition of semi-natural grassland has improved recently and longer term;
- there has been no change in the condition of arable habitats or improved grassland;
- Plant species richness has increased in improved grassland, semi-natural grassland and MMH in the recent period and remained stable in woodland;
- For semi-natural grassland the recent increase in plant species richness as built on a longer term trend;
- There has been no change in species richness of arable habitats.

Our ERAMMP evidence review has included A Review of the Contribution of Species Records held by Local Environmental Record Centres in Wales¹²⁹.

ERAMMP have also produce detailed evidence reviews¹³⁰ to inform the future scheme, including on the following issues relevant to biodiversity:

- Soil nutrient management;
- Sward management;
- Ecosystem resilience;

¹²⁷ Welsh Government (2019). *Agriculture in Wales*.

¹²⁸ Smart, S.M, et al. (2019) ERAMMP Report 22: LERCs. Report to Welsh Government (Contract C210/2016/2017)(CEH NEC06297).

¹²⁹ Smart, S.M, et al. (2019) ERAMMP Report 22: LERCs. Report to Welsh Government (Contract C210/2016/2017)(CEH NEC06297).

¹³⁰ ERAMMP Evidence Reviews can be accessed at <https://erammp.wales/en/r-sfs-evidence-pack>

- Flood risk management;
- Systems approach to Greenhouse gas emission reductions;
- Improving Air quality.

5. Have you used up to date knowledge of the key impacts on biodiversity to make evidence-based decisions?

We have commissioned evidence reviews¹³¹ of the key impacts of agriculture on biodiversity, and considered the evidence in terms of farm-level interventions to support biodiversity. This, and other evidence, will inform policy proposals as they develop.

6. Can your proposal contribute to our body of knowledge for biodiversity?

Future schemes will be subject to robust monitoring and evaluation and the findings will be publically available.

Governance and support for delivery of biodiversity action

7. Can your proposal support biodiversity action in any way?

Our proposals for National Minimum Standards will set a robust and enforceable regulatory baseline which has multiple benefits to biodiversity.

The future scheme will build upon the protections provided by the National Minimum Standards to fund the delivery of additional biodiversity benefits. Our proposals for a future scheme explicitly involve rewarding farm businesses to deliver biodiversity outcomes, alongside other environmental outcomes, in support of SLM.

Our proposals for the future scheme also include the opportunity for farmers to collaborate and co-operate at a wider landscape scale (for example the scale of a catchment) to deliver environmental outcomes, including biodiversity, on a wider scale.

8. Can your proposal help to build capacity for biodiversity action?

We want to ensure our agricultural industry has the right knowledge of innovation available to be able to improve productivity and business resilience over the long term. To this end, we are proposing to work closely with academic institutions and colleges to identify the most appropriate research, such as innovative husbandry, cropping and livestock systems and techniques. These skills could be developed through a range of channels, including specialist advice, knowledge transfer exercise and farm demonstration events. Importantly, we also want to ensure skills training, innovation and capital support are fully joined up to enable farmers and foresters to adopt the right technology and techniques to improve their business resilience.

¹³¹ Keenleyside, C.B., et al. (2019). Annex 4: Building ecosystem resilience. ERAMMP Report to Welsh Government (Contract C210/2016/2017) (CEH NEC06297).

9. Have you recorded decisions and actions to maintain and enhance biodiversity?

Our proposals are consistent with our S6 duty and could input into any reporting on our S6 duty that Welsh Government produces.

Safeguarding species and habitats of principal importance

10. Is all legislation complied with to ensure protection of marine and terrestrial species and habitats?

Principles for future scheme design are, in part, focused on protection of biodiversity and habitats. Compliance with applicable regulations will be necessary for any farm business wishing to participate in the future scheme. Any requirement for licenses, monitoring/enforcement will be considered and actioned to ensure ongoing compliance with legislation.

Our proposals for regulatory reform for agriculture in Wales will also help ensure the protection of species in habitats. We propose to develop and consult further on these proposals. We propose they should include clear National Minimum Standards, based on consolidating the existing legal requirements as well as proposals for maintaining protections for soil and landscape features currently included under Cross Compliance. Our proposals also include improvements to the way regulatory compliance is monitored and enforced. In the interests of fairness, we propose the National Minimum Standards should apply to all farmers, whether or not they receive financial support from the Welsh Government.

Our forestry proposals will ensure we retain the power to control EIA thresholds, but it does not propose any change to the present EIA threshold of five hectares. Using this opportunity to retain a power we presently have keeps the status quo, and avoids the need to carry out costly and time consuming legislative change in the future.

We are committed to carrying out a consultation before any EIA threshold changes are introduced. This will allow the risks to be carefully considered, and could ultimately lead to a greater focus on priority habitat protection.

There is no requirement for EIA, SEA or HRA of the White Paper proposals at the current stage but this will be revisited when schemes are designed.

11. Does the proposal seek first to maintain and enhance biodiversity?

The proposals for future support and regulation for agriculture intend to address biodiversity loss, and increase ecosystem resilience. In order to do this, biodiversity needs to be both maintained and enhanced.

The White Paper proposals will support the increased provision of functioning habitats through broad-scale improvements in the habitat condition, diversity and ecological

resilience of semi-natural habitats, farm woodlands and other trees and hedgerows within farmland.

We have conducted a range of evidence reviews (Keenleyside et al¹³²) which have shown that for semi-improved grassland (which may be of significant value, for example, as habitat for a range of widespread but declining species, such as starling, yellow wagtail and lapwing), there is scope for relatively simple and important conservation gains (including connectivity) as a result of applying interventions appropriate for semi-natural land, without the need for intensive habitat restoration. Given an estimated 20% of Wales is comprised of semi-natural grassland¹³³, and over 88% of land is agricultural¹³⁴, the future scheme offers the potential to deliver pan-Wales improvements in biodiversity.

Our forestry proposals would allow NRW to add conditions or amend felling licenses to ensure felling takes place sustainably. Presently NRW cannot attach conditions to felling licences to ensure the integrity of protected sites, protected species or other sensitive 'environmental receptors'. The proposals would also introduce civil sanctions for the illegal felling of Ancient Semi-Natural Woodland (ASNW). These woodlands are widely recognised as being irreplaceable natural resource that can never be re-created.

The proposals will also allow landowners to fell their trees affected by ash dieback if there is a real and immediate danger under a specific exemption to be added to the *Forestry Act 1967*. Some ash woodlands are part of species-rich habitat with the trees often containing important epiphyte communities of mosses, liverworts and lichens. This proposal is not designed to allow the wholesale removal of the ash component from these biodiversity rich ecosystems, which is why it focuses entirely on the ash trees which have a real and immediate danger. Further felling beyond this category is woodland management and is dealt with by the NRW system of felling licences, which considers Habitats Regulations Assessments and UK or European protected species licensing.

Increasing the resilience of our natural environment

12. Does your proposal contribute to building the resilience of our ecosystems?

Increasing ecosystem resilience is a principle aim for the future scheme. There will be opportunities for farms to collaborate and cooperate to deliver SLM outcomes at a landscape or catchment scale. Ecosystem resilience will be enhanced through building stronger

¹³² Keenleyside, C.B., et al. (2019). Annex 4: Building ecosystem resilience. ERAMMP Report to Welsh Government (Contract C210/2016/2017) (CEH NEC06297).

¹³³ Countryside Survey (2007) <https://countrysidesurvey.org.uk/sites/default/files/CS-Wales-Results2007-Chapter03.pdf>

¹³⁴ farmland and commons. Source: Welsh Government (2019). Agriculture in Wales.

networks of habitats and promoting connectivity. Evidence shows the following actions¹³⁵ consistent with SLM would help promote habitat connectivity at a landscape scale:

- Improving site condition through good management to improve within-patch connectivity and fitness of populations;
- Increasing habitat patch size;
- Developing buffers around patches;
- Expanding habitat to join patches;
- Developing stepping stones between patches;
- Developing corridors;
- Improving the condition of land between habitat patches to increase permeability;
- Improving the extent and condition of landscape features such as hedgerows, field margins and water courses;
- Developing networks of habitats; and
- Encouraging large continuous areas of habitat at a landscape-scale.

13. Does your proposal contribute to the creation of new habitat?

Our proposals to maintain landscape features which provide important habitats for wildlife on all agricultural land across Wales adds protections for these habitats which may have otherwise been lost. This would provide a baseline upon which the scheme could build additional habitats. The evidence base that underpins the range of actions that may be part of future schemes (Keenleyside et al¹³⁶) suggests to increase the resilience of habitat networks in Wales, creation or restoration of habitat on both semi-improved and improved land is necessary. Restoration and creation are essential components of landscape-scale management of semi-natural habitats.

Tackling key pressures on species and habitats

14. Will the proposal have any negative impacts on habitats or species through

It is not expected the regulatory proposals nor principles for the future scheme would result in negative impacts on habitats or species. Where a change in land use may occur as a result of any future scheme participation, consideration of relative risks/costs/benefits to biodiversity as a result of that change would need to be given.

¹³⁵ Latham J., Sherry J. and Rothwell J. (2013) *Ecological Connectivity and Biodiversity Prioritisation in the Terrestrial Environment of Wales*. CCW Staff Science Report No. 13/3/3.

¹³⁶ Keenleyside, C.B., et al. (2019). Annex 4: Building ecosystem resilience. ERAMMP Report to Welsh Government (Contract C210/2016/2017) (CEH NEC06297).

15.Has all legislation regarding the pressures on species and habitats been complied with?

Proposals for the development of a set of National Minimum Standards intend to maintain existing environmental standards underpinning Cross Compliance which includes legislation limiting agricultural pollution and as well as measures which contribute to mitigating and adapting to climate change, as described in the Climate Change Impact Assessment. The above elements will be considered in the development of the National Minimum Standards as well as regulation for forestry and animal health and welfare. These standards will be reviewed in line with species and habitats trends throughout the monitoring and evaluation process to ensure the policy complies with these requirements.

16.How will any negative impacts be mitigated?

Our proposals include the intention to introduce a single system of support for agriculture supported by a robust set of National Minimum Standards. Payments will be paid for outcomes achieved above the regulatory baseline defined in the National Minimum Standards whilst ensuring compliance with regulation is a requirement for payment. This will encourage a whole system approach to increasing the environmental, social and economic sustainability of farm businesses in Wales. By taking such an approach, the impact of business decisions will be considered holistically across the farm, and the land being managed. This should help reduce unintended negative impacts.

The impact of our proposals on pollution and climate change is considered in the Climate Change and Natural Resources Impact Assessments.

Evidence¹³⁷ shows there has been growing concern regarding the population status of insect pollinators, and in turn the pollination service they provide. The main threats to pollinators include habitat loss, environmental pollution, climate change and the spread of alien species. A 2015 review in the context of the status of the UK's butterflies suggests climate change may pose more of a threat to UK species than had been previously realised¹³⁸.

Our proposals for a set of National Minimum Standards based on existing regulations combined with additional legislation on soils and landscape features will provide benefits for pollinators through (not exhaustive):

- Maintaining protections of landscape features such as hedgerows allow habitat which pollinators rely on;

¹³⁷ Potts, S. G., Biesmeijer, J. C., Kremen, C., Neumann, P., Schweiger, O., & Kunin, W. E. (2010). Global pollinator declines: trends, impacts and drivers. *Trends in ecology & evolution*, 25(6), 345-353.

¹³⁸ Fox, R., Brereton, T., Asher, J., August, T., Botham, M., Bourn, N., Cruickshanks, K., Bulman, C., Ellis, S., Harrower, C. & Middlebrook, I., (2015). *The State of the UK's Butterflies 2015*.

- Maintaining legislation on PPP statutory Code of Practice made under section 17 of the Food and Environment Protection Act 1985 and The Plant Protection Products (Sustainable Use) Regulations 2012 governing the use of plant protection products ensuring they are used correctly to protect the environment;
- Maintaining The Environmental Impact Assessment (Agriculture) Regulations Wales, protecting the semi natural habitats that support pollinators.

An approach to scheme design based on SLM will address some of the challenges facing pollinators including habitat loss, environmental pollution and climate change. Many actions consistent with SLM would also be beneficial for pollinators. For example:

- Reduction of artificial fertilisers;
- Reductions in pesticide use through integrated pest management;
- agroforestry;
- The planting of species rich grassland and meadows (both as permanent pasture and as part of a rotational system); and
- The creation of in-field wildlife corridors, pollinator strips and beetle banks.

Habitat maintenance and creation are key purposes for the future scheme, and would further benefit pollinators. This could include tree planting/woodland management, hedgerow creation and maintenance and the restoration/maintenance of important habitats such as rivers, streams and ponds, blanket bogs and upland and lowland health.