

WELSH GOVERNMENT INTEGRATED IMPACT ASSESSMENT

Title of proposal:	Sustainable Farming Scheme
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SECTION 1. WHAT ACTION IS THE WELSH GOVERNMENT CONSIDERING AND WHY?

Sustainable Farming Scheme– Agriculture (Wales) Act 2023

The Agriculture (Wales) Act 2023 (the Act) includes provisions for:

- Sustainable Land Management (SLM)
- Future support for agriculture and ancillary activities
- Monitoring and reporting of SLM
- Monitoring and reporting of future support
- Data collection and sharing

The Act defines agriculture as:

- a. horticulture;
- b. farming arable crops;
- c. dairy farming;
- d. keeping and breeding livestock;¹
- e. using land as grazing land;
- f. using land as farm woodland or for agroforestry;
- g. controlled environment agriculture;²
- h. otherwise growing plants for sale, or for the sale of part of a plant;
- i. maintaining land in a state that makes it suitable for an activity listed above

The Act defines ‘ancillary activity’ as

- a. taking action, on land used for agriculture—
 - i. to create and manage habitats, or for other purposes relating to nature conservation,
 - ii. to mitigate and adapt to climate change, or
 - iii. to maintain and enhance the resilience of ecosystems;
- b. selling, marketing, preparing, packaging, processing or distributing products deriving from agriculture.

¹ ‘Livestock’ includes, among other things, any animal kept to produce food, drink, oils, fibres or leathers, or to graze land.

² ‘Controlled environment agriculture’ means growing plants in a closed ecosystem permitting the management of environmental variables (including temperature, humidity, light and nutrients).

Sustainable Land Management

The Act sets Sustainable Land Management (SLM) as the overarching principle for future agricultural policy, including regulation and support. SLM is defined by 4 strategic objectives within the Act. These are:

1. To produce food and other goods in a sustainable manner.
2. To mitigate and adapt to climate change.
3. To maintain and enhance the resilience of ecosystems and the benefits they provide.
4. To conserve and enhance the countryside and cultural resources and promote public access to and engagement with them, and to sustain the Welsh language and promote and facilitate its use.

The Act also states,

For the purposes of the first objective, factors relevant to whether food and other goods are produced in a sustainable manner include, among other things, the resilience of agricultural businesses within the communities in which they operate and their contribution to the local economy.

Furthermore,

For the purposes of the fourth objective, 'cultural resources' include, among other things, cultural heritage and the historic environment.

These objectives must be met in a way which:

- a. Meets present needs without compromising the ability of future generations to meet their own needs; and
- b. Contributes to the well-being goals in the Well-being of Future Generations (Wales) Act 2015.

The Act places a duty on Ministers to ensure future support for agriculture is provided in a way which they consider to best contribute to achieving the objectives of SLM.

Powers to provide support

The Act provides Ministers with the powers of support, including the ability to open schemes, for agriculture and sets purposes for which support may be provided. The purposes are:

- a. Encouraging the production of food in an environmentally sustainable manner
- b. Reducing emissions of greenhouse gases
- c. Maximising carbon sequestration and storage
- d. Maintaining and enhancing the resilience of ecosystems
- e. Conserving and enhancing landscapes and the historic environment
- f. Improving air quality
- g. Improving water quality

- h. Maintaining and enhancing public access to and engagement with the countryside and the historic environment
- i. Mitigating flood and drought risks
- j. Achieving and promoting high standards of animal health and welfare
- k. Maximising resource efficiency
- l. Helping rural communities to thrive and strengthening links between agricultural businesses and their communities
- m. Improving the resilience of agricultural businesses
- n. Sustaining the Welsh language and promoting and facilitating its use.

The Sustainable Farming Scheme

Following the introduction of the Agriculture (Wales) Act 2023, the Welsh Government is intending to introduce the Sustainable Farming Scheme (SFS), which will be the primary mechanism by which farms receive financial support in the future.

The SFS will have three layers:

- Universal Layer: Actions which all farms participating in the Scheme will need to undertake, unless not applicable to their farming system³.
- Optional Layer: A suite of actions from which farms will be able to choose those most suitable for their business.
- Collaborative Layer: Support for farms to work together with other farms and organisations on joint projects to maximise the potential for delivering economic, environmental and social benefits.

The requirements of the Universal Layer of the Scheme are made up of 3 elements: the Regulatory Baseline, Universal Code and Universal Actions.

The Regulatory Baseline is underpinned by the requirements included in Cross-Compliance, with additional requirements for Invasive Non-Native Species and Access/Public Rights of Way regulations. The majority of these requirements will not be new to farmers as they are already the law.

The Universal Code is primarily made up of the remaining requirements within cross-compliance which are not covered by legislation, with some strengthened additions in relation to biodiversity, habitats, commons and soil cover requirements.

The Universal Actions are a set of requirements specific to each of the 12 Universal Actions. These may not be applicable to all farms within the Scheme.

³ For example, animal health actions will not be relevant for farms that do not have livestock.

Transition period

The Welsh Government is committed to ensuring no farmers experience a sudden cessation of their financial support. As such, there will be a managed transition period between 2026 and 2029¹. During this period, the SFS will be introduced, beginning with Universal Actions and priority Optional and Collaborative Actions, with the full suite of Optional and Collaborative Actions becoming available over time. Support has continued to be provided prior to 2026 (as part of a Preparatory Phase) to support farmer's introduction to the SFS. Those wishing to remain in BPS from 2026 will receive a tapered Basic Payment Scheme (BPS) as part of their transition from support provided by Welsh Government.

Impact

We recognise the introduction of SLM in the Act, and the transition away from existing payment schemes to the SFS, represents a substantial change for the agriculture industry in Wales. We also recognise that climate change, rising costs, new trade deals and the war in Ukraine are presenting significant challenges for our farmers. The SFS has been designed with the aim of supporting the resilience of the industry now, and ensuring farming remains sustainable and viable for future generations. The use of a transition period is designed to help the management of this change; nonetheless it is inevitable that such significant changes will have a variety of impacts on farms, the wider agricultural industry, and Wales as a whole. These potential impacts are explored within this Integrated Impact Assessment.

Costs and Benefits

Providing financial support to the agriculture industry comes at a cost to Welsh Government; however, implementation of SLM, including through the SFS, could generate considerable benefits. At a societal level, this includes the value of environmental outcomes such as cleaner air, cleaner water, and carbon storage and sequestration. At a farm level, the provision of financial support is intended to support economic stability, which would have subsequent cultural and social impacts. A number of Actions in the SFS will contribute to a farm's resilience in the face of adverse effects of climate change, such as flooding or drought. In addition, many sustainable farming practices can generate financial savings or benefits on farm, such as improved animal health and welfare, efficiency, and water storage. Such benefits were explored in the Regulatory Impact Assessment published alongside the Agriculture (Wales) Act². These benefits are considered further in the SFS Business Case and have informed the final Ministerial decision on the SFS.

The 5 ways of working

The Well-being of Future Generations (Wales) Act 2015 includes 5 'ways of working': long-term, integration, prevention, involvement and collaboration.

Long term

The SFS is designed to support the delivery of a number of outcomes which contribute to societal long-term needs such as climate change mitigation, adaptation and the reversal of biodiversity decline, whilst enabling farmers to continue to make a living from agriculture. In our Sustainable Farming Scheme: Outline Proposals for 2025,³ we stated that keeping farmers on the land was one of the principles of scheme design. It is our aim to keep farmers farming, ensuring land continues to be managed by those who know it best, whilst also supporting them to adapt and prosper. The SFS will do this by supporting active farmers to adopt sustainable farming practices. Keeping farmers on the land will help deliver long-term outcomes, as well as supporting our rural communities, creating and reinforcing social networks and supporting cohesion and resilience in communities. The Scheme also aims to conserve and enhance our cultural heritage, supporting the continued use of the Welsh language in our farming and rural communities.

The SFS recognises that food production is vital for our nation. The Scheme is expected to help deliver against our ambition for Welsh farmers to be world leaders in sustainable farming, meeting our global obligations without offshoring food production to countries with lower standards. Farming is on the front line of climate change impacts. The SFS is designed to help protect and enhance our long-term food security by supporting farmers to adapt to climate change and extreme weather events, like drought and flooding.

Prevention

Environmental issues associated with agriculture can arise from demands on land to deliver outputs beyond its natural capacity, and a narrow focus on economic outcomes. Impacts of large-scale issues such as climate change and biodiversity loss can also have substantial impacts on production. Our proposals intend to integrate actions which will help mitigate or reverse these environmental impacts with agricultural practice in a way which enables the delivery of truly sustainable farming.

We recognise the delivery of environmental and social outcomes depends on farm businesses being economically and socially sustainable as well as environmentally sustainable. The SFS therefore aims to support farm businesses to become more resilient, enabling them to farm within a competitive and changing world whilst operating within the natural capacity of their land. This support will be in the form of monetary payments, but also through actions which increase resilience, and the continued provision of training and advisory services. The SFS will include a Universal Payment for undertaking a set of Universal Actions and in recognition of the social benefits of sustainable production, to provide farmers with much needed stability. The Scheme will also have Optional and Collaborative Layers, which will enable farms to undertake additional actions which are relevant to their farm business. These actions will provide additional income and give farmers targeted support to increase their business resilience in the face of the climate and nature emergencies.

Integration

The SFS promotes an approach integrating the drivers of prosperity for agriculture with actions to enable long-term improvement of the rural environment. We believe this offers the best way forward for future agricultural support. The SFS will provide support targeted at outcomes in a way that intends to deliver them together, minimising trade-offs. The SFS actions are designed to support farmers to produce food in a way which maximises their contribution to achieving each of these outcomes.

Collaboration and Involvement

Consultations

We have engaged extensively with stakeholders throughout the development of the SFS. This has included 4 consultations, 2 phases of co-design and ongoing engagement that have helped us seek the views of farmers, farming and other organisations and the wider public about our proposals:

- 1,043 substantive responses were submitted to *Brexit and our Land*,⁴ our consultation on how we initially proposed to continue to support farmers after leaving the EU.
- We received 508 unique responses to our *Sustainable Farming and our Land*⁵ consultation, which set out our revised proposals for supporting farmers.
- We received 232 responses from individuals and organisations on our proposals for the legislative framework⁶ to support Welsh agriculture.
- We received 3,228 substantive responses to our *Keeping farmers farming* consultation, which set out revised Scheme proposals and was designed as the final formal consultation.⁷

Co-design

Our co-design work has allowed us to seek input from individual farmers across Wales, alongside a wide variety of organisational stakeholders, which has been central to Scheme design. We completed a first phase of co-design in 2020⁸, in which almost 2,000 farmers participated. We received 1,941 survey responses from farmers online or by telephone. We also conducted 270 one-to-one meetings with survey respondents by telephone or video link, and 28 group discussion sessions with a total of 129 participants. This phase of co-design explored farmers' views on six specific topics to inform the development of the SFS⁴. Our second phase of co-design work was completed in autumn 2022⁹ and focused on the SFS Outline Proposals published in that same year; we received 1,344 survey responses from farmers online or by paper and completed an additional 101 surveys via phone or in-person interviews. A total of 26 co-design workshops were also held to collect more detailed feedback. There were 23 workshops covering the Scheme actions and a further three which focussed on Scheme processes (covering topics such as eligibility and registration).

⁴ The 6 topics covered by the first phase of co-design were outreach, soil management, habitat management (ecosystem resilience), farm development opportunities, animal health & welfare and livestock management, and the Welsh language.

Separately, and also focused on the SFS Outline Proposals, a stakeholder feedback form was available for organisations and other individuals to contribute their views on the outline scheme proposals. We received 100 stakeholder responses from organisations and groups which sit across the broad spectrum of those who have an interest in the agricultural sector¹⁰.

Keeping farmers farming

Keeping farmers farming was the latest formal consultation and closed in March 2024. During the consultation period we held 10 Roadshows across Wales as an opportunity for farmers to hear firsthand what was included in the consultation. Approximately 3,200 farmers attended the roadshows.

In addition to Welsh Government-led Roadshows and the formal stakeholder meetings referenced below, Welsh Government staff continue to take part in a range of stakeholder discussions from bilateral discussions between individual stakeholders, and conferences or webinars to larger groups of farmers.

In summer 2024 the SFS Ministerial Roundtable⁵ was established comprising senior stakeholders representing farmers and the food, nature, forestry and veterinary sectors, as well as the wider supply chains. The Roundtable provides direct support to the Deputy First Minister with responsibility for Climate Change and Rural Affairs. In addition, a Carbon Sequestration Evidence Review Panel¹¹ was established, and alongside the existing stakeholder Officials Group, these became subgroups of the Roundtable. A new Trees and Hedges Stakeholder Delivery Group was also established. These Groups continue to meet. This positive commitment from stakeholders resulted in over 50 meetings (many half and full days) up to the end of April 2025.

The formal responses to the *Keeping farmers farming* consultation helped shape the discussions with these stakeholder fora. As a result of working in partnership with the Ministerial Roundtable we published an updated Scheme Outline in November 2024. This Outline included changes such as the reduction of the number of Universal Actions from 17 to 12, and of the 12, most have had significant changes. The proposed requirement for there to be at least 10% tree cover on each farm was also removed.

This engagement has continued to help shape the development of the Scheme to ensure the final proposal are accessible and appropriate to meet the scheme and SLM Objectives.

Evidence base

A range of evidence sources have been used to inform development of the SFS and estimate potential impacts. These include:

⁵ Membership of the Ministerial Roundtable and subgroups is available in Annex 1 of the Sustainable Farming Scheme: proposed scheme outline (2024) [HTML] | GOV.WALES

- ERAMMP Integrated Modelling Platform (IMP) outputs which explore the effects of the SFS on farm viability, land use and environmental outcomes in Wales. The IMP is applied to 7,401 full-time farms⁶.
- ADAS-lead Consortium modelling which estimates the potential economic effects of the SFS Universal Actions. The ADAS model is applied to 15,555 full-time and part-time farms⁷ and assumes 100% uptake of the SFS.
- Miller Research Evidence Review of Proposed SFS Optional & Collaborative Themes report which outlines findings from a qualitative evidence review of the Optional and Collaborative Themes, and assesses the evidence reviewed against the SFS Business Case Critical Success Factors.
- ERAMMP Reports 110 Assessment of natural capital benefits for 2025 which provides estimates of the social values from certain ecosystem services from the SFS.

A quantitative assessment of the potential economic impacts of the SFS, drawing on the evidence products described in the list above, is provided in the full Business Case and is therefore not included in this IIA.

This IIA considers a wider variety of secondary data sources and other sources of evidence throughout our individual specific impact assessments. These include data such as the Welsh Index of Multiple Deprivation, Census and survey data from the Office for National Statistics, academic literature, and research produced by organisations with an interest in agriculture. In combination, these different sources allow us to assess the potential impacts of the SFS as relates to the domains covered by each individual impact assessment.

⁶ In the IMP full time farms are those with > 1 Full Time Equivalent (FTE) labour.

⁷ The ADAS consortium modelling includes all farms in receipt of Basic Payment Scheme (BPS) funding in the baseline and with sufficient financial data to model, with full-time being defined as a Standard Output of at least €25k. Specialist pig, poultry and horticultural farms are excluded.

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

2.1 People and Communities

How, and to what extent, will the proposal affect people and communities?

The Sustainable Farming Scheme (SFS) will be the main source of future Government support for farmers in Wales. It will represent a shift from the previous support mechanism provided under the EU's Common Agricultural Policy (CAP). The CAP offered direct payments to farms based on farm area. The new funding model provides a support mechanism targeted at sustainable production of food, rewarding farmers for the delivery of environmental and social outcomes through the adoption of sustainable farming practices. Farmers will be rewarded for actions taken to respond to the climate and nature emergency, alongside the sustainable production of food, rewarding work to deliver clean air and water quality, mitigate flood risks, fight climate change and boost biodiversity.

Sustainable Land Management (SLM) was introduced as the framework for agricultural policy in Wales through the Agriculture (Wales) Act 2023 (the Act) and underpins the SFS. It is designed to have a positive impact on people and communities by protecting our natural resources and producing positive health outcomes for the people of Wales. SLM is designed to meet both the needs of present and future generations and contribute to the well-being goals as laid out in Section 4 of the Well-being of Future Generations (Wales) Act 2015.

SLM incorporates the economic, environmental and social contribution of farmers to society in Wales. It is an internationally recognised concept which encourages the use of land resources in such a way that the needs of the current generation are balanced with our obligations to the next¹².

The SFS is structured so that its Actions contribute to one or more of the SLM objectives as set out in the Act. The Scheme's Actions are designed to enable farmers to be rewarded for the delivery of specific SLM outcomes and for their contribution to the health and well-being of our nation. This is intended to bring benefits to farmers, farming families, rural communities, consumers of Welsh produce and the people of Wales.

Farming is on the front line of climate change impacts. In Wales and the rest of the UK, climate change impacts such as extreme weather events are projected to increase, year on year¹³. For instance, it has been projected that Wales can expect warmer, drier summers, more intense rainfall, and more flooding in coastal and low-lying areas¹⁴. As a consequence of more frequent and intense extreme weather events, agricultural production in Wales and the UK will be negatively impacted¹⁵. In particular, farm businesses would be unlikely to maintain or increase current levels of agricultural production^{16,17}.

The SFS is designed to help protect and enhance our food production by supporting farmers to adapt to climate change and extreme weather events, like drought and flooding, therefore helping them to stay sustainably and productively farming on their land despite our changing climate.

We recognise that the delivery of environmental and social outcomes depends on farm businesses being economically sustainable. The SFS will therefore support farm businesses to become more resilient, helping them to compete in a competitive and changing world whilst operating within the natural capacity of their land. It will include a Universal Payment for undertaking certain Universal Actions and in recognition of the social benefits of sustainable production, to provide farmers with much needed stability. Many of the SFS Actions are also designed to help farmers become more efficient by adopting an approach which makes the best use of their resources.

We recognise, however, that different groups will experience different impacts. We therefore provide an assessment of the expected impacts on particular individuals, groups and communities in the full impact assessments, which can be found in the Annexes of this document.

2.2 Children's Rights

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

2.3 Equality

Please see Annex B for the Equality Impact Assessment.

2.4 Rural Proofing

Please see Annex C for the Rural Proofing Impact Assessment.

2.5 Health

Summary of predicted impacts

The Sustainable Farming Scheme (SFS)

It is anticipated that the SFS could have several health impacts on both the general public and farming community. The Agriculture (Wales) Act 2023 has established the legislative framework for Sustainable Land Management (SLM) as the future policy framework for agriculture in Wales, with strategic objectives encompassing sustainable food production, climate change mitigation and adaptation, ecosystem resilience, and the conservation and enhancement of culture and the countryside. This has paved the way for the SFS to act as a vehicle for delivering these SLM objectives, which intend to benefit the people and land of Wales environmentally, socially and economically. In relation to health, in particular, such outcomes could include:

- Environmental improvements that provide physical health benefits to the Welsh public. The SFS is designed to have a positive impact on the environment, with associated health benefits for the people of Wales.

- Prevention, control and elimination of animal diseases, contributing towards safer food, reduced antibiotic use, improved public health and minimising the risk to people from diseases such as salmonellosis. There are specific Actions within the Universal and Optional Layers of the Scheme designed to address the aim of achieving and promoting high standards of animal health and welfare.
- 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. Maintaining and enhancing public access to the countryside is set as a purpose for support within the Act and specific actions will be available to farmers within the Optional and Collaborative Layers of the Scheme.

The level of change does, however, have the potential to have negative impacts on farmer mental health if it is not managed appropriately. Clear advice, guidance, and support will be important to help mitigate this. In addition, there will be a multi-year transition period to provide farmers with stability in the move from the current Basic Payment Scheme (BPS) to the SFS. No farmer will experience a sudden cessation of the payments they receive, even if they choose not to partake in the new Scheme. We are continuing to work with the Wales Farm Support Group¹⁸ (including on the SFS Ministerial Roundtable), which represents the main farming charities, and other stakeholders to understand issues involving mental health and to ensure suitable mitigations are in place where issues arise.

2.5a How, and to what extent, will the proposal impact health determinants?

Lifestyles

The delivery of environmental outcomes through the SFS could provide benefits to the lifestyle determinants of the health of the people of Wales. Improved opportunities for access to, and enjoyment of, the countryside could contribute to better physical and mental health outcomes, as should food safety improvements resulting from increased animal health and welfare.

Livestock and Public Health

The SFS aims to achieve and promote high standards of animal health and welfare. On adopting the Scheme, relevant farms will be universally required to implement the Animal Health Improvement Cycle (AHIC), the incoming animal Biosecurity assessment and the Animal Welfare component focused on mobility and body condition scoring. This will allow support to be provided to incentivise the prevention, control, and elimination of animal diseases, contributing towards safer and more efficiently produced food, improved public health and animal welfare. The AHIC is expected to require different actions across farms because we recognise that no two farms are the same. Farmers are expected to work closely with their vet to identify areas of farm performance that can be improved. These measures aim to minimise the risk of disease and improve the health, welfare and productivity of animals, which in turn would positively impact the quality and safety of Welsh animal produce and the resilience of Welsh livestock businesses and rural communities. For

example, minimising the risk to people from diseases such as salmonellosis can help reduce the demand on health services and the need for antibiotic treatment and also support farm productivity. The biosecurity aspect of the Animal Health and Welfare Universal Action aims to mitigate disease risk from sourcing and introduction of incoming animals.

Less healthy livestock are less efficient and likely to have higher greenhouse gas (GHG) emission intensities, i.e. they produce more kilograms of GHG per kilogram of edible output. Work commissioned by the UK Climate Change Committee (UKCCC) has identified improving animal health as a key greenhouse gas mitigation measure¹⁹. Healthier and more productive animals lead to less pollution and greenhouse gas emissions, and therefore lower risk to human health through supporting the Welsh livestock sector's journey towards net zero by 2050.

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 one million deaths around the world each year²⁰. However, that figure has been predicted to rise, with an estimated 39 million deaths between 2025 and 2050 if no action is taken²¹. Wales will also be impacted by AMR if it is not controlled; however, quantitative research on the impact on mortality of AMR in Wales has not yet been done. AMR is driven by the use of antibiotics. The AHIC aims to ultimately 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 principles of the SFS are designed to drive healthy livestock production, taking a 'prevention is better than cure' approach, which would therefore help to address the issue of AMR.

Lifestyles and Physical Activity

One of the ways in which farmers support the physical and mental well-being of the general population is through their maintenance of the countryside and public rights of way. The Welsh countryside provides space for physical activity which contributes to both physical and mental well-being. Spending time in the countryside or green spaces has been shown to have positive mental health and well-being effects²². Agricultural use accounts for 90%⁸ of the land in Wales,²³ which includes 16,000 miles of footpaths, 3,000 miles of bridleways, 1,200 miles of cycle network and 460,000 hectares of open access land, as well as hedgerows, dry stone walls and other landscape features.

The SFS will require compliance with the minimum legal requirements and enable provision for improved and enhanced public access to the countryside and cultural resources. The SFS Optional Actions (OAs) may include:

- Improving public rights of way or access to open access land to make them more accessible

⁸ Either through farmland or commons.

- Improving the visitor experience
- Improving access to nature and outdoor recreation
- Upgrading footpaths to multi-use paths.
- Enhancing existing paths to make them more accessible.
- Establishing joined-up or new access routes and trails.

Furthermore, Collaborative Actions (CAs) under the SFS could also support projects that would improve access for local communities and support national priorities. This could enable greater levels of recreation and enjoyment of the Welsh countryside by the people of, and visitors to, Wales.

There is a substantial body of evidence supporting the notion that increased access to the countryside, or green spaces, may contribute to positive individual and public health benefits. For instance:

- A 2007 review of the links between the natural environment and well-being concluded ‘the natural environment provides physical, mental and social well-being benefits. There are synergistic effects between these benefits’²⁴. It also noted ‘increased levels of physical activity are known to have both a preventative role in cardiovascular and musculoskeletal diseases and inhibiting stroke and cancer’ and ‘has a positive effect on range of health determinants such as body weight, blood pressure, cholesterol levels and so forth’²⁵.
- A 2007 study 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’²⁶. The 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’²⁷.
- A 2009 study evaluated changes in self-esteem and mood after walking in four different English National Trust natural and heritage sites²⁸. It reported, 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.
- A 2023 study, based in Finland, found that frequently visiting green spaces was associated with less frequent use of psychotropic, antihypertensive and asthma medications for those in urban environments²⁹. The association did not apply with regards to residential green or blue space, or green or blue views from the home.

Farm Safety

Data from the Health and Safety Executive (HSE) shows there were 23 fatalities in agriculture, forestry, and fishing across the UK in 2023/24,⁹ compared with a five-year average of 24³⁰. Many more have been seriously injured or made ill and as a result unable to work³¹.

On-farm health and safety is a fundamental requirement of a sustainable farming business and should be seen as an essential part of farm business management.

The SFS includes a Universal Action whereby farmers will be required to complete a minimum baseline level of learning, including on health and safety, which will be a mandatory requirement of the Scheme. This will support the work of the Wales Farm Safety Partnership³². It is expected that properly identifying and managing risks, along with high levels of education and skills, will lead to an improvement of health and safety standards on farms.

Social and community influences on health

The Public Health Wales (PHW) report, *Supporting farming communities at times of uncertainty*, identifies a number of key uncertainties and challenges with the potential to impact on farmers' well-being, one of which being isolation and loneliness³³. There is evidence that involvement in environmental schemes can mitigate some of these well-being issues. For example, the EU LIFE report into the Burren LIFE project in Ireland 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'³⁴.

Similarly, a survey of Environmental Stewardship (ES) participants in England reported ES can:

play an important part in developing new social contacts and networks. Of the advisors 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 activity³⁵.

The survey also found that ES schemes, particularly HLS, have also brought agreement holders into contact with more farmers and the general public. It appears the social contact supported by scheme membership (hosting or attending farm walks, meetings to discuss options, advisor visits) can be greatly valued.

The above evidence suggests funding collaborative SLM action amongst farmers, and between 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. The SFS will support farmers and rural communities to work together on a range of

⁹ It should be noted that the cited figure for 2023/24 is currently provisional, subject to review and final confirmation.

Collaborative Actions and bring farmers together as part of the Farming Connect knowledge transfer programme.

Mental well-being

As discussed above, the SFS will contain voluntary Optional and Collaborative Actions designed to support opportunities for access to, and enjoyment of, the countryside. This could contribute towards better physical and mental health outcomes for those members of the public who access the countryside. The positive well-being impacts that 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*, report³⁶.

As well as general societal health and well-being, the mental health of farmers is an important consideration, as the changes resulting from the SFS will have a larger impact on their day-to-day lives compared with the general population.

International data demonstrates farming has some of the highest incidents of suicide compared with other occupations: social isolation at work may be an important factor in this³⁷. In Wales, data from the Office for National Statistics states 39 agricultural workers died by suicide between 2011 and 2021 (37 males and 2 females)³⁸.

The PHW report, *Supporting farming communities at times of uncertainty*, explains that

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 suicide³⁹.

The report identifies 6 key uncertainties and challenges with the potential to impact of farmers' mental health and well-being:

1. The uncertainty and viability of farming in Wales
2. Succession planning.
3. Regulation, administration and digitalisation.
4. Farmer's prioritising their own health.
5. Isolation and loneliness (detailed above under 'Social and community influences').
6. The underlying culture and expectations in farming.

Each of these key uncertainties and challenges are discussed, below, in relation to the SFS.

1. The uncertainty and viability of farming in Wales

Public Health Wales noted that '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'⁴⁰. Whilst the principles and policy direction for future support have been set out in the Agriculture (Wales) Act 2023 and the SFS, there remains uncertainty about the nature of UK trading relationships in agricultural produce now we have left the European Union (EU).

The Agriculture (Wales) Act 2023 set out a significant reform to agriculture policy and support through establishing the SLM framework, and its future implementation through the SFS. These changes to the agricultural sector may be a cause of uncertainty for the farming sector.

We have sought to mitigate this by encouraging stakeholder engagement from all who wish to contribute throughout the consultation and co-design stages of SLM and the SFS. This will contribute to greater knowledge and reduced uncertainty of the proposed Scheme within the farming community. Between the publication of the final Scheme in summer 2025 and the Scheme commencing in January 2026, a range of engagement activities are being designed so farmers are aware of the final Scheme detail and what participation in the Scheme means for them. These activities include a series of in person roadshows, and we will provide engagement materials via the stakeholder network. The SFS is intended to provide certainty for farmers as it sets out the long-term approach for agricultural support in Wales. Specifically, 'improving the resilience of agricultural businesses' is one of the purposes for support set out in the Act, meaning that future support can be given for actions which make a positive contribution to the viability of farming in Wales. The resilience of agricultural businesses is also considered as a facet of sustainable food production in the objectives of the Act.

In addition, there will be a managed transition between the current BPS and the SFS. This means farmers wishing to remain in BPS will not experience a sudden end to their payments.

2. Succession planning

A major review 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'⁴¹. We have previously outlined that the SFS should be available to all eligible farms and should provide an important revenue stream for participating farms. Previous barriers to succession such as the use of reference periods or quotas have been intentionally removed from the Scheme to support farms to undertake long-term planning for their businesses and support succession.

Other concerns relating to succession planning, such as national taxation are retained by the UK Government. The Welsh Government has engaged with the UK Government to represent the views of the Welsh farming industry.

3. Regulation, administration and digitalisation

The PHW report, *Supporting farming communities at times of uncertainty*, cites understanding and complying with regulation as a key challenge to maintaining good mental health and well-being of farmers and land managers⁴². The SFS will be a voluntary scheme that will provide support for

farmers to undertake actions above and beyond the regulatory requirements; however, since it will become the primary mechanism through which farms receive financial support, it is important to consider the impact of such a large change alongside consideration of regulation impacts.

Using Bovine Tuberculosis (TB) as an example, the untimely culling of any animal, and in some cases complete depopulation of entire holdings, 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 events, which in turn may affect physical well-being. The SFS includes high animal health and welfare standards and an emphasis on biosecurity amongst its Universal and Optional Actions. This aims to reduce the risk of large-scale disease outbreaks and the frequency with which the negative impacts of more severe disease control measures are experienced. As discussed above, the SFS will require livestock farmers to adopt the Animal Health Improvement Cycle (AHIC) as a Universal Action and also complete an incoming animal biosecurity assessment with their vet to minimise the risk of introduction of disease. These measures are designed to both improve the health of animals and positively influence the well-being of farmers, amongst its range of impacts.

The Welsh Government, acknowledging the impact of 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. While free Cymorth TB visits remain available to keepers, lessons learned from both the Pembrokeshire and North Wales TB projects will inform a review of the initiative. The Welsh Government also contracted the Farming Community Network (FCN) to deliver bespoke Mental Health and Farmer Welfare support for those effected by TB.

There are now a Bovine TB Technical Advisory Group (TAG) and Bovine TB Programme Board in place, which will oversee and provide guidance to Welsh Government on its TB Eradication programme. The Programme Board has strong farmer and veterinary representation, mindful of the impact that TB has on the mental health and well-being of cattle farmers, their families and the wider agricultural community.

The SFS will provide guidance and support, for example through Farming Connect and the Farm Liaison Service, to help farmers understand and meet their regulatory and administrative requirements. In addition, we recognise that in implementing the SFS, farmers may experience challenges, unexpected consequences, or even find that actions they take may be unsuccessful in their particular circumstances. The SFS will seek to support farmers to overcome and rectify any problems, rather than penalising unforeseen failures.

The Welsh Government will also continue to ensure farmers understand how to access mental health and welfare support from the farming charities and the FarmWell portal⁴³.

4. Farmers prioritising their own health.

Evidence suggests that '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'⁴⁴.

It should be noted the correlation could go both ways; it may indicate that farmers with better mental health are more likely to participate in agri-environment schemes, rather than these schemes leading to improved mental health. It is evident, however, that the two are linked, and as such, the SFS has been designed with the aim of reducing causes of non-adoption, for example by reducing the administrative requirements of the Scheme compared to the original proposals.

5. Isolation and loneliness

This is discussed in greater detail, above, under the heading, 'Social and community Influences'.

6. The underlying culture and expectations in farming

The PHW report, *Supporting farming communities at times of uncertainty*, describes a culture of self-reliance in agriculture, with farmers expected to 'just get on with it' and not allow themselves to fail⁴⁵. This culture and the pressures that accompany it were highlighted as a key challenge in addressing farmers' mental health. The report proposes 'prevention by supporting a cultural shift to seek advice and value health'⁴⁶.

The SFS will include an advisory and support service, and opportunities for Continuous Professional Development, building on the work of the current Farming Connect programme. The SQW evaluation of Farming Connect found that it appears to have made the most difference in influencing farmers' personal development, particularly in strengthening confidence and ambition, and creating the 'foundations' for change⁴⁷. This has influenced business management and decision-making processes alongside improved technical skills for Farming Connect participants.

The SFS will facilitate peer-to-peer support, advice, and training through Farming Connect, which could encourage farmers to support one another further. Furthermore, the SFS will also support a range of Collaborative Actions, therefore supporting farmers to work together, which are expected to build relationships and networks between farmers.

Living/environmental conditions affecting health

The Agriculture (Wales) Act 2023 has established SLM as the future policy framework for agriculture in Wales, and the objectives of the Act include the mitigation of and adaption to climate change, and the maintenance and enhancement of ecosystem resilience. The SFS will encourage actions which are designed to contribute to better air quality, reduced flood risk, and reversing the decline in biodiversity. As such, the SFS could therefore contribute to better physical and mental health outcomes in the general population.

The Scheme will have the potential to directly impact public health through positive outcomes, in particular:

1. Improving air quality and reducing emissions of greenhouse gasses.
2. Improving water quality and mitigating flood and drought risks.

3. Maintaining and enhancing public access to and engagement with the countryside and the historic environment.
4. Achieving and promoting high standards of animal health and welfare.

We consider each of these outcomes and their positive impacts below.

1. Improving air quality and Reducing emissions of greenhouse gases.

Public Health Wales estimates the burden of long-term air pollution exposure in Wales to be the equivalent¹⁰ of 1,000 to 1,400 deaths (at typical ages) each year⁴⁸. The National Air Quality Strategy (the Clean Air Plan for Wales) sets out the Welsh Government's ambitions and actions to improve air quality and reduce the impacts of air pollution on human health, biodiversity, the natural environment and the economy. Existing national air quality concentration objectives have been set for the protection of human and environmental health. In addition, the UK has emission reduction commitments for overall UK emissions of five damaging air pollutants to be achieved by 2030. The pollutants include: fine particulate matter (PM_{2.5}); ammonia (NH₃); nitrogen oxides (NO_x); sulphur dioxide (SO₂); and non-methane volatile organic compounds (NMVOCs). The Environment (Air Quality and Soundscapes) (Wales) Act 2024⁴⁹ also introduced a new air quality target setting framework in Wales, which strengthens Welsh Ministers' powers and enables the introduction of long-term targets for identified pollutant risks. The Act sets out 2 duties on Welsh Ministers to set targets for pollutants: a target for fine particulate matter (PM_{2.5}) by February 2027; and a target by February 2030 for one of the following: ammonia; particulate matter (PM₁₀); ground level ozone; nitrogen dioxide; carbon monoxide and sulphur dioxide⁵⁰.

PHW states the air pollutants of greatest public health concern are PM_{2.5} and NO₂⁵¹. Air pollution, combined with other aspects of the social and physical environment, creates an inequitable disease burden on more deprived parts of society. As outlined by PHW, most local air pollution problems are caused by emissions from road vehicles; however, other sources also influence air quality such as industrial, agricultural and residential/domestic sources. The SFS will include Universal, Optional and Collaborative actions in relation to woodland creation and management, tree planting, hedgerow management, restoration, and creation. New woodland planting in particular could provide benefits to air quality in Wales and subsequent benefits for human health.

Pollution from agriculture has the potential to severely impact physical health through the emission of pollutants such as ammonia or nitrous oxides. The agricultural sector is the 'dominant source' of ammonia emissions in the UK, 'accounting for 87% of total emissions in 2022'⁵². Air pollution can travel substantial distances, and so a reduction in pollution in rural areas has the potential to positively impact both rural and urban communities across Wales.

¹⁰ This does not mean there are 'actual' deaths from air pollution exposure; rather, that the reduced life expectancy which everyone experiences because of air pollution exposure is 'equivalent' to between 1,000 and 1,400 deaths when summed.

Improving air quality and improving water quality are 2 of the purposes of support under the Agriculture (Wales) Act to help deliver SLM. The SFS will contain actions to contribute to these purposes.

Appropriately sited woodland planting has the potential to intercept ammonia emissions. In addition, the SFS will build on the *Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021* by further incentivising actions to lower the risk of diffuse pollution from farms. Implementing the SFS is intended to have benefits for soil, air, and water quality through a reduction in pollution, which in turn should lead to an improvement in the health outcomes of the general public.

2. Improving water quality and mitigating flood and drought risks

A number of actions in the SFS are intended to contribute towards the improvement of water quality and the mitigation of flood and drought risks. The SFS will include actions which aim to minimise the risk and lessen the impact of flooding. For instance, improving soil health and structure, together with increasing soil organic matter, can 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.

The SFS will also support farmers and other landowners to work together at a landscape, catchment or pan Wales level to build a collective network of coordinated actions which could include activities addressing flood and drought risks.

The SFS also aims to improve water quality, as in many cases (as with flood mitigation) improvements in water quality may also be delivered through support for other actions. Soil quality improvements resulting from the delivery of the SFS should contribute to improved water quality, while reduction of emissions will also contribute to cleaner water. Water pollution entering river catchments from agriculture travels downstream, and so reducing emissions could have positive benefits in urban areas as well as rural ones.

Overall, the SFS is designed to lead to a reduction in the risk to the public from flooding and drought, and an increase in water quality, which should contribute to positive physical and mental health outcomes.

3. Maintaining and enhancing public access to and engagement with the countryside and the historic environment.

The SFS intends to support farmers to maintain and enhance public access to, and engagement with, the countryside and historic environment. The Optional Layer will provide support for the upgrading and improvement of existing public rights of way, which includes improving furniture and the visitor experience. Furniture improvements such as the removal of stiles, aim to make it easier for people with mobility impairments, or families with pushchairs to access the countryside. Support for the replacement or installation of waymarkers, information boards and seats are

designed to improve visitor experiences and may encourage new or more frequent visits (therefore contributing to improved physical and mental health outcomes).

4. Achieving and promoting high standards of animal health and welfare.

Information regarding how improved animal health and welfare can have positive impacts on human health are detailed above in the Livestock and Public Health section.

Economic conditions affecting health

Independent economic assessment of the Universal Layer of the SFS has informed assessment of the estimated relationship between the SFS and rural employment, farm business income and broader socio-economic issues. Details of this assessment, and analysis of the costs and benefits of the SFS, can be found in the SFS Business Case.

Information concerning the expected socio-economic impact of the SFS is detailed in the Socio-economic Duty Impact Assessment (Annex G).

Access and quality of services

The SFS aims to provide increased opportunity and engagement with agricultural services, for example in the engagement farmers will have with their vet to complete the animal health and welfare actions. Other examples include support for the management of existing habitat and woodland along with actions to plant trees and create or restore hedgerows. Further details are set out in the SFS Business Case.

Biodiversity

A full Biodiversity Impact Assessment for the SFS can be found in Annex F.

Climate

The Welsh Government Programme for Government (2021-2026) sets out, as key well-being objectives, the need to 'Embed our response to the climate and nature emergency in everything we do' and 'Build a stronger, greener economy as we make maximum progress towards decarbonisation.' In addition, the Agriculture (Wales) Act 2023 has set the objective to mitigate and adapt to climate change. The SFS aims to contribute to these objectives through reducing the carbon footprint of the agricultural sector and increasing tree and woodland cover, which in turn is intended to have positive impacts on the health and well-being of the people of Wales. The 2020 UKCCC report, *Land Use: Policies for a Net Zero UK*, highlights the co-benefits of reducing emissions, including improved health from increased air quality and improvements in flood alleviation⁵³.

As the climate changes, the environment, biodiversity needs, and the biological ecosystem will also all change. SLM and the SFS are designed to enable the Welsh Government to respond positively, supporting farms to remain resilient.

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

We will consider the following categories:

- Age related groups
- Income related groups
- Groups who suffer discrimination or other social disadvantage
- Geographical groups

In addition, the potential impact on the mental health of farmers is discussed in the Mental Well-being section of question 2.5a.

Age related groups

The SFS has been designed to be accessible to all eligible farmers, regardless of age. In recognition of, and to mitigate against, the prevalence of digital inequalities amongst older and rural generations, a series of roadshows were held to coincide with the last formal consultation, *Keeping farmers farming*. Ten roadshows were held with locations designed to offer a roadshow within one hour travel of all parts of Wales wherever possible. Similar events are planned in advance of the SFS being introduced in 2026 and we will provide assistance for those where digital access is difficult (for multiple reasons). Further details regarding this, and on the expected impacts of the SFS, including in relation to health, on different age groups can be found in the Equality Impact Assessment (Annex B).

Succession planning can be a source of anxiety for farmers and will likely have a more acute negative impact on the mental health of older farmers nearing retirement. The SFS has been designed to support succession planning by not including any historic reference periods or entitlements. Increased sustainability of farming businesses may have a positive impact by relieving mental health pressures if the SFS results in more successful succession planning, and this would be felt more keenly by older farmers.

Regarding the population more generally, research demonstrates children and older people are more vulnerable to the negative effects of air pollution exposure⁵⁴. The SFS is explicitly designed with the objective of responding to the climate emergency, and positive environmental outcomes, such as cleaner air and the reduction of greenhouse gas emissions, will contribute towards this objective. Due to their increased vulnerability, children and older people would be expected to experience the greatest health benefits from such environmental outcomes.

The agricultural sector has the highest mortality and accident rate of any industry in the UK, including the highest child injury rate in a workplace environment⁵⁵. Farming is moreover the sole high-risk industry in the UK where children are a constant presence (either as part of the family or as members of public)⁵⁶. The HSE reports that children in the UK are killed every year in relation to agricultural work and activities; furthermore, most children who die in such incidents are family members⁵⁷. As outlined above, the SFS includes a UA whereby farmers will be required to

complete a minimum baseline level of learning, including on health and safety. Identifying and managing risks, along with high levels of education and skills, should lead to an improvement of health and safety standards on farms which could in turn support child safety.

Income related groups

The primary impacts of the SFS in relation to income related groups will concern farming households. Research into Small and Very Small farms in Wales (which account for 87% of Welsh farms) shows farm economic size does not necessarily predict household income for the majority of farms in Wales⁵⁸. Very Small farms were more likely to have a household income of £10,000 to £29,999, while Small farms were more likely to have a household income between £50,000 and £69,999, though neither of these results were statistically significant in the research. Overall, the vast majority (82%) of Small and Very Small Welsh farms will have a household income between £10,000 and £69,999⁵⁹. The SFS is intended to provide support for smaller farms compared to BPS, as a consequence of a lower minimum eligible farm size (3ha or 550 standard labour hours, compared to 5ha in BPS).

In contrast to the BPS, the SFS will financially support farmers to undertake actions which deliver outcomes. It is not expected at this stage that the SFS will have a significant differential impact on income related groups, subject to the take up of the Universal, Optional and Collaborative Actions. Analysis of the costs and benefits of the SFS is included in the SFS Business Case.

Groups who suffer discrimination or other social disadvantage

We do not anticipate that the SFS will impact specifically on the health of groups who suffer discrimination or other social disadvantage, other than the potential health benefits for the general population we have described above. For further information regarding the impacts of the SFS on those who suffer socio-economic disadvantage, please see the Socio-Economic Duty Impact Assessment (Annex G). For impacts on those possessing Protected Characteristics as set out in the UK Equality Act 2010, please see the Equality Impact Assessment (Annex B).

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 and over are found in rural areas in Wales such as Powys, Conwy, and the Isle of Anglesey. Whilst there are health impacts for older people living in rural areas, they are focussed on the delivery of key health, social services, and transport issues.

2.6 Privacy

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

Please see the Data Protection Impact Assessment (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'⁶⁰. Culture includes museums, archives, libraries and the arts; heritage includes the built historic environment as well as intangible heritage such as traditions; the arts encompass 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 are intricately linked to the landscape and natural environment. The Welsh Government's *Light Springs through the Dark: A Vision for Culture in Wales*,⁶¹ 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 as an estimated 90% percent of Welsh land is devoted to agriculture.

The Area Statements developed by Natural Resources Wales demonstrate this relationship between landscapes, culture, and heritage in Wales⁶². For instance, the agricultural land of the Gwent levels (South-East Area Statement) is not only of historical and archaeological importance but also an important habitat for many species⁶³. 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 Valley⁶⁴.

The Agriculture (Wales) Act 2023 has set Sustainable Land Management (SLM) as the future policy framework for agriculture in Wales and has 4 objectives which Ministers must consider. The fourth objective is 'conserve and enhance the countryside and cultural resources and promote public access to and engagement with them, and to sustain the Welsh language and promote and facilitate its use'. Therefore, culture and heritage, including the Welsh language, are considered a key aspect of the future of farming in Wales, alongside the objectives relating to food production, climate change, and ecosystem resilience.

Given most of the land in Wales has agricultural use, agricultural land is also where many of our archaeological heritage assets are located. Any landscape changes through the Sustainable Farming Scheme (SFS) should not be to the detriment of heritage assets and the historic environment as SLM requires government and farmers to consider the landscape holistically in order to meet the strategic objectives set out in the Agriculture (Wales) Act 2023. One of the SLM purposes is to 'conserve and enhance the countryside and cultural resources and promote public

access to and engagement with them.’ Although landscape change is inevitable over time through natural processes, change brought about by the SFS should support the cultural value derived from individual features or the context provided by their surrounding landscape.

As *Sustainable Farming Scheme: Outline Proposals for 2025*⁶⁵ identified, the rural landscapes of Wales are ‘a precious part of our heritage’ and ‘our historic features on farmland are fundamental to our national character, cultural identity and economy.’ In recognition of their social, cultural, and economic value, the SFS will support farmers to manage and enhance the landscape and historic environment through several Universal, Optional, and Collaborative Actions. Our ambition is to protect our important historic assets from damage and help conserve and sustain the distinctive visual and cultural character of Wales for current and future generations.

The conservation of the historic environment through the SFS is intended to be achieved by farmers assuming responsibility for the historic assets on their land. RPW online will show a farmer if they have any known historic assets on their landholding.

As part of the Historic Environment Universal Action, farms with identified historic assets will need to monitor, maintain and adopt a ‘do no damage’ approach to their historic features.

This Action is applicable to all farms in the Scheme with at least one historic asset listed below:

- Scheduled Monuments
- Registered Parks and Gardens
- Historic environment features – including both individual features and larger archaeologically sensitive areas
- Traditional Farm Buildings

The SFS may also support landscape-based collaborative projects which aim to enhance the historic environment and landscape, including in our Designated Landscapes, National Parks and National Landscapes, where the Ffermio Bro: Farming in Designated Landscapes scheme (commencing in 2025-26) will inform the collaborative layer across multiple farms. Moreover, the SFS may also support collaborative activities at the landscape scale to improve access for local communities and support national priorities.

Further detail regarding the way the SFS is expected to promote and protect our natural environment and countryside, and therefore our cultural heritage, is included in the Biodiversity Impact Assessment (Annex F). Moreover, the Welsh Language Impact Assessment outlines the expected impacts of the SFS on this particular aspect of Welsh culture (Annex E).

The SFS is designed to support the management of our landscapes and improvements to the accessibility of the countryside. We have no evidence the Scheme will directly affect, positively or negatively, the participation of people in the arts or in sport.

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 SFS 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. Wales has a rich agricultural heritage, and farms are of cultural importance to many communities in Wales. The SFS has been designed to support the resilience of these businesses, which would therefore positively impact rural communities. The SFS also aims to help rural communities thrive as well as improve the resilience of agricultural businesses. We set out further detail of this in our Rural Proofing Impact Assessment (Annex C).

3.2 Welsh Language

Please see Annex E for the Welsh Language Impact Assessment.

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 the Welsh Government's Programme for Government.

4.1 Business, the general public and individuals

How, and to what extent, will the proposal impact business and the public?

Farm businesses

The introduction of the Sustainable Farming Scheme (SFS) represents a change to the way in which farm businesses receive public money. Previously, under the EU's Common Agriculture Policy (CAP), financial support was provided to farms in Wales on the basis of land area, with additional support for specific actions available under agri-environment schemes such as Glastir.

The Agriculture (Wales) Act 2023 (the Act) set Sustainable Land Management (SLM) as the overarching policy framework for agriculture in Wales, defined by four objectives covering the sustainable production of food, mitigation of climate change, resilience of ecosystems, and the preservation and enhancement of cultural resources. The SFS has been designed to deliver SLM and as such will require farmers to undertake sustainable farming practices in order to receive public money.

The economic wellbeing of farmers will reflect in part the financial and economic resilience of their farm businesses. The economic resilience of farm businesses will reflect the impact on productivity, output and Farm Business Income from undertaking SFS actions, as well as the value of the SFS payment made to farms. We published the proposed approach to payment methodology as part of the SFS proposed Scheme Outline⁶⁶ in 2024. Further details of the payment methodology are available in the Business Case. The Universal Payment received by a farm in the SFS Universal Layer will be composed of:

- Universal Baseline Payment to reflect the costs incurred and income foregone to farmers for undertaking SFS Universal Actions, and consists of 3 separate elements:
 - A Whole Farm Payment – a single payment rate per hectare covering the eligible area of the whole farm and a proportionate allocation of common land where applicable;
 - A Habitat Maintenance Payment – a single payment rate per hectare of semi-natural habitat farmland (not including common land) maintained (including non-woodland SSSI land) in line with the management actions and/or area of temporary habitat, once created; and
 - A Woodland Maintenance Payment – a single payment rate per hectare for existing woodland (including SSSI woodland) that is managed on non-tenanted farmland. The Habitat Maintenance Payment and Woodland Maintenance Payment (where paid) could not be paid on the same area of land.

- **Social Value Payment:** The social value payment is intended to reflect the benefits farms produce for wider society by producing food in a sustainable way. This payment is in addition to payments made under the Universal Baseline Payment. It will be a single payment rate per hectare covering the eligible area.

Optional and Collaborative Action payments will reflect the costs incurred and income forgone for action but not include a social value payment. This approach focuses the social value payment on the Universal Layer, to recognise the existing and additional social value provided by sustainable farming in the SFS, and thus help incentivise participation in the Scheme. As the SFS develops, we will keep this position under review.

The analysis supporting the Business Case shows that the potential economic impacts of the SFS vary across farm types and different economic sizes of farm, and is very sensitive to assumptions about stock displacement and the number of farmers who incur additional compliance costs associated with SFS actions. The economic modelling assumes 100% uptake when in reality each farmer will make an informed decision whether or not to participate in the SFS based on their own personal and business circumstances.

To mitigate potential negative economic impacts, Welsh Government are committed to a managed transition period. We propose to reduce BPS payments in increments for farms who opt not to join the Scheme. This will ensure that no farmer experiences a sudden cessation in their payments. We will also ensure a continuation of some existing support schemes as the suite of Optional and Collaborative Actions are developed.

The implementation of SLM, including through the SFS, is designed to support economic viability in the long-term, by helping farms to be resilient to, and mitigate, the effects of adverse circumstances for example due to climate change (such as flooding and drought), and by providing financial support to undertake actions that could lead to cost savings for farms (such as improved animal health, soil condition and resource efficiency).

A quantitative assessment of the potential economic impacts of the SFS on farm businesses in Wales is available in the Business Case.

Wider agricultural and rural industries

The SFS will contain a number of actions which could be expected to benefit the wider supply chain, both directly and indirectly.

A number of the Universal, Optional and Collaborative Actions could increase the need for provision of goods and services to farms, presenting opportunities for other businesses to be developed or grow. These include, for example, goods and services relating to woodland creation and management, animal health and welfare actions, soil testing, hedgerow creation and laying, habitat management, seed supply and the provision of technical advice.

Support will be provided under the Collaborative Layer for farms to work together to add value to produce, access new markets and develop supply chains which will benefit both farms and the wider supply chain.

Indirectly, benefits to the wider supply chain and rural businesses may be supported through actions supporting the resilience of farm businesses and rural communities, which aim to ensure continued production of food and economic and environmentally sustainable access into local, national and international markets over the longer term.

There is a risk of the SFS resulting in a reduction in agricultural output as farmers respond positively to the challenges of climate change, evolving market requirements and volatility and the requirements of the Scheme. The SFS (Universal, Optional and Collaborative Layers) has been designed to provide flexibility for farmers to choose the appropriate Actions to suit their circumstances and therefore mitigate this risk. For example, habitat management requirements will have a recommended and not mandatory stocking levels. The Optional and Collaborative Layers are voluntary.

General Public and Individuals

The SFS is intended to impact positively on individuals and the general public. Many of the potential positive impacts related to health and well-being are outlined in the Health Impact Assessment (Section 2) and our Equality Impact Assessment (Annex B). Potential socio-economic impacts are outlined in the Socio-Economic Duty Impact Assessment (Annex G).

In particular, the following impacts on the general public may be generated:

- 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, well-being and tourism benefits
- The protection of landscapes and the historic environment will maintain our cultural assets for current and future generations
- Improved air and water quality, through the delivery of SLM within the SFS, will also positively impact on health and well-being
- High animal health and welfare will contribute towards safer food, improved public health, reduced demand on health services and the need for antibiotic treatment. 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. There is also a risk of zoonotic diseases (diseases transferrable from animals to humans e.g. salmonella) which can have public health impacts. 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.

Depending on public behaviour, improved access may pose risks to the natural environment. For instance the most recent *Sheep Worrying by Dogs* survey by the National Sheep Association have shown that farmers are still experiencing the same high incidence of sheep worrying attacks by dogs that reached a high at the start of the coronavirus (COVID-19) pandemic in 2020, as dog ownership and countryside access increased.⁶⁷ The Countryside Code, which will be promoted as part of SFS Actions, has since been updated⁶⁸ to reflect the way in which people are now accessing the countryside and aims to minimise the risk of negative impacts.

4.2 Public Sector including local government and other public bodies

How, and to what extent, will the proposal impact the public sector?

Primary impacts on the public sector will relate to those bodies involved in the delivery of the SFS. In particular, aspects of the Scheme's actions will require technical expertise from several public bodies, primarily the Welsh Government (Rural Payments Wales (RPW) and Cadw), Natural Resources Wales (NRW). Both organisations have significant involvement in the delivery of existing support and control mechanisms.

The SFS may also help to achieve reduced costs for the public sector. For example, the Universal and Optional Layers include actions relating to biosecurity and increased animal health and welfare; reducing the likelihood and scale of disease outbreaks could lead to cost savings in relation to dealing with and responding to such incidents. The 'one health' gains associated with improved animal health and welfare will also support benefits to public health bodies through reduced burden of zoonotic disease and reduced antibiotic use, delaying the development of antibiotic resistance. Further, reduced reliance on animal treatments may support work being done by environmental health bodies through reduced leakage of anthelmintics and antiparasitic compounds into the environment and their impacts on biodiversity.

4.3 Third Sector

How, and to what extent, will the proposal impact third-sector organisations and what they do?

We have engaged with third-sector organisations during our consultations and co-design work and will continue to engage with them as the SFS is introduced and delivered.

In particular, a number of third-sector organisations provide mental health support to farmers in Wales. We recognise that agriculture in Wales is going through a period of substantial change, and this may impact the mental health of some farmers. A more detailed assessment of these impacts, and relevant mitigations, is given in Section 2. Third-sector organisations providing support in this area may see changes to the level of demand and type of assistance being requested.

The SFS is a farming scheme, and as such, third-sector organisations will not be the main participants or recipients of funding from the Universal Payment. Where a tenant farms land owned by a third-sector organisation, it is the farmer themselves who we expect to enter the Scheme, undertake actions, and receive payments. However, in the Collaborative Layer there will

be opportunities for third-sector organisations to work alongside farmers to achieve outcomes at landscape scale, on innovation and other opportunities where individuals and organisations work together can achieve greater benefit.

It is anticipated that some third-sector organisations may provide guidance and support to inform the actions of farmers to realise the benefits which come from the Scheme, but the SFS does not require third-sector organisations or volunteers to deliver any aspect of the Scheme, nor will it require the use of community facilities/assets owned by the third sector.

4.4 Justice Impact

The SFS relates to on-farm actions above and beyond regulatory requirements. The Scheme does not:

- Bring forward any new legislation
- Create, remove, or amend an offence
- Result in any other impact on the justice system (e.g. through increased litigation, need for legal aid, appeal against a decision of a public body)

As such, a Justice System Impact Assessment is not required for the proposals.

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.

Required for all proposals:	<ul style="list-style-type: none"> Natural Resources Policy national priorities, challenges and opportunities 	5.1a 5.1b
Required for all proposals	<ul style="list-style-type: none"> Biodiversity 	5.2 and Annex F
Required for all proposals	<ul style="list-style-type: none"> Climate Change 	5.3
Certain plans and programmes requiring SEA under the Environmental Assessment of Plans and Programmes (Wales) Regulations 2004	<ul style="list-style-type: none"> Strategic Environmental Assessment 	5.4 and IIA Guidance
Proposals which may affect a Special Area for Conservation or a Special Protected Area (SAC/SPA):	<ul style="list-style-type: none"> Habitats Regulations Assessment 	5.5 and IIA Guidance
Certain projects relating to town and country planning; transport; agriculture; forestry; marine, land drainage; and electricity which require EIA under the various EIA Regulations	<ul style="list-style-type: none"> Environmental Impact Assessment 	5.6 and IIA Guidance

5.1 Natural Resources

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

The National Priorities in the NRP are:

- *Delivering nature-based solutions*
- *Increasing renewable energy and resource efficiency*
- *Taking a place-based approach*

The delivery of Sustainable Land Management (SLM) through the Sustainable Farming Scheme (SFS) is expected to help deliver on each of the three National Priorities as set out in the Natural Resources Policy.

Nature-based solutions

The SFS has targeted support in the form of a number of Universal, Optional and Collaborative Actions aimed at contributing towards, for example, healthy soil, clean air, and a resilient environment with increased biodiversity.

The SFS, will encourage more of a focus on natural solutions and enhancing the habitats and biodiversity on agricultural land across Wales. The Universal, Optional and Collaborative Layers will support land users to make these changes in farm management practice. For example, increasing tree coverage on eligible land (managed in line with UK Forestry Standard), together with the action of actively managing habitat could help to reduce flood risk and contribute towards decarbonisation.

All farms in SFS must also maintain a minimum of 10% of their farm as habitat, recognising the contribution and scale of action required to respond to the climate and nature emergency. Farms without 10% will be able to create additional temporary habitat on improved land to meet this requirement. This Action aims to achieve a significant increase in land managed as habitat in Wales and provide valuable benefits to the farmer, nature and the environment.

Increasing resource efficiency

The SFS includes a number of Actions which are designed to help farmers become more efficient by adopting an approach which makes the best use of their resources, minimise waste (often seen as environmental pollution) and therefore increases resource efficiency.

For example, the Benchmarking Universal Action aims to encourage basic benchmarking to promote a step change in farm performance, increasing a farms' ability to adapt to change and improve their impact on the environment, leading to a more prosperous and resilient industry. The Benchmarking Universal Action will give farmers a starting point to understand how their business is performing and enable them to make more sustainable decisions, lower costs, make

better use of resources, and make environmental improvements, which link to other Scheme actions e.g. animal health improvements or utilising grassland more efficiently.

The WG commissioned an ERAMMP report,⁶⁹ which outlines how livestock management measures levers can both reduce emissions and improve efficiency.

The Universal Actions, such as soil testing, continuous professional development, animal health and welfare and the integrated pest management, will also inform on farm changes to support increased resource efficiency. Activities under the Optional and Collaborative Layers have been designed to support the realisation of the benefits identified in the Universal Actions.

Supporting farmers, through the SFS Actions and advice and guidance, to identify where improvements can be made is intended to support a reduction in carbon emissions and pollution, whilst providing benefits to biodiversity and the functioning of ecosystems. These changes would also support cleaner air, water and higher quality food produce.

Place-based approach

The Sustainable Land Management (SLM) framework encourages a place-based approach, which is supported by a number of proposed Actions within the Scheme. SLM intends to support farming in a way which works with nature, helps tackle the climate and nature emergency, supports vibrant rural communities as well enabling and supporting the sustainable production of food. SFS actions aim to deliver the positive outcomes of SLM, yet such actions will vary by farm, location, and local priorities. We will continue to take account of a range of evidence, including the *State of Natural Resources Report* (SoNaRR)⁷⁰ and NRW's *Area Statements*⁷¹ to identify the local priorities and opportunities to support collaboration at a catchment or landscape scale.

SFS Actions to support place-based, landscape scale activity will include, for example, the Integrated Natural Resources Scheme (INRS) which has been developed to build capacity and capability for collaborative action, enabling farmers, foresters, land managers and others to work together at a landscape, catchment, or pan Wales level. There will be further opportunities in the Collaborative Layer of the Scheme for farmers, and others, to work together to deliver local priorities.

At all levels of activity under the Scheme (farm, landscape, catchment, pan Wales), it will be important to ensure that appropriate actions for that location and farm business are undertaken. For example, the Scheme will employ the use of existing mechanisms, modified where appropriate, to ensure environmental constraints and sensitivities are recognised as part of tree, woodland and hedgerow creation to support sensitive and appropriate actions. Through the introduction of the Universal Tree Planting and Hedgerow Creation Opportunity Plan, tree planting and hedgerow creation has been designed to be as flexible as possible, allowing farmers to choose where best to plant with financial support, help and guidance.

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.

Please see Annex F for the Biodiversity Impact Assessment.

Safeguard and increase carbon stores in soils and biomass.

The SFS aims to help farmers to understand their pathways to net zero and support the identification of opportunities to reduce carbon emissions and increase carbon sequestration.

We propose providing each participant in the Scheme with an individual Farm Level Carbon Baseline which is intended to measure the carbon impact of the entire farm business (CO₂e per hectare of output). This is a starting point for each farmer to understand their carbon footprint, and should support farmers in their ability to reduced Green House Gas (GHG) emissions and maximise carbon storage.. Continued use of the Farm Level Carbon Baseline will help track the effectiveness of low carbon initiatives undertaken on the farm, empowering farmers to understand their current emissions and help identify areas which can be improved.

The *Environment and Rural Affairs Monitoring & Modelling Programme (ERAMMP) logic chains report*⁷² and the *Carbon Sequestration Evidence Review Panel's report*,⁷³ which have been used to support the design of the SFS, demonstrate the opportunities available within the Scheme and wider policy to support the safeguarding and increase in carbon stores and biomass. Universal Actions such as soil testing, integrated pest management, benchmarking and hedgerow management along with related Optional and Collaborative Actions are intended to support farms to undertake a range of management practices which would positively impact carbon stores in soils and biomass.

However, evidence⁷⁴ shows a finite capacity for increasing carbon stores and the importance of maintaining beneficial management over the longer term:

- 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.

All farms in the SFS will be required to manage a minimum of 10% of their farm as habitat, recognising the contribution and scale of action required to respond to the climate and nature emergency. Farms without 10% will be able to create additional temporary habitat on improve land to meet this requirement. This Action along with specific Optional Actions for habitat creation and management could result in a significant increase in land managed as habitat in Wales and

provide valuable benefits to the farmer, nature and the environment. There is also a Universal Action for designated sites, designed to ensure all sites, on farms within SFS, have a Management Plan and a Schedule of Works in place, agreed with NRW, to maintain or improve the condition of these valuable national assets.

Additionally, the management and restoration of existing natural habitats (within SFS) which act as carbon stores, could lead to an increased capacity for different ecosystems to retain carbon.

Maintain productive capacity, in particular, by improving soil quality and biosecurity.

Soil Quality

Maintaining productive capacity through improving soil quality is integral to the principle of SLM and must be maintained and enhanced if the strategic objectives are to be met. The *Welsh Soil Evidence Review* (2022⁷⁵) highlights that soil is a vital resource that ‘sustains life and provides crucial ecosystem services to Wales’ (p4). The report notes that as soil has a slow formation process, it is considered a non-renewable resource, requiring sustainable management. The current status of Welsh agricultural soil (in particular organo-mineral and peat soils) is described as high in carbon, when compared to the European average. This makes the soil a valuable resource. The risk to soil is associated with the intensity of management within grassland systems, as they vary significantly across Wales and depend on stocking density, farm enterprise and grassland type. The report outlines 3 key opportunities for improving soil quality in Wales: carbon sequestration and retention, reduction of GHG emissions and changes in land quality and cropping opportunities.

On-farm Actions to improve soil quality can often deliver wider benefits such as reduced GHGs, improved water quality, improved air quality and increased ecosystem resilience, therefore maintaining the productive capacity of the land.

The SFS will include Actions in the Universal and Optional Layers related to Soil Health Planning, which will include soil testing, management, and nutrient planning. This aims to give every farmer an understanding of their soil and the demands of their crops. By testing their soils farmers will have the information needed to make informed decisions, which will be supported through activities under the Optional Layer. This will help ensure farmers implement the most appropriate management for their farm, whilst also improving:

- Farm profitability through input cost management
- Soil biome through diverse soil life such as fungi or larger small organisms e.g. worms
- Soil structure through better soil aggregation and stable soil carbon, reducing erosion
- Soil carbon sequestration
- Soil infiltration rate allowing more water to be retained by soils, reducing flooding

Optional Layer activities focused on organic conversion and support may also serve to improve or maintain soil quality on the farms that implement them due to the use of crop rotation, compost and nitrogen-fixing crops⁷⁶.

The Universal Code also includes minimum mandatory requirements such as Good Agricultural and Environmental Condition (GAEC) 4 and 5, to focus on protecting soil by maintaining minimum soil cover and minimising soil erosion.

Biosecurity

Production-limiting diseases are a major constraint on efficient livestock production and have an impact on the carbon footprint, efficiency, and profitability of farms. Welsh systems are particularly vulnerable to endemic disease impacts because they are largely pasture-based. The UK Climate Change Committee (UKCCC) has identified better animal health through biosecurity as an effective mitigation measure, which is estimated to provide savings to farmers and contribute to the CO₂e emission abatement.

The *ERAMMP logic chains report*⁷⁷ showed that healthier and more productive livestock from increased biosecurity could deliver:

- Improved productivity, resulting in fewer livestock needed for the same output
- Maintaining and enhancing biosecurity as a benefit in itself
- Reduced effects from veterinary medicines on other species (e.g. dung beetles) and associated ecosystem processes (e.g. nutrient cycling) and services (e.g. water quality)
- Reduced antibiotic leakage to the environment
- Improved air quality and reduced carbon emissions per unit outputs, which are indirect benefits from more productive animals

The Scheme Universal Actions offer support for achieving and promoting high standards of animal health, welfare and biosecurity. The Animal Health and Welfare UA will comprise of 3 main components: the Animal Health Improvement Cycle (AHIC); Biosecurity; and Animal Welfare. The Biosecurity component, and related Optional and Collaborative Layer activities, seeks to enable a good level of biosecurity across farms, through the ability to provide support to undertake actions such as ensuring boundaries are secure to stop stock straying, making sure wash stations are available, and securing feed stores to keep out wildlife, particularly rodents.

Further Actions supporting biosecurity include:

- The option of selecting related Continuous Professional Development modules
- Farmers with livestock are required to have all their enclosed farm boundaries, for which they have responsibility, made stockproof as appropriate to the species kept

Reducing the risk of flooding

Flood risk is influenced by a range of factors such as topography, habitat and rainfall⁷⁸. The ERAMMP logic chains report highlights a range of activities which could be expected to support flood risk mitigation:

- Sward management and cover cropping can increase infiltration rates and water retention
- Establishing hedgerows and other buffers (e.g. in riparian zones) can slow water run-off
- Farm woodland improves water interception through improved soil structure

A wide variety of 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 well⁷⁹.

Evidence from ERAMMP⁸⁰ shows that restoration of floodplain wetlands has Flood Risk Management benefits, by reducing the frequency and time lag of flood events. There can be a risk to peak synchronisation leading to flooding downstream. The effectiveness of restoring floodplain wetlands depends on site-specific factors, for instance landscape topography, soil characteristics, management type and how well connected they are to the river. The ERAMMP evidence also notes the biodiversity benefits of restored floodplains, which ‘can provide a wide range of habitats (including priority habitats such as fens, reed beds and lowland raised bog) and benefits for species that use these as feeding, breeding and resting areas.’⁸¹ Species and taxa benefiting from this include ‘waders, wildfowl, fish, mammals, amphibians and invertebrates. Three quarters of restored wetlands are used by migrating birds’⁸².

Soil management can also contribute to reduced flood risk. The Royal Society 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’⁸³. However, they observe that ‘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’⁸⁴.

Actions within the SFS which could support flood risk mitigation objectives include:

- Where habitat exists, farmers will need to maintain it appropriately
- The creation of new woodland and hedgerows
- Woodland maintenance
- Manage new and existing hedgerows
- Have a multi-species cover crop on all land which is uncropped over winter (in order to avoid bare soil which would speed water flow, allow soil transfer into waterways and lead to soil erosion)

- Actively manage at least 10% of their land to maintain and enhance semi-natural habitats. Where there is insufficient semi-natural habitat available, farmers will need to select Actions to create permanent or temporary habitat features on other agricultural land

Overall, the Scheme aims to contribute to flood risk reduction through SLM practices, in particular hedgerow and woodland creation, cover cropping, wetland restoration and soil management. Together, these actions could improve water retention, reduce the rate of run-off, enhance biodiversity and complement ecosystem functions. This in turn could help to mitigate negative potential downstream effects and contributes to reversing the decline in biodiversity.

Supporting climate change mitigation and adaptation through ecosystem approaches.

Agricultural emissions are a significant part of Wales GHG, contributing approximately 15% of total Welsh emissions⁸⁵. Welsh Government has set net zero targets for 2050, and the industry (the National Farmers Union of Wales) is targeting 2040⁸⁶. Given the size of the industry's GHG emissions, a significant opportunity exists for farming to help deliver climate change mitigation.

Ecosystem approaches to climate change adaptation are defined by the Convention on Biological Diversity as 'the use of biodiversity and ecosystem services [...] to help people adapt to the adverse effects of climate change'⁸⁷. This 'may include sustainable management, conservation and restoration of ecosystems, as part of an overall adaptation strategy that takes into account the multiple social, economic and cultural co-benefits for local communities'⁸⁸.

Importantly, this definition places an emphasis on the well-being of people and communities and using measures which deliver wider benefits. This aligns with the strategic SLM objective of mitigating and adapting to climate change which must be done in a way that:

- Meets the needs of the present without compromising the ability of future generations to meet their own needs; and
- Contributes to the well-being goals of the Well-being of Future Generations (Wales) Act 2015.

Healthy ecosystems can act as a buffer against severe weather events induced by climate change. NRW has advised, in the North-West Wales area statement, that the effects of climate change are already occurring in Wales with severe drought, wildfires and stress on our native habitats becoming more common⁸⁹. The SFS Actions below are intended to support SLM outcomes in relation to climate change:

- Carrying out soil testing. An increased understanding of soil health can inform management decisions, which can in turn lead to soil benefits. Good soil health can lead to multiple cross-cutting benefits, which include providing resilience to extreme weather; improving fertility, leading to long-term sustainability; and the reduction of flooding.
- Where habitat exists, farmers will need to maintain it appropriately.

- Tree planting, hedgerow creation, and the creation of new woodland.
- Woodland maintenance.
- The management of new and existing hedgerows.

These SFS Actions could contribute to creating resilient ecological networks by improving habitat for wildlife, diversifying species. These Actions also align with safeguarding and increasing carbon stores.

Agroforestry¹¹

Evidence⁹⁰ shows agroforestry systems can contribute to slowing down 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.

The SFS is intended to provide increased opportunity and financial support for agroforestry and silvopasture on Welsh farms.

Woodland

The *Climate Change Committee's (CCC) advice to the UK Government on their Seventh Carbon Budget (2038-2042)*⁹¹ sets out the importance of increasing woodland cover at a UK level, within the Balanced Pathway. Alternative uses of land could lead to emissions reductions of 39% by 2040, in comparison with 2022. By that point, emissions are projected to fall from 0.8 MtCO₂e in 2022 to -1.9 MtCO₂e by 2040. This includes peatland restoration and management (17% of emissions reduction in 2040), which accounted for a net source of emissions (15 Mt CO₂) in 2022. In the Balanced Pathway, the total restored or near-natural area rises from the current 30% to 60% in 2040. In the Balanced Pathway, planting new diverse woodlands would increase UK woodland cover area from 13% to 16% by 2040, and 19% by 2050. The *CCC 2024 Progress Report to Parliament*⁹² highlights that current rates of tree planting are not sufficient to meet the UK target of 30,000 ha new woodland creation per year by 2025 and would need to more than double to meet this target as the current rate of new woodland creation is around 13,000 ha per year.

In their advice to *Welsh Government on their Fourth Carbon Budget (2031-2035)*⁹³, the measures within the CCC Balanced Pathway for Wales require changes in use for 14% of Wales' land, in line with the equivalent for the UK as a whole. However, variations in land types and infrastructure constraints in utilising energy crops mean that there is a greater emphasis on woodland creation for the Balanced Pathway in Wales compared to the UK as a whole. In the Balanced Pathway in Wales under the Fourth Carbon Budget, planting new diverse woodlands would increase woodland cover area from 15% to 17% by 2033, and 26% by 2050.

¹¹ Agroforestry refers to the production of crop, livestock, and tree biomass on the same area of land.

The CCC highlight additional benefits to these actions, including benefits to health and wellbeing, agricultural resilience and increased employment in some areas.

In addition to carbon benefits, trees and hedges provide a benefit to nature and offer shade and shelter for livestock which will be important as we face more extreme weather due to climate change. Studies have shown, by providing shelter, lamb losses can be reduced by up to 30% and daily liveweight gain can increase by 10-21%⁹⁴. Hedges also improve biosecurity, and trees can offer an alternative income stream.

The SFS is designed to enable farmers to apply the above ecosystem approaches, amongst others, on their farm, helped by their SFS Tree Planting and Hedgerow Creation Opportunity Plan. This could help increase resilience to climate change, but also provide wider social, economic, and cultural benefits by ensuring the sustainability of agriculture and rural communities.

Reducing noise pollution, and pollution levels in our air, and enhancing air quality.

Agricultural emissions to air (e.g. ammonia) impact air quality and have negative effects on human health and ecosystems. Many of the ecosystems and natural resources in Wales act in ways to reduce pollution. This includes carbon sequestration and interception of ammonia emissions by woodlands along with a number of benefits from different landscapes. Expected health impacts of enhanced air quality are covered in the Health Impact Assessment.

Nitrogen is lost to the air as ammonia when urine mixes with muck and from spreading fertiliser. It builds up in the atmosphere and then falls on to the land, interfering with ecosystems. In 2018, 88% of sensitive habitat in Wales received excess nitrogen above thresholds where it is harmful to sensitive plants and biodiversity. Additionally, nitrogen is having an adverse effect on 29% of the most sensitive habitats⁹⁵.

Annual total mass emissions from Welsh agriculture are estimated to be around 20,000 tonnes of ammonia and 2,000 tonnes of nitrogen oxide to air⁹⁶.

For the UK to meet the National Emission Ceilings Regulations 2018 (NECR) ammonia target for 2030, ammonia emissions need to be 16% lower compared with 2005 levels. Compared with the other NECR pollutants, ammonia emissions fell between 1990 and 2007 but have since been rising.

The causes of ammonia emission will vary on every farm but, in order of overall importance, they are:⁹⁷

- Slurry and muck spreading (26%)
- Livestock housing (24%)
- Fertiliser, especially urea (19%)
- Grazing (12%)
- Muck and slurry storage (11%)

Evidence suggests the following interventions have the potential to deliver enhanced air quality:⁹⁸

- Managing nitrogen (N) losses on the farm and improving N use efficiency 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 emissions⁹⁹.
- 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).

Other evidence from ERAMMP 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’¹⁰⁰.

There are multiple SFS Actions which are intended to support improvements in air quality, including:

- Woodland maintenance
- Tree planting (including woodland and agroforestry) and hedgerow creation
- Hedgerow management
- Habitat maintenance
- The creation of temporary habitat on improved land
- Designated Site Management Plans
- Soil testing, which can help more targeted application of fertilisers and reduce losses to air
- On-farm infrastructure investments, such as slurry stores, roofing over existing yards, etc.
- Precision nutrient application equipment, including slurry direct injection systems, GPS etc.

Whilst noise pollution is not specifically targeted within the SFS, actions in the Scheme could also reduce noise pollution. A report by Eftec for DEFRA found natural capital assisted with the mitigation of road noise levels of up to 115,000 buildings in Wales¹⁰¹. Increasing ecosystem resilience could further support this.

Improve the quality and ensure the quantity of our water.

Annual nutrient losses from Welsh agriculture to water are estimated to be around 37,000 tonnes of nitrate-N and 700 tonnes of phosphorus¹⁰². Emissions of nitrates, phosphates and sediment from agricultural land is one of the main pressures on freshwater quality in Wales¹⁰³.

Improving water quality can be achieved by a range of on-farm measures¹⁰⁴ which reduce losses of nutrients, erosion of topsoil, and prevent any losses from reaching water courses:

- Nutrient management planning can ensure the right quantities are applied at the right time, reducing losses to water
- Hedgerows, habitat and trees can increase interception of nutrients, preventing them from reaching watercourses
- Cover cropping can increase retention of nutrients, reducing losses and preserving topsoil

Scheme Actions consistent with the SLM purpose to improve water quality, include:

- Soil testing
- Habitat and Peatland management
- Tree planting and woodland creation
- Woodland maintenance
- Hedgerow management, creation and restoration
- Multi-species cover crop on all land which is uncropped over winter
- Maintenance, management, creation and enhancement of habitats (including ponds and wetlands)
- Improve on farm water management resilience
- Managing Invasive non-native species

These Actions could support the reduction of nutrient runoff resulting from soil erosion, create natural barriers to reduce pollution from entering waterways, and increase the storage and filtration of water on individual farms. Larger scale, for example catchment activity, coordinated with other actors will be encouraged through the Collaborative layer, as demonstrated in the current INRS approach.

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

Resource efficiency and effective energy management are intended outcomes captured within the development of the SFS. Resource efficiency is essential for climate change mitigation and the sustainability of agriculture. Farm resources may be environmental (e.g. water, soil) or may be inputs (e.g. energy, fertiliser, diesel, pesticides).

The SFS aims to support the sustainable production of food on Welsh farms, by improving the efficiency of their production within the natural capacity of the land. An important element of this will be the provision of effective advice and guidance, within the developed Farming Connect programme, to support understanding and application.

Improved efficiency can not only improve farm business resilience, through reducing costs and waste (e.g. through reduced energy or fertiliser use), but can also help reduce resource pressure for current and future generations.

One way to support sustainable improvements, which will be supported through activities within the Optional Layer, is to consider indicators such as age to slaughter, age at first calving and calving intervals, to gradually improve the genetic potential of the Welsh herd.

Other SFS Actions aimed at supporting resource efficiency include:

- Farm Level Carbon Baseline
- Benchmarking
- Continuous Professional Development
- The Animal Health Improvement Cycle (AHIC)
- Soil testing and support for soil health planning
- Integrated pest management assessments
- Multi species crop coverage requirements
- Sustainable production optional action

The wider delivery of actions against other SLM purposes, such as clean air, clean water, and increased carbon sequestration, is also intended to reduce the pressure 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.

As outlined above, the SLM framework, which SFS has been developed under, is intended to reduce air pollution, improve air quality, and improve provision for opportunities for public access to, and engagement with, the countryside. We have set out the evidence in our Health Impact Assessment the main areas where our proposals could contribute to mental and physical health.

In terms of tackling physical activity and mental health, improving access to the environment should make these green spaces more attractive and easier to visit. SFS Optional Layer activities such as replacing stiles with gates, follow the principles of 'least restrictive access', thereby providing opportunities for all individuals.

Supporting action to tackle health and economic inequalities

The SFS 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, the SFS should have a positive impact on the health inequalities of low-income households.

In Wales, based on 2017, Public Health Wales estimates the burden of long-term air pollution exposure to be the equivalent of 1,000 to 1,400 deaths (at typical ages) each year¹⁰⁵. 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 workdays and costs to our health service¹⁰⁶. Actions supporting an improvement in air and water quality will help to improve this situation. In addition, access to green space is linked to better health, regardless of actual usage and socio-economic status¹⁰⁷. Access to safe, local, good quality green space has been shown to encourage higher levels of physical activity. More passive forms of usage, or even just access to views of green space, can have a beneficial impact on mental well-being and cognitive function.

Our Equality Impact Assessment notes the environmental outcomes that could be delivered by the SFS have the potential to positively impact indicators in each of the 3 physical environment sub domains (air quality, flood risk and access to green space) of the Welsh Index of Multiple Deprivation (WIMD)¹⁰⁸.

Supporting community cohesion

The SFS is expected to positively contribute to social capital and community well-being. Rural communities are at the forefront of the climate and nature emergency. If action is not taken to address these challenges, the sustainable production of food and resilience of rural economies and communities are under threat. Actions within the SFS have been designed to support the mitigation of these challenges in a way which also benefits social cohesion, culture and heritage and supports decarbonisation in a fair and prosperous way. The intention is for the SFS to enable the strengthening of links between agricultural businesses and their communities, helping rural communities thrive.

The need to meet the SLM objectives, which underpin the SFS, is strengthened by the requirement that they must be achieved in a way which:

- a. Meets the needs of the present without compromising the ability of future generations to meet their own needs; and
- b. Contributes to achieving the well-being goals in section 4 of the Well-being of Future Generations (Wales) Act 2015.

The SFS is intended to support the delivery of outcomes to increase the resilience of agriculture and the rural environment, which in turn supports community cohesion as outlined in our Rural Proofing (Annex C) and Economic Wellbeing Impact Assessments (Section 4).

Improving access to the environment should make these green spaces more attractive and easier to visit. Green spaces can offer opportunities for people who may not normally interact to come together and can help develop social ties and community cohesion¹⁰⁹.

Supporting secure and stable employment

Estimates for 2024¹¹⁰ show the total number of people working on agricultural holdings in Wales is 49,538. Of this total, there are 37,318 principal farmers, directors, business partners and their spouses. The total includes 12,220 regular full time, regular part-time and seasonal/casual farm

workers. The figure does not include self-employed people or contractors who may also work on the farm.

Some of the Scheme's Actions may require skills or equipment that participating farmers do not possess, or because of time or ability they may choose to employ others, and this may therefore alter the labour requirement on farm. Evidence from reviews of Tir Cymen ¹¹¹ and Entry Level Stewardship in England ¹¹² found these agri-environment schemes were associated with an increased labour demand. Additionally, at UK level in relation to the EU Common Agricultural Policy (CAP), it has been suggested 'the contribution of Pillar 2 ¹² to rural employment is higher (1.2%) compared to the contribution of Pillar 1 (1.0%)' ¹¹³.

Improving the resilience of agricultural businesses in Wales is one of the SLM principles underpinning the SFS. Through SLM, a resilient agricultural sector will also contribute to secure and stable employment by enabling current and future generations to continue the sustainable production of food and the outcomes we are seeking. This should support jobs in the agricultural sector, wider supply chain and rural communities.

It is essential that any changes to agriculture, land use, and associated practices are fair and create opportunities across the rural (and wider) community. This will require appropriate advice, support, and skills development. As part of the SFS there will be an advisory service to support all farm businesses in delivering SLM.

There is a risk of the SFS resulting in a reduction in agricultural output as farmers respond positively to the challenges of climate change, evolving market requirements and volatility and the requirements of the Scheme. The SFS (Universal, Optional and Collaborative Layers) has been designed to provide flexibility for farmers to choose the appropriate Actions to suit their circumstances and therefore mitigate this risk. For example, habitat management requirements will have recommended and not mandatory stocking levels. The Optional and Collaborative Layers are voluntary.

Additionally, the protection and increased sustainability of Welsh heritage, landscapes and 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 destination ¹¹⁴.

Therefore, the Scheme aims to support stable and secure employment in Wales by enhancing agricultural resilience and leveraging Wales' natural resources by promoting rural employment and agri-tourism opportunities.

¹² CAP payments to UK farmers are currently paid under two pillars. Pillar 1 accounts for the majority of payments and are mainly direct payments to farms. Pillar 2 relates to agricultural support and rural development funding - Farm payments in a no-deal Brexit

5.2 Biodiversity

Please see Annex F for the Biodiversity Impact Assessment.

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). The 2021-2026 Programme for Government makes the commitment to embed our response to the climate and nature emergencies in everything we do.

The impacts of climate change on agriculture and forestry in the UK have been extensively detailed¹¹⁵. Likewise, there is evidence concerning the impact of climate change on Wales's Natural Resources,¹¹⁶ and on its protected sites¹¹⁷. The *Wales National Trends and Glastir Evaluation* (2025)¹¹⁸ has gathered evidence on the impacts of Climate Change on agriculture. The report states there are 'increasing challenges linked to continuing air pollution particularly of ammonia from livestock, increasing extreme events linked to climate change and input costs for land managers'. The report suggests that action taken needs to be at sufficient magnitude and scale locally and nationally to have an impact.

The Environment (Wales) Act 2016 commits the Welsh Government to reducing GHG emissions to net zero by 2050. Moreover, the Agriculture (Wales) Act 2023 has set a strategic framework to consider mitigating and adapting to climate change within agriculture in Wales, designed to help Wales decarbonise in a fair and prosperous way.

5.3a Decarbonisation

How, and to what extent, will the proposal affect emissions in Wales?

The SFS has been designed to support farmers to deliver on the SLM Objectives in the Agriculture (Wales) Act 2023 including to mitigate and adapt to climate change.

In 2022, agriculture accounted for 15% of Welsh emissions (5.6MtCO₂e)¹¹⁹. Emissions are primarily methane (66%) and Nitrous Oxide (22%). These emissions are mainly accounted for by livestock emissions, enteric fermentation and manure management (4.5 MtCO₂e) and soil emissions (0.5 MtCO₂e).

The *Environment and Rural Affairs Monitoring & Modelling Programme (ERAMMP) logic chains report*¹²⁰ and the *Carbon Sequestration Evidence Review Panel's report*¹²¹, which has been used to support the design of the SFS, demonstrates the opportunities available within the Scheme and wider policy to support the safeguarding and increase in carbon in response to climate change. The intention is to establish a Farm Level Carbon Baseline as part of participation in SFS (as outlined in section 5.1b) to facilitate a step change in farm performance, by giving farmers the tools to understand how their farm is performing and the data and evidence from any

interventions carried out throughout the scheme to allow for considered evaluation. This is also supported by the Benchmarking Universal Action.

The Farm Level Carbon Baseline is intended to measure the carbon impact of the entire farm business (CO₂e per hectare of output).

This is a starting point for each farmer to understand their carbon footprint and should support farmers in their ability to reduce Green House Gas emissions and maximise carbon storage, as every farmer will have the opportunity to use the Farm Level Carbon Baseline data to support future decision making and access advice and guidance to identify areas for improvement.

In many cases, the Scheme's Actions are also expected to contribute towards meeting this target, such as supporting agricultural businesses to manage energy efficiently.

Support to generate on-site renewable energy and be more energy efficient is provided by the Welsh Government through Business Wales.

Reducing emissions

A report by ERAMMP examined the potential reduction in emissions from the management of livestock, manures and fertilisers¹²². It found that a Maximum Technical Potential Reduction¹³ of 22.5% for nitrous oxide and 32.4% for methane could be achieved by 2050 with the largest reductions gained through improved diet, management and genetics in dairy and beef and also an increase in Nitrogen use efficiency. Combined with improvements in agriculture engine emissions the report showed a potential for a reduction in emissions to 3.8 MtCO₂e.

Actions expected to support a reduction in emissions include:

- Completing the Farm Level Carbon Baseline to help understand where efficiencies can be made on each farm.
- Soil testing to encourage farmers to make appropriate/efficient use of artificial fertiliser through nutrient management, (the minimum requirement for testing includes Potassium [P], Phosphorous [K], Magnesium [Mg], pH, and Soil organic matter [through Loss on Ignition (LOI) laboratory testing]).
- Optional Layer activities such as reducing age at slaughter for beef cattle, reducing the first age of calving, and shortening the calving intervals for beef and dairy cattle can reduce the number of non-productive animals on farm which leads to less replacements and shortens the duration of time beef animals are kept on farm.

Maximising carbon storage

To maximise carbon storage, existing carbon stocks need to be protected and the size of our stocks, increased. In Wales, woodland is the main sink for emissions¹²³ (-1.27 MtCO₂e) followed by

¹³ At current production levels.

harvested wood products (-0.22 MtCO₂e). This is followed by cropland converted to grassland cover (-0.11 MtCO₂e), wetlands (-0.08 MtCO₂e) and settlements converted to grassland (-0.03 MtCO₂e).

In terms of sward management and grassland, evidence¹²⁴ shows there are significant stocks of carbon in improved pastureland, to an estimated equivalent value of 47% of Welsh soil carbon stocks. In the case of management of woodland stocks, evidence also suggests that if a woodland is sustainably managed and the rotation of trees grow to reinstate the pre-harvest carbon stock, this results in a forest carbon stock that is cyclically renewed.

Expansion of woodland and hedgerows is a fundamental way to increase carbon sequestration. The UKCCC has recommended Wales achieves 22,000 ha of new woodland planting by 2030 and 208,000 ha by 2050¹²⁵. Reaching this target, in conjunction with other land use change¹⁴, could cause land use emissions to fall from -0.9 MtCO₂e in 2022 to -1.0 MtCO₂e by 2033, and to -3.7 MtCO₂e by 2050, with woodland creation and management contributing 57% of the emissions reduction achieved in 2033 and 72% in 2050. New woodlands planted after 2025 are projected to become a net sink in the early 2040s and by 2050 offer emissions reduction of 1.0 MtCO₂e¹²⁶.

Actions supporting an increase in carbon sequestration, and maintaining existing carbon stores, include:

- Managing existing woodland and agroforestry (in line with UK Forestry Standard)
- Tree planting (including woodland and agroforestry) and hedgerow creation
- Hedgerow management

The SFS also includes actions which are intended to support farms to make decisions around further actions to related to carbon sequestration and storage:

- Completing the Farm Level Carbon Baseline
- Carrying out soil testing annually on at least 20% of eligible land to include a combination of: Potassium (K), Phosphorous (P), Magnesium (Mg), pH, Soil organic matter (through Loss on Ignition [LOI] laboratory testing)
- Completing the Integrated Pest Management
- Benchmarking
- Continuous Professional Development

Achieving and promoting high standards of animal health and welfare

¹⁴ Land use change included the UK CCC balanced pathway other than woodland creation and management includes peatland restoration and management, and agroforestry and hedgerows. Under the balanced pathway, these land use changes contribute to emissions reductions as follows: Peatland restoration and management (12% of emissions reduction in 2033; 7% in 2050), Agroforestry and hedgerows (31% of emissions reduction in 2033; 21% in 2050)

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 (GHG) emissions.

The Welsh Government commissioned a unique study, using life-cycle analysis techniques, to determine the impact of Bovine Tuberculosis (TB) on GHG emissions¹²⁷. The study showed eradication of TB in Wales would reduce GHG emissions from the cattle sector by approximately 2% through reduced wastage and greater efficiency – a small, but significant, contribution to the overall goal of reducing GHG emissions from farming.

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

The SFS has been designed to enable the delivery of improved and enhanced animal health and welfare. 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. Furthermore, the intensive use of over 1.3 million litres of government approved disinfectant, which was 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. There were also longer-term effects, as biological sewer treatment processes at small plants were disrupted¹²⁸.

Whilst animal disease outbreaks cannot be predicted, increased preventative action through enhanced biosecurity and animal health and welfare should reduce the likelihood of occurrence and, should they occur, scale. This could reduce the negative environmental impact and potential implications resulting from responsive action.

Actions supporting animal health and welfare improvements include:

- Self-assessment once a year against a standard set of Key Performance Indicators (KPIs – two per sector)
- Carrying out actions, identified by working closely with their vet, through the Animal Health Improvement Cycle (AHIC)
- Undertake training and assess the livestock performance for lameness and body condition
- Having the necessary biosecurity measures in place on each farm

Assessment using the HM Treasury Green Book Greenhouse Gas valuation methodology¹²⁹

An assessment using the HM Treasury Green Book Greenhouse Gas valuation methodology is discussed in the Business Case for the SFS.

5.3 Adaptation

How, and to what extent, will the proposal affect ability to adapt to the effects of climate change?

The 2021-2026 Programme for Government makes the commitment to embed our response to the climate and nature emergencies in everything we do. The SFS is part of this commitment, offering incentives to Scheme participants for actions which help farms to mitigate and adapt to the predicted impacts of climate change. Without mitigation and adaptation to climate change, the resilience of our ecosystems, the sustainable production of food, and our cultural resources are under threat.

Agriculture is particularly vulnerable to the effects of climate change.

In the context of livestock farming, evidence suggests,

climate change is a threat to ... 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 measures¹³⁰.

In the context of arable crops, research contends

the key effects [of climate change] for arable crops 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 considered¹³¹.

In the context of dairy farming, it is argued to be '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'¹³².

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 analysis*¹³³ and *2024 Climate Adaptation Strategy for Wales*¹³⁴.

The Scheme aims to enable action to be taken on farm to respond to the effects of climate change and increase the resilience of farm businesses. In addition, the SFS intends to support farms to become more sustainably productive, managing land within their productive capacity. Sustainable management of natural resources should improve the condition of our ecosystems, which in turn increases the ability of the environment to mitigate the effects of climate change. For example, increased tree cover can have a cooling effect and also mitigate flood risk. Improving soil health and structure, together with increasing soil organic matter, can allow more rapid infiltration of surface water and its retention within the soil for longer periods of time than would otherwise be the case. Soil quality improvements can also contribute to improved water quality.

Changing climates and rising temperatures increase the risk of certain animal diseases, in particular vector-borne diseases. Bluetongue Virus, for instance, is a disease transmitted by midges, which have a higher survival rate in warmer temperatures. Additionally, warmer temperatures alter the migratory patterns and routes of wild birds, presenting an increased risk of avian influenza (AI) to our national flock. Increased animal health, welfare and biosecurity should act to minimise disease risks, including the increased disease risk created by climate change.

Actions anticipated to support climate adaptation include:

- Animal biosecurity requirements
- Habitat maintenance and management (e.g. helping to regulate waterflow and reduce risk of flooding)
- Create new woodland and agro-forestry.
- Hedgerow management and creation (e.g. supporting shade and shelter, buffer strips, and slowing water flow)
- Implementation of actions for natural flood management (NFM)
- Multi-species crop coverage on uncropped land over winter (e.g. reducing soil erosion and run off during winter months).

Actions that are intended to support farms to make decisions around further action in relation to climate adaption include:

- Carrying out the Farm Level Carbon Baseline
- Continuous Professional Development
- Actions under the Sustainable Production Optional Theme

Therefore, the SFS aims to support climate change adaptation by facilitating Actions such as habitat management, hedge maintenance and natural flood management which help to build resilience in ecosystems. By promoting sustainable practices, improvements to productivity and biosecurity measures the SFS seeks to ensure that farms in Wales are best placed for mitigating climate change and maintaining sustainable production.

5.4 Strategic Environmental Assessment (SEA)

The SFS does not meet the criteria for an SEA to be undertaken.

5.5 Habitats Regulations Assessment (HRA)

Please see Biodiversity Impact Assessment (Annex F, section 32).

5.6 Environmental Impact Assessment (EIA)

The SFS does not meet the criteria for an EIA to be undertaken.

SECTION 6. SOCIO-ECONOMIC DUTY WHAT WILL BE IMPACT ON SOCIO-ECONOMIC DISADVANTAGE?

6.1 The Socio-economic Duty.

Please refer to Annex G for the full Socio-Economic Duty Impact Assessment.

SECTION 7. RECORD OF FULL IMPACT ASSESSMENTS REQUIRED

Impact Assessment	Yes/No	If yes, you should
Children's rights	Yes	Annex A
Equality	Yes	Annex B
Socio-economic Duty	Yes	Annex G
Rural Proofing	Yes	Annex C
Health	Yes	Section 2
Privacy	Yes	Annex D
Welsh Language	Yes	Annex E
Economic / RIA	Yes	Section 4
Justice	No	Section 4
Biodiversity	Yes	Annex F
Climate Change	Yes	Section 5
Strategic Environmental Assessment	No	Refer to the Integrated Impact Assessment Guidance
Habitat Regulations Assessment	No	Refer to the Integrated Impact Assessment Guidance

Environmental Impact Assessment	No	Refer to the Integrated Impact Assessment Guidance
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SECTION 8. CONCLUSION

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

- In July 2018, we published the *Brexit and Our Land* consultation¹³⁵. Over 12,000 responses were submitted. This included over 1,000 substantive responses with the remaining responses coming from seven unique campaigns.
- In July 2019, we published the *Sustainable Farming and our Land* consultation¹³⁶. 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.
- In December 2020 we published the *Agriculture (Wales) White Paper consultation*¹³⁷. We received 232 unique responses and a further 887 from one campaign.
- We have also published a summary of responses^{138,139,140} and our own response to the views expressed for each of these 3 consultations^{141,142,143}.
- In March 2024 we closed the *Keeping farmers farming consultation*¹⁴⁴. 3,228 unique responses were received. Welsh Government hosted 10 information roadshows attended by 3200 farmers to coincide with the consultation.
- 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 to our consultations represented a diverse range of voices and perspectives. The largest proportion of respondents reported they were directly engaged in farming, while the second largest groups of respondents were individuals and organisations with environmental interests.
- In each of our consultations we have sought views on the effects our proposals may have on the Welsh language and how they could be formulated to have a positive impact.

Co-design and wider stakeholder engagement

- We engaged with over 1,900 stakeholders (the majority of whom were farmers) through the first phase of co-design¹⁴⁵ to gain insight into their views on our proposals for a Sustainable Farming Scheme (SFS).
- Our second phase of co-design was completed in autumn 2022¹⁴⁶; we received 1,344 survey responses from farmers online or by paper and completed an additional 101 surveys via phone or in-person interviews. In addition, a total of 26 workshops were held to collect more detailed feedback on the SFS. There were 23 workshops covering the scheme actions and a further three which focussed on scheme processes (covering topics such as eligibility and registration). Separately, a stakeholder feedback form was available for organisations and other individuals to contribute their views.
- All co-design work was undertaken bilingually.

- While developing the Agriculture (Wales) Act 2023¹⁴⁷ and our proposals for the Sustainable Farming Scheme (SFS) 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.
- In May 2024 the Deputy First Minister, with responsibility for Rural Affairs established the SFS Ministerial Roundtable, made up of 18 senior stakeholders representing farmers and the food, nature, forestry and veterinary sectors, as well as wider supply chains. The Roundtable provides direct support to the Deputy First Minister by reviewing the priorities for the Universal, Optional and Collaborative Layers of the SFS, including for example the Universal Actions, Scheme Requirements (including the 10% requirements), eligibility criteria, and the payment methodology. The Deputy First Minister will make all final decisions along with the rest of the Welsh Government Cabinet, balancing the evidence, stakeholder views and other considerations.
- An Officials Working Group, the Carbon Sequestration Evidence Review Panel and some aspects of the Trees and Hedges Stakeholder Delivery Group feed into the Roundtable.
- These groups have met accumulatively over 50 times up to end April 2025.

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

Traditionally, support for agriculture has been focussed on policies related to agricultural production. The impacts of some intensification practices on biodiversity, air and water quality, public health and the climate are issues that must be urgently addressed.

The SFS is designed to support the sustainable production of food while delivering against the challenges of the climate and nature emergency. Public Health Wales have identified farming as being particularly vulnerable to the impacts of climate change. 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 the Agriculture (Wales) Act 2023 which establishes Sustainable Land Management Objectives.

Supporting farmers to deliver Sustainable Land Management (SLM) outcomes through the SFS 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 is intended to enable current and future generations to continue farming, offering long-term resilience to the communities they are embedded in. This is expected to have positive onward impacts for rural communities in Wales, keeping farms at the heart of their communities, providing trade for local businesses, and offering opportunities for employment.

The provision to support farmers to deliver these outcomes will also offer an alternative revenue stream, unaffected by changes in trading conditions. This income stream should also support resilient rural communities, particularly for local businesses which rely on custom from farms.

Farmers will be required to undertake action to receive funding, and the economic impact of this new funding mode will vary between farms of different types and sizes.

Concerns were raised, through responses to our consultations and our first phase of co-design, about the potential impact of a new scheme on rural areas and the subsequent effect on the Welsh language. In the *Keeping Farmers Farming Consultation*¹⁴⁸ there were concerns raised around:

- The potential for the Scheme to cause a decline in the number of Welsh speakers
- The perception that small scale farming and agricultural communities act as Welsh speaking hubs that could be negatively affected by the Scheme
- The possibility that any negative effects on farm viability would impact the Welsh Language

While there are no specific Actions in the SFS relating to the Welsh language, it is designed to support the sustainability of farm businesses within their communities, which will help rural communities to thrive and safeguard the use of the Welsh language for current and future generations. Analysis of the costs and benefits of the SFS has informed the final Ministerial decision on the SFS and encompasses wider societal and cultural benefits where possible. This analysis can be found in the Business Case.

By supporting farming to deliver within the SLM framework 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, and for the well-being of future generations.

8.3 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?**
- **Contribute towards achieving the SLM objectives?**

The SFS and the Well-Being Goals

The SFS will make a number of contributions to achieving the well-being goals, as set out in the Well-being of Future Generations (Wales) Act 2015¹⁴⁹. Sustainable farming practices and their subsequent outcomes will directly contribute to the goals for a globally responsible Wales, a more resilient Wales and a healthier Wales. Through supporting the agricultural industry and ensuring that farmers are able to remain on their land and participate in their local communities, the SFS will make indirect contributions to goals for a prosperous Wales, a Wales of more cohesive communities, a Wales of vibrant culture and thriving Welsh language, and a more equal Wales.

Mitigation of potential impacts

We recognise the importance of any potential economic impact on the sector, rural communities, and the potential for varying impacts across different areas of Wales. The SFS is designed on the principle it should be available to different farm types, including tenants and those with rights to common land. The Universal Actions for the Scheme will mean the SFS is accessible to farmers who meet good environmental and animal health standards. This will give farmers certainty and provide a foundation for those wishing to choose additional activities from the Optional and Collaborative Layers for further payment.

A period of transition between the current system of support and the SFS will allow farms to adjust and ensure that farmers do not experience a sudden cessation of their payments, regardless of whether or not they choose to enter the proposed SFS.

The SFS will be accompanied by an advisory service which will be available to all farms across Wales. This service will be available bilingually and will support farms to transition into the SFS and gain the maximum benefit from the Actions within the scheme. This service will help ensure farms have access to the advice and guidance needed to adjust to the changes.

Contribution towards achieving the SLM objectives

The SFS has been designed and developed with the intention of supporting the resilience of the agricultural sector, its businesses and its farmers whilst simultaneously ensuring farming remains sustainable and viable for future generations. To this end, the SFS has been developed with the intention that each of the Actions support farmers to produce food and other goods in a sustainable way, whilst simultaneously supporting agricultural actions which maximises their contribution towards the economic, environmental, social and cultural objectives embedded within SLM.

Throughout the IIA we have provided an assessment of the SFS against the SLM objectives; in some instances, Actions contribute towards achieving more than one objective.

We have identified below several examples to highlight the integral relationship between SFS actions and the SLM objectives, further details can be found within the sections or annexes identified under each of the SLM objectives.

1. To produce food and other goods in a sustainable manner:

The Universal Actions, supported by Optional and Collaborative Actions have been designed to provide a foundation to support the sustainable production of food and other goods. The completion of these Actions along with the benefits which result from sustainable food production are recognised in the Universal Payment. Annex G – Socio-Economic Impact Assessment – provides details on the benefits anticipated to be realised as a result of the actions and subsequent support via the SFS. It highlights not only the on-farm economic benefits of stable payments for actions which result in the production of food and other agricultural goods in a

sustainable manner, but also the wider impacts this has on the resilience of agricultural businesses within the communities in which they operate and their contribution to the local economy. For example, this may extend to farm diversification and additional employment opportunities for the local community.

We have captured the expected economic impacts of the SFS across the sector, including the impact against economic well-being, which has been addressed at Section 4.

2. To mitigate and adapt to climate change:

Section 5 of the IIA focuses on the environmental well-being effects of the Scheme. It also captures the impacts of the Actions and their contribution towards achieving the second SLM objective to mitigate and adapt to climate change, from soil-based actions to tree planting and habitat management.

Section 5.1 includes the impact of the actions which meet the second SLM objective and how this, in turn, has the potential to help deliver on three National Priorities as set out in the Natural Resources Policy. From nature-based solutions, to increasing resource efficiency, and to using a place-based approach, actions have been developed to align with the SLM objective. For example, for nature-based solutions, the focus is on natural solutions and enhancing the habitats and biodiversity on agricultural land across Wales. Specific actions will support farmers / agricultural businesses to make these changes in farm management practice, this includes actions from increasing tree coverage on eligible land, to managing habitats to reduce flood risk and contribute towards decarbonisation.

Section 5.3 identifies specific actions to be completed by farmers within the SFS, such as the completion of a Farm Level Carbon Baseline which is intended to measure the carbon impact of the entire farm business (applicable to all farm businesses in Wales) as well as at product level (CO₂e per unit of output). The Farm Level Carbon Baseline should support farmers in their ability to identify opportunities to maximise carbon storage, for example through developing an understanding of their soil and the demands of their crops and be able to use the assessment and soil testing to support their decision making via data collected on the impact of potential changes and/or offer suggested areas for improvement. Further activities under the Optional and Collaborative Layers will be provided to support the farmer to achieve these outcomes.

3. To maintain and enhance the resilience of ecosystems and the benefits they provide:

The SFS has been designed to target a number of key areas which are aligned with the third SLM objective. Scheme Actions across the Universal, Optional and Collaborative layers are intended to support more nature-based interventions and contribute towards healthy soil, clean air, and a resilient environment with increased biodiversity. The SFS Actions encourage greater emphasis on natural solutions and enhancing the habitats and biodiversity on agricultural land across Wales.

Section 5.1.b outlines the potential impacts SFS actions undertaken to mitigate and adapt to climate change could also have on the diversity, scale, conditions and adaptability of ecosystems. It also captures the impacts of actions taken in support of managing flood risk, from sward management and cover cropping to hedgerow management and how this supports the flora and fauna of the ecosystems which are found around a farm.

Annex F – Biodiversity Impact Assessment - provides additional examples of the links between the actions taken at a Scheme level and their contribution towards the resilience of ecosystems and the benefits therein.

4. *To conserve and enhance the countryside and cultural resources and promote public access to and engagement with them, and to sustain the Welsh language and promote and facilitate its use:*

Section 3 of this IIA captures the cultural well-being and Welsh language assessments of the support to be delivered under the SFS. This section aligns with the assessment of the SFS against the fourth SLM objective, which captures the cultural impacts of agriculture. For example, Section 3.1a outlines that many archaeological heritage assets in Wales are located on agricultural land. We therefore have a responsibility to ensure that assets on agricultural land are conserved for the benefit of both present and future generations. There is also a responsibility for traditional features on farms that form part of cultural heritage for Wales, for instance stone and slate walls.

In recognition of their social, cultural, and economic value, the SFS is designed to support farmers to maintain, manage and enhance the landscape and the historic environment through several Actions within the Universal, Optional, and Collaborative Layers. Participating farms will be provided with a map of historic features on their land via the HBR which will include features such as Scheduled Monuments, Historic Environment Features, and Listed Buildings.

Further detail regarding the way the SFS is expected to promote and protect our natural environment and countryside, and therefore our cultural heritage, is included in the Biodiversity Impact Assessment in Annex F. The Welsh Language Impact Assessment deals in full with the impacts of the SFS on this particular aspect of Welsh culture (Annex E).

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

A monitoring and evaluation strategy will detail how Welsh Government intends to assess the delivery of environmental, economic, social and cultural outcomes within the SFS, and identify impacts during the life of the SFS.

The monitoring and evaluation strategy will also inform a regular review of the SFS design to ensure it is still fit for purpose and meet the obligations of the Agriculture (Wales) Act 2023.

SECTION 9. DECLARATION

Declaration

Name of Senior Responsible Officer / Deputy Director: Mark Alexander

Department: Land Management Reform Division

Date: June 2025

FULL IMPACT ASSESSMENTS

A. CHILDREN'S RIGHTS IMPACT ASSESSMENT

The *Rights of Children and Young Persons (Wales) Measure 2011* places a duty on the Welsh Ministers to pay due regard to the United Nations Convention on the *Rights of the Child (UNCRC)* and its *Optional Protocols* when exercising any of their functions.

1. Policy objectives

The Agriculture (Wales) Act 2023 (the Act) has established Sustainable Land Management (SLM) as the policy framework for agricultural support in Wales.

The Act has provided Ministers with the power to provide support for agriculture in Wales.

SLM is designed to meet the challenges of the climate and nature emergencies whilst enabling and supporting the sustainable production of food and the protection of our natural resources, culture and heritage. The Sustainable Farming Scheme (SFS) has been designed as the delivery mechanism for SLM, which includes for example the following outcomes:

- Clean air
- Clean water
- Enhanced access to, and engagement with, the natural environment
- Promotion of animal health and welfare
- Maximisation of carbon storage
- Mitigation of flood and drought risks
- Protection natural landscapes and historic environmental spaces
- Reduction of greenhouse-gas emissions
- Establishment of a resilient ecosystem
- Resource efficiency

Children will not be direct participants of the SFS; however, children on participating farms may be impacted through changes to their family's farming practice. We also recognise children may be undertaking age-appropriate activities on farms within the SFS. Such impacts are discussed further below. Moreover, children on participating farms may be expected to be indirectly impacted by any potential economic changes to their family's business. The potential economic impacts of the SFS for farmers are considered in the Socio-Economic Duty Impact Assessment (Annex G).

Generally, however, the SFS is expected to have positive outcomes for children, young people and their families through positive environmental impacts, and the resilience of the rural communities in which children live.

The agricultural sector has the highest mortality and accident rate of any industry in the UK, including the highest child injury rate in a workplace environment¹⁵⁰. Farming is moreover the sole high-risk industry in the UK where children are a constant presence (either as part of the family or as members of public)¹⁵¹. The HSE reports that children in the UK are killed every year in relation

to agricultural work and activities; furthermore, most children who die in such incidents are family members¹⁵².

The SFS is expected to have positive impacts on the health and well-being of children who live on, or near, a farm. For instance, one UA will require farmers to complete a minimum level of learning, including a mandatory module on Health and Safety, which may raise awareness of dangers that could harm children, in particular (e.g. through failure to assess the risks that may impact children in general; the dangers that may threaten unsupervised young children; children [14 and above] working unsupervised, or without adequate training).

Furthermore, the Animal Health Improvement Cycle (AHIC) can be expected to reduce or prevent several physical harms to children. Such harms may include the spread of infectious diseases; the transfer of zoonoses from animals to children; as well as reduce the risk of children being exposed to harmful chemicals and pollutants in the farm environment.

The SFS will impact young people entering the agricultural sector in Wales who may also seek to join the Scheme. It has been designed to ensure it is accessible and appropriate for all farmers. New entrants into farming bring new ideas, energy and entrepreneurial vigour, and as such can be the enablers of positive change in the industry.

However, new entrants to agriculture face the multiple challenges of access to land, finance, and (for some) skills and training. Previous support schemes have led to new entrants experiencing difficulties meeting the investment threshold required to qualify for grants; the value for monies associated with purchasing only new equipment; as well as challenges applying for payments where quotas or entitlements were based on payments received during previous reference periods. A reduction in the minimum eligible area required to enter the Scheme will make this easier.

As outlined in Section 2, we recognise that, in the short term, the change from the current system of support has the potential to cause uncertainty and stress for farming families, and therefore may impact children in those families. The transition period is intended to mitigate some of this uncertainty by ensuring that no farm experiences a sudden cessation in payments and will allow time to plan and adjust to the changes.

2. Gathering evidence and engaging with children and young People

- *What existing research and data on children and young people is available to inform your specific policy?*

Climate Change

UNICEF have declared the climate crisis to be a children's rights crisis¹⁵³. The basic rights of access to clean water, clean air and health are threatened by climate change and children are disproportionately vulnerable to negative ecological impacts.

UNICEF's Children's Climate Risk Index (CCRI) assesses children's exposure and vulnerability to climate-change hazards across the world¹⁵⁴. This Index is structured according to two pillars:

- a. Exposure to shocks and stresses such as air pollution, flood, water pollution.
- b. Vulnerability in terms of health, nutrition, access to education, sanitation, and poverty¹⁵⁵.

The UK has scored 'medium' on the CCRI (point three on a five-point scale where five is most at risk) due to a high exposure to environmental shocks and hazards¹⁵⁶. This indicates children's rights in the UK are threatened by climate change and its cascading environmental impacts.

There is also growing evidence children and young people are increasingly experiencing 'climate anxiety' as a consequence of climate change, which may lead to negative mental-health and wellbeing impacts^{157, 158}. For instance, a survey (of 10,000 children and young people) conducted by Marks et al., found more than 45% of respondents reported their feelings in relation to climate change negatively affected 'their daily life and functioning', whereas 60% expressed feeling 'very' or 'extremely' worried about climate change¹⁵⁹. Moreover, more than half of respondents felt 'betrayed' by government inaction to tackle the climate crisis¹⁶⁰. In Wales, the 2021-22 *WISERD Education Multi Cohort Study (WMCS)* asked 3 cohorts of children the question 'How worried are you about climate change?'¹⁶¹. Of the 454 children for whom a response was recorded, only 11% said they were 'not at all worried' about climate change. Around 20% of the children asked reported that they were 'not very worried' about climate change while 44% reporting being 'somewhat worried', 20% reported being 'very worried' and nearly 5% reported being 'extremely worried'¹⁵.

Taking action to mitigate climate change and reduce exposure to hazards such as air pollution and extreme weather events, should therefore reduce threats to the rights of children in Wales and work towards improving their physical and mental health and well-being.

Mitigating and adapting to climate change is an objective of SLM. Actions intended to address and mitigate against the climate emergency, as well as meet several SLM outcomes, are included in the SFS. The purposes for support as set out in the Agriculture (Wales) Act 2023 will allow direct action to mitigate this risk through the delivery of the SFS and therefore impact children positively.

- *Using this research, how do you anticipate your policy will affect different groups¹⁶ of children and young people, both positively and negatively? Please remember policies focused on adults can impact children and young people too.*

To the extent that poor air and water quality disproportionately affect low-income households (in deprived areas) and ethnic minorities in Wales, and throughout the UK,¹⁶² the SFS could positively impact the health and well-being of children in such households.

¹⁵ Percentages calculated from results available in the WISERD Data Portal. Due to rounding percentages may not sum to 100.

¹⁶ You may, for instance, consider how your policy would affect the following groups of children and young people differently: early years, primary, secondary, young adults; children with additional learning needs; disabled children; children living in poverty; Black, Asian and minority ethnic children; Gypsies, Roma and Travellers; migrants; asylum seekers; refugees; Welsh-language speakers; care experienced children; LGBTQ+ children. Please note that this is a non-exhaustive list and within these cohorts there will not be one homogenous experience.

In 2022 it was found that in Wales approximately 535,000 children under the age of 18 (of which 356,000 are under the age of 12) live in neighbourhoods where the average annual concentration of PM_{2.5} are above WHO guidelines¹⁶³. There are over 1,200 schools in these polluted areas¹⁶⁴. It was also found that approximately 93,000 children under 18 in Wales (of which 64,000 are under 12) live in areas where the average concentration of NO₂ is above the WHO guidelines, and where there are 169 schools¹⁶⁵.

Furthermore, it has also been found that younger children are more at risk from air pollution than older children and adults¹⁶⁶¹⁶⁷. Pregnancy, infancy, and early childhood are critical developmental stages; as such, developing babies and young children are particularly vulnerable to air pollution and other negative environmental stresses¹⁶⁸. As noted by the *Royal College of Physicians and the Royal College of Paediatrics and Child Health*,

The developing heart, lung, brain, hormone systems and immunity can all be harmed by pollution. Environmental effects on the embryo, fetus, baby and toddler may last a lifetime, but may take years or even decades to become apparent. [...] There is also clear evidence that early exposure to air pollution can damage the lungs, and increase the risk of lung infections that may be fatal. It is known to have an effect on heart health in adult life¹⁶⁹.

As we note in our Equality Impact Assessment, the SFS is designed to generate environmental outcomes, delivery of which will positively impact indicators in 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])¹⁷⁰.

Children in rural areas are more likely to be vulnerable to the effects of severe weather events such as flooding. A number of the Scheme's Actions are expected to support the SLM purpose of mitigating risk from flood (e.g. woodland and hedgerow maintenance, woodland and hedgerow creation, multi-species crop cover on all land which is uncropped over winter); therefore, children in these areas could directly benefit from these actions and outcomes.

Our Welsh Language impact assessment outlines potential impacts on Welsh speakers, including those in rural areas.

- *What participatory work with children and young people have you used to inform your policy? If you have not engaged with children and young people, please explain why.*¹⁷

While children in farming families may undertake age-appropriate activities on the farm, children will not be formal participants in the SFS. As such, no specific engagement is required through the consultation on and implementation of the Scheme.

Nonetheless, children could benefit from the SFS, as its expected outcomes should continue to support resilient rural communities and improve the sustainability of the agricultural sector over

¹⁷ Article 12 of the UNCRC stipulates that children have a right to express their views, particularly when adults are making decisions that affect them, and to have their opinions taken into account.

the long-term. In addition, young people in farming families could have the opportunity to gain knowledge and skills relating to sustainable farming practices and will be able to use such knowledge and skills in the future, should they take over the farm or begin farming elsewhere.

During the co-design process for the SFS, a number of working groups were established to support its development which included consideration of issues related to new entrants. The Welsh Government has also promoted the co-design process by attending agricultural shows, markets and events to raise the profile of the SFS as widely as possible.

Responses to our previous consultations¹⁷¹ have included those from organisations representing younger/the next generation of farmers. The Wales Federation of Young Farmers Clubs is a member of the SFS Ministerial Roundtable, a statutory consultee and has engaged in regular discussions with Welsh Ministers and Officials on the development of the SFS and wider agricultural and rural policies. This engagement is expected to continue as the SFS is implemented and delivered.

3. Analysing the evidence and assessing the impact

- *Using the evidence you have gathered, what impact is your policy likely to have on children and young people? What steps will you take to mitigate and/or reduce any negative effects?*

Based on the evidence collated to date, we expect the SFS to positively impact the lives of children and young people. Positive impacts related to the expected SLM purposes include:

- Better air quality.
- Better water quality.
- More resilient ecosystems and species recovery.
- Improved access opportunities to the countryside for exercise and social wellbeing.
- Protection of landscape features.
- Resource efficiency.
- Mitigation against climate change.

Delivery of these outcomes should positively affect the lives of children and young people Wales, now and in the future.

In the Health Impact Assessment, we have noted the potential of environmental outcomes from the SFS to positively impact the health outcomes of the population generally. As already discussed, better air quality is likely to benefit children. Public Health Wales states 'It is well-documented that different people are affected in different ways by air pollution exposure; [...] children, older people and those with chronic lung or heart conditions are considered more vulnerable to the effects of air pollution exposure'¹⁷².

A potential positive impact of the SFS on children is an increase in the resilience of agricultural businesses due to the Universal Payment and Optional and Collaborative Actions offered as

support within the Scheme. The Scheme has removed or reduced many of the historic barriers young people met in accessing financial support. The SFS does not include any historic reference periods or entitlements, and the minimum eligible areas is set at 3 ha or 550 standard labour hours. The Scheme has also been designed to be accessible to tenants, which is often the route into farming for many young people. Resilient agricultural businesses support resilient rural communities, which in turn benefit children in these areas for both current and future generations. The economic impacts of the SFS, which may impact children (positively or negatively), have been discussed in the Economic Impact Assessment.

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 affect children.

Healthier animals with high standards of welfare can also 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.

The SFS intends to support the resilience of rural and Welsh speaking communities, thus positively impacting the lives of children in these areas and across Wales.

- How does your proposal enhance or challenge children's rights, as stipulated by the UNCRC articles and its Optional Protocols? Please refer to the articles to see which ones apply to your own policy.

UNCRC Articles or Optional Protocol	Enhances (X)	Challenges (X)	Explanation
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	X		<p>Children are disproportionately vulnerable to the effects of climate change. Exposure to hazards such as air pollution and extreme weather events can threaten health and wellbeing.</p> <p>The SFS enables support for the delivery of Sustainable Land Management purposes for support such as clean air, improved water quality, ecosystem resilience and enhanced access to the countryside. This would provide children with</p>

must help poorer countries achieve this.			improved opportunities for healthy activities in a safe environment, and good physical and mental health.
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.	X		<p>Mitigating and adapting to climate change is one of the SLM objectives covered in the SFS. Extreme weather events such as flood and storms can destroy housing and create unsafe environments. Moreover, witnessing impacts on animal welfare during animal disease outbreaks can have the potential to seriously impact a child's mental wellbeing. The SFS has been designed with actions expected to reduce and mitigate against flood and drought risk.</p> <p>Scheme actions are also targeted to improve air and water quality and reduce greenhouse gases (GHGs). Delivery of these outcomes will help protect and improve the environment children grow up in.</p>
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.	X		<p>A review 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.'¹⁷³</p> <p>Increased opportunities for providing access to the countryside could facilitate children enjoying increased</p>

			contact with nature. This would contribute positively to childhood development, based on the above evidence. The SFS will have a number of Optional and Collaborative Actions specifically designed to support the improvement of access whilst protecting and enhancing our natural landscapes and heritage, providing culture for children now and in the future.
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4. Ministerial advice and decision

- *How will your analysis of these impacts inform your ministerial advice?*

As with other impact assessments, compiled within the IIA, this CRIA (and earlier iterations of it) has been included in and used to inform Ministerial advice on the development and delivery of the SFS.

5. Publication of the CRIA

This CRIA will be published in full as part of the IIA for the SFS.

6. Communicating with Children and Young People

If you have sought children and young people's views on your proposal, how will you inform them of the outcome?

As outlined in Question 1, we have not explicitly sought children's views on the SFS, although responses to our previous consultations have included those from organisations representing younger/the next generation of farmers. For example, The Welsh Federation of Young Farmers Clubs are involved in the Scheme development and will be informed of the outcome.

7. Monitoring and Review

- *Please outline what monitoring and review mechanism you will put in place to review this CRIA.*

Future policy and implementation revisions of the SFS will be subject to further impact assessment. As such, this CRIA will be kept under review as proposals are developed.

- **Following this review, are there any revisions required to the policy or its implementation?**

The development of the SFS been consistent with this review and founded on our legislative framework so there have not been any revisions required. Future policy or implementation revisions of the SFS will be subject to further impact assessment. As such, this CRIA will be kept under review as proposals are developed.

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.

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 Sustainable Farming Scheme (SFS)

The SFS will be available to all eligible farmers who wish to participate. It is aimed at maintaining economically, socially, and environmentally sustainable farm businesses through the delivery of Sustainable Land Management (SLM).

The SFS is not expected to have any negative impacts on people who share protected characteristics; however, potential impacts on different groups are considered as part of this Impact Assessment. The SFS is expected to produce 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 delivered as a result of on-farm action. The benefits of improved opportunities to access the countryside and protection of landscape features.

Record of Impacts by protected characteristic

The following statistics use *2023 ONS population estimates*¹⁷⁴ and *Census 2021*¹⁷⁵ data to examine issues facing rural Wales. They demonstrate that certain groups are overrepresented or underrepresented in rural communities. This means that there are more or fewer people possessing particular characteristics than would be expected if such groups were proportionately distributed across urban and rural areas according to population numbers.

In later sections of this Equality Impact Assessment, we examine the potential impacts of the SFS on different protected groups, including positive impacts that could contribute to greater equality in Wales.

The classification of Urban/Rural Local Authorities¹⁷⁶ and Urban/Rural Areas¹⁷⁷ used in the below is based on the 2021 Rural Urban Classification (RUC)^{18, 178}. Here, Urban/Rural Local Authorities and Urban/Rural Area refers to the ONS 2021 RUC designation given to each Local Authority District (LAD) or Output Area (OA) respectively. An Output Area is a geographical area containing between 100 people (or 40 households, whichever is smaller) and 625 people (or 250 households,

¹⁸ The 2021 Rural Urban Classification (RUC) is a standardised method for classifying geographies as rural or urban developed in collaboration with ONS Geography, DEFRA and Welsh Government.

whichever is larger). Output Areas are designed to be small enough that they do not contain a mixture of urban and rural environments.

Children: Children (aged under 16) tend to be underrepresented in the Rural Local Authorities¹⁷⁹ (LAs) in Wales. Although the majority of children living in Rural LAs do live in Rural Areas, the underrepresentation effect is slightly pronounced in these areas, with children overrepresented in Urban Areas.

Young people: Census 2021 data shows young people, aged 16 to 24, are underrepresented in Rural Areas.

Older working age people: There are more older working age people, aged 60 to 64, in Rural Areas compared to Urban Areas in almost every LA in Wales.

Older people over 65. Some of the highest proportions of people aged 65 and over are found in the Rural LAs of Wales. In many of these LAs, older people are overrepresented in the rural population, accounting for more than a quarter of residents.

Disability. Prevalence of disability in Wales is highest in Neath Port Talbot and the Valleys Local Authorities. At the Output Area level, prevalence of disability tends to be marginally higher in Urban Areas than Rural Areas. It is important to note, however, the needs of disabled people in Rural Areas may be very different to those in Urban Areas, with greater challenges in accessing appropriate care and support. Disability is also more prevalent in older age groups; 43.8% of those reporting their day-to-day activities were 'limited a lot' are aged 65 and over.

Race and ethnicity: Census data shows in 2021, 6.2% of the Welsh population was made up of individuals belonging to ethnic minority groups¹⁹. There is, however, a substantial concentration of ethnic minority groups in Urban Areas; around 9 in 10 of those belonging to an ethnic minority group lived in an Urban Area, with the vast majority specifically living in Cardiff, Newport, or Swansea.

Sex and gender: On Census Day 2021, both males and females living in rural areas had higher employment rates, lower unemployment rates and lower economic inactivity rates compared to those in urban areas¹⁸⁰.

These findings demonstrate there are notable differences in the general characteristics of those living in rural Wales, compared with those living in urban areas.

¹⁹ "Mixed or multiple ethnic groups", "Asian, Asian Welsh or Asian British", "Black, Black Welsh, Black British, Caribbean or African", and "Other ethnic group". White minority groups are not included in this grouping.

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?

Children

As outlined in the Children's Rights (Annex A) and Health (Section 2) Impact Assessments, the SFS could indirectly impact children in several ways. The impact of the SFS on children is expected to be positive, through the delivery of environmentally beneficial outcomes such as clean air and water which provide health benefits, and improved opportunities for access to the countryside facilitating increased contact with nature.

Any positive or negative economic impact of the SFS may be felt by children in farming families and the wider rural community. The SFS is designed to support the resilience of agricultural businesses and will therefore support resilient rural communities, benefitting children in these areas, and making them more viable locations for families to live.

The SFS will support farmers to deliver enhanced access to rural areas and green spaces within the Optional Layer, including in ways aimed at children, such as supporting the replacement of stiles with gates which will make it easier for families with young children to physically access the countryside, which may encourage greater countryside use by those children later in life.

Young People

It is a noted issue that net outward migration of young people from rural areas can have a substantial negative impact on farm succession planning and rural economies. In order to address these issues and increase the sustainability of farming for the future, there need to be opportunities for young people to enter agriculture; both those raised in farming families and those wishing to enter the industry from other backgrounds.

The SFS will include the development of advice and guidance for farmers, as well as the provision of appropriate Continued Professional Development as part of the Universal and Optional Layers. This provision 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, as well as gaining the knowledge/skills needed to run a successful business. Farming Connect has led a number of initiatives to address these challenges, and we are continuing to consider how best to build on these initiatives in future.

Young Farmer representative groups²⁰ have engaged in our consultations and co-design programme and have raised the need to support new entrants into the industry.

²⁰ The young farmer representative groups that engaged with the consultation process, include Anglesey Young Farmers Club, Erwood Young Farmers Club, and Radnor Young Farmers Club.

Findings from the second phase of *Sustainable Farming Scheme Co-design*¹⁸¹ showed that the percentage of land ownership gradually increases in proportion to the older age of farmers. Younger farmers (under the age of 40) who responded to the survey were less likely to wholly own farmland and were more likely to depend wholly upon tenanted farmland. As a greater percentage of younger farmers depend wholly or in part on tenanted farmland, they may face additional barriers to joining the SFS as they may be unable to carry out some actions on land that they do not own. For instance, the second phase of *SFS Co-design* found that older farmers were more willing to undertake the now removed 10% tree cover UA than younger farmers, and that this willingness appears to correlate with land ownership and the issue of management control. Since the *Keeping Farmers Farming* consultation, changes have been made to Scheme design to ensure that it is accessible to tenant farmers which should also benefit younger farmers. We have also outlined how payments will not be based on entitlements, quotas or reference periods so new or young entrants will enter the Scheme on the same terms as all other farmers.

There is some evidence¹⁸² to suggest younger farmers are more likely to embrace new technologies and knowledge. Research into farmer motivations found farmers under the age of 40 were most likely to strongly agree or agree that they are always actively looking to learn new skills and are open to new technology¹⁸³. Given that the SFS will support farmers to adopt new and innovative methods in addition to traditional farming practices, young farmers may be well-placed to implement SLM and benefit from the SFS. As such, the SFS may be expected to positively impact younger farmers.

Older People

Issues for older people living in rural areas tend to focus on the delivery of key health, social services, and transport issues¹⁸⁴. We have no evidence that the SFS will impact negatively on the well-being of older people in the wider rural community; rather, it is intended to support a thriving and sustainable rural economy and so any positive impact on the viability of rural communities would benefit older residents. In terms of potential positive impacts, we note in our Health Impact Assessment (in Section 2) the potential of the environmental outcomes, resulting from the SFS, to impact positively on the health outcomes of the population generally. We also note the impact on older people of exposure to poor air quality.

The estimated average age of a farmer in Wales in 2023 was over 60 years old, with the majority of principal farmers in Wales being over the age of 55¹⁸⁵. The SFS represents a substantial change in the way farmers receive government support and this needs to be reasonably communicated to all farmers.

Although digital mediums are a useful way to keep publications up to date, the Public Health Wales *Supporting farming communities at times of uncertainty* 2019 report, cites digitalisation as a challenge, particularly for older farmers¹⁸⁶. It is clear that we cannot rely solely on digital means of communication for matters relating to the SFS, else there could be a disproportionate negative impact on older farmers. Roadshows and in-person workshops have run concurrently with

previous SFS consultations and aimed to reach all farmers across Wales, including those who may be digitally disadvantaged. Reaching these groups is an important consideration in the delivery of advice and guidance and for SFS Actions such as Continuous Professional Development where we will support a dual in-person and digital approach.

We have experience communicating with farmers through the Farm Liaison Service and the Gwlad newsletter and will use this knowledge in our communication strategies. Steps were taken to ensure a fair representation of farmers from all age groups participating in the co-design programme which informed the development of the SFS.

Conversely to the findings relating to young farmers, research suggests that older farmers are least likely to strongly agree or agree they are always actively looking to learn new skills or are open to the use of new technology¹⁸⁷. This may be linked to the fact they are closer to retirement and choose to leave decisions around change for their successor. They may also face greater physical challenges than younger farmers in undertaking actions as part of the SFS. We will need to ensure older farmers are encouraged to participate in the SFS and that they are supported to adopt SLM more generally in a way that is feasible and compatible with succession planning. The knowledge and support services provided alongside the Scheme will be integral to this.

Disability

Throughout development of advice and guidance in relation to agricultural policy, officials will work to ensure this is accessible to all farmers and therefore will consider reasonable adjustments for those with disabilities.

As noted above, we expect the outcomes delivered as a result of the SFS to impact positively on the health outcomes of the population generally, including people with disabilities. In addition, any improvements to current access routes, undertaken under the Optional Layer of the SFS, that increase accessibility, may have a positive impact by allowing a greater number of disabled people to enjoy the countryside and its associated benefits. A detailed discussion regarding the mental health of farmers can be found in Section 2 of this document.

Race and ethnicity

There are no expected adverse impacts on race and ethnicity from the SFS. As noted above, the implementation of SLM through the SFS is expected to lead to outcomes that will positively impact the health outcomes of the population. However, the varying geographic distribution of different race and minority ethnic groups across Wales may mean that potential benefits also vary across groups.

Recent research has found that ethnic minority groups are overrepresented in the most deprived areas for air quality, ambient green space, and flood risk in Wales (consistent with evidence in England)¹⁸⁸. This is due to the fact that ethnic minority communities tend to be concentrated within urban areas.

As such, it is pertinent to consider the extent to which the positive health impacts of the SFS will be felt in towns and cities as well as in the countryside. The actions relating to tree planting, woodland management and creation could improve the air quality of urban populations according to the proximity of participating farms to these areas. Therefore, where these urban areas in proximity to new SFS woodland have a higher proportion of ethnic minority communities, there may be a higher benefit from improved air quality for these groups. Further detail on the potential spatial variation in benefits arising from SFS actions can be found on the ERAMMP website¹⁸⁹.

Both air and water pollution can travel substantial distances, so any reduction in emissions from agriculture could have a positive impact for those in both rural and urban areas, and therefore across race and ethnicity. Agriculture is the main source of ammonia emissions in Wales¹⁹⁰ which contributes to the formation of PM_{2.5}, and in turn this poses risks to human health in communities across Wales.

The SFS intends to reduce ammonia emissions through a range of actions, such as:

- The option to create new woodland and agroforestry
- Woodland maintenance
- The management of new and existing hedgerows
- Habitat maintenance
- The creation of temporary habitat on improved land
- Action undertaken through Designated Site Management Plans
- Soil testing which can help more targeted application of fertilisers and reduce losses to air
- On-farm infrastructure investments, such as slurry stores, roofing over existing yards etc.
- Precision nutrient application equipment, including slurry direct injection systems, GPS etc.
- Support for collaborative approaches which would allow farmers to work together to deliver actions to lower ammonia emissions

Regarding water, most Welsh towns and cities are located near rivers, and agricultural pollution entering the catchment upstream will therefore also affect urban areas. For example, investigations have shown that without reduction in agricultural pollution in the Clwyd catchment, improvements in water quality for bathing in Rhyl will not be realised¹⁹¹. Reductions in water pollution would also have positive benefits for recreation for all users of the countryside, as well as reducing water treatment costs.

There are known disparities in access to the countryside¹⁹² among different ethnic groups, with issues such as lack of awareness cited as drivers of this disparity¹⁹³. The SFS will support farmers to deliver enhanced access within the Optional Layer.

With regards to farmers themselves, data from the 2021 Census¹⁹⁴ shows that in 2021, over 99% of those working in Skilled Agricultural and Related Trades in the UK were White. This is compared with the general working population at the time where 82% were White. Elementary Agricultural Occupations is contained within a larger grouping of Elementary Trades and Related Occupations,

so while we cannot make a direct comparison, there may be more diversity within Elementary Agricultural Occupations. We do not have data for Wales specifically and note that arable farms which require larger numbers of seasonal workers for activities like harvesting are less common in Wales than England. In addition, the high level of casual and unpaid work within agriculture can make it challenging to establish the true number of workers.

It is typically difficult for new entrants to farming to begin a farming career. In addition to the known concentration of ethnic minorities in Urban Areas, this may contribute to the substantial underrepresentation of ethnic minorities in farming.

The SFS actions with regard to farming are therefore likely to have less of an impact on ethnic minority groups than those in the White ethnic groups, as they are substantially underrepresented in the agriculture industry.

Marriage and civil partnership

We do not expect the SFS to have particular impacts on people because of whether or not they are married or in a civil partnership.

Pregnancy and maternity

SFS Actions in relation to biosecurity and increased animal health and welfare should reduce the risks caused by disease within the livestock population, which could enter the food chain. Certain zoonotic diseases (transferrable to humans) and infectious agents are a serious risk to pregnant women and their unborn babies in particular; hence, we expect any action to minimise disease to have a positive impact on them. In addition, general health impacts such as better air quality would also be of particular importance to pregnant women, as discussed in greater detail in the Children's Rights IA^{195, 196}.

Gender reassignment

We do not expect the SFS to have particular impacts on people because they are undergoing or have undergone gender reassignment.

Religion and belief

We do not expect the SFS to have particular impacts on people because of their religion or faith.

Sexual orientation

We do not expect the SFS to have particular impacts on people because of their sexual orientation.

Sex/gender

According to the Annual Population Survey, those employed in skilled agricultural and related trades are predominantly male, however the number of females in the sector has increased by 46.2% between 2004 and 2024 in Wales¹⁹⁷.

Women face a number of barriers within farming; in 2015, Farming Connect launched a Woman in Agriculture initiative to support women in the industry, this support continues to be available in the current offering. There are no specific Universal Actions in the SFS relating to sex and gender; however, the Welsh Government is able to consider specific support provision under the wider powers of support in the Agriculture (Wales) Act 2023 in order to build on previous initiatives.

Furthermore, even where the primary farmer is male, women in farming families are often active in running the farm business, though they may not be recognised as formal employees. The nature of farming as a household-oriented business means that changes in the way funding is received and requirements to undertake specific actions within the SFS will have impacts beyond the principal farmer.

Low Income Households

Farm business income is subject to volatility influenced by agricultural conditions (including weather) and market conditions. This volatility can bring challenges to long-term business planning. The SFS will provide an income stream based on the delivery of SLM; this is unaffected by this volatility. For participating farms, this should have a positive effect on those from low-income households by providing stability of income.

Our Economic Wellbeing and Rural Proofing Impact Assessments, and the SFS business case, consider potential economic effects of the SFS in further detail.

Households in deprived areas

The Welsh Index of Multiple Deprivation (WIMD)¹⁹⁸ includes the quality of an area's physical environment as one of the 8 domains of deprivation making up the overall index. This physical environment domain in WIMD 2019 consisted of indicators on air quality, flood risk and access to green space.

The SFS aims to support farmers to improve the physical environment through reduced emissions, reduced flood risk through nature-based solutions (e.g. agroforestry, improved soil health) and increased access to the countryside. The effect of the SFS on the environment is considered further in the Biodiversity Impact Assessment, and Section 5 of this document, which relates to Environmental Wellbeing.

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

We do not expect the SFS to create barriers for those who share protected characteristics. As we continue to communicate with farmers concerning the SFS, we will consider how we can ensure there are no barriers to participation for those within protected groups. In addition, we will consider whether there is a need for targeted initiatives alongside the SFS, under the power of support in the Agriculture (Wales) Act 2023, to support groups who are underrepresented in

agriculture, such as women and those belonging to ethnic minority groups. We will take steps to ensure all advice and guidance related to the SFS will be communicated in accessible ways.

Monitoring of the proposals

As well as providing the powers for the SFS, the Agriculture (Wales) Act 2023 provides the relevant monitoring and evaluation powers, both for future support and for SLM as a whole.

This monitoring and evaluation strategy will set out how the SFS 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 report and identify interim measures which can demonstrate progress.

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 the SFS, as it will lead to outcomes which support general public health, such as cleaner air.	Older people are particularly vulnerable to air pollution, the actions in the SFS will improve air quality.	This is a positive impact, no mitigation needed.
	There may be a negative impact on some older farmers if communication about the SFS, and its 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.	Advice and guidance will be available in a variety of formats and as part of the SFS engagement, roadshows will reach farmers across Wales in person.

	<p>The movement from an area-based support scheme to the SFS, which requires farmers to undertake specific actions has the potential to impact new entrants, who may also be younger people.</p>	<p>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.</p>	<p>We will be considering how to build on the current advisory offer for younger people and new entrants to the industry as part of wider farm support.</p>
<p>Disability (think about different types of disability)</p>	<p>The environmental outcomes delivered by the SFS are expected to positively impact the health outcomes of the population generally, including people with disabilities.</p> <p>Improvements to access routes under the Optional and Collaborative Layers may have a positive impact for those with accessibility needs e.g. removing stiles will have a positive impact on those with physical disabilities.</p>		<p>This is a positive impact, no mitigation needed.</p>
<p>Gender Reassignment (the act of transitioning and Transgender people)</p>	<p>No specific positive or negative impacts have been identified.</p>		<p>At this stage, no mitigation shall be necessary, but we will continue to monitor this.</p>

Pregnancy and maternity	Reduced livestock disease will lower the risk to pregnant women and their unborn babies from zoonotic diseases (transferrable to humans). Environmental outcomes delivered from the SFS are expected to positively impact the health outcomes of the population generally, including pregnant women.		This is a positive impact, no mitigation needed.
Race (include different ethnic minorities, Gypsies and Travellers and Migrants, Asylum seekers and Refugees)	<p>Farmers primarily belong to the White ethnic group so direct impacts of the SFS will mainly concern this group.</p> <p>There are no aspects of the SFS that are expected to negatively impact Gypsies and Travellers (such as changes to land rights or access to education).</p> <p>Supporting a thriving rural economy will continue to provide opportunities for migrant workers.</p>		At this stage, no mitigation shall be necessary, but we will continue to monitor this.
Religion, belief and non-belief	No specific positive or negative impacts have been identified.		At this stage, no mitigation shall be necessary, but we will

			continue to monitor this as.
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 part of the wider support offer alongside the SFS.
Sexual orientation	No specific positive or negative impacts have been identified.		At this stage, no mitigation shall be necessary, but we will continue to monitor this.
Marriage and civil partnership	No specific positive or negative impacts have been identified.		At this stage, no mitigation shall be necessary, but we will continue to monitor this.
Children and young people up to the age of 18	Children and young people are expected to benefit from the delivery of the SFS, as it will lead to outcomes which support general public health, such as cleaner air.	Children are particularly vulnerable to air pollution.	This is a positive impact, no mitigation needed.
	The movement from an area-based support scheme to one based on the requirement to deliver a suite of sustainable farming actions has the potential		Economic analysis of the potential impacts of the SFS has been produced in the SFS Business Case. This analysis has informed final ministerial decisions on the SFS.

	to have economic impacts, this may impact on children, particularly in rural areas.		
Marriage and civil partnership	No specific positive or negative impacts have been identified.		At this stage, no mitigation shall be necessary, but we will continue to monitor this.
Low-income households	The movement from an area-based support scheme to one based on the requirement to deliver a suite of sustainable farming actions has the potential to have economic, and this may impact on low-income farm households.		Economic analysis of the potential impacts of the SFS has been produced in the SFS Business Case. This analysis has informed final ministerial decisions on the SFS.

Human Rights and UN Conventions

Do you think that this policy will have a positive or negative impact on people's human rights?
(Please refer to point 1.4 of the EIA Guidance for further information about Human Rights and the UN Conventions).

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>As with previous agricultural schemes, the SFS will require some data collection and processing to facilitate scheme participation.</p> <p>Data collection and processing undertaken for the SFS under the Agriculture (Wales) Act 2023 should not have a negative impact on the right to respect for private and family life.</p>	<p>The processing of personal information carries a risk of impinging on the right to privacy.</p>	<p>The purposes and legal basis for data collection and processing will be made clear to SFS participants. This will help mitigate the risk of non-proportionate data processing/sharing.</p> <p>Please refer to the Data Protection Impact Assessment for further details.</p>

EU/EEA and Swiss Citizens' Rights

We do not expect the SFS to have specific impacts on the rights of EU/EEA and Swiss Citizens. With regards to EU/EEA or Swiss Citizens who reside and farm in Wales, the SFS will be available to all farmers in Wales who meet the eligibility criteria, regardless of nationality.

The SFS aims to support a sustainable and resilient agricultural sector in Wales. For EU/EEA and Swiss Citizens who rely on seasonal agricultural work, the SFS should mean any requirement for seasonal work is maintained as farms are resilient for the future.

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 2024 show the total number of people working on agricultural holdings in Wales is 49,538¹⁹⁹. Of this total, there are 37,318 principal farmers, directors, business partners and their spouses²⁰⁰. The total also includes 12,220 regular full-time, regular part-time and seasonal/casual farm workers²⁰¹. The figure 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, 'whilst hardly visible in basic statistics, agriculture remains a major driver of economic and community viability in the many remote areas of Wales'²⁰². The centrality and interdependence of the social and economic contributions of agriculture to rural communities was also reflected in the responses to our consultation, *Keeping farmers farming*²⁰³.

Farms in Wales make a significant contribution to the social capital embedded in rural communities. As NFU Cymru 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 community²⁰⁴.

The introduction of the Sustainable Land Management (SLM) framework and the Sustainable Farming Scheme (SFS) represent a change in how farmers will receive financial support. Given the multi-faceted contribution of agriculture in many rural areas, these changes can be expected to impact rural communities.

The SFS will be the main mechanism for fulfilling SLM objectives and providing agricultural support in Wales. SLM objectives set out the need for food to be produced in a sustainable manner, which requires the resilience of agricultural businesses. The SFS is designed to support farmers in line with the purposes set out in The Agriculture (Wales) Act 2023 and is expected to positively impact rural communities through increasing resilience.

Specifically, SLM purposes to be delivered through the SFS include improving the resilience of agricultural businesses, helping rural communities thrive, and strengthening the links between agricultural businesses and their communities.

Rewarding farmers for delivering the outcomes the Welsh Government is seeking through the SFS is intended to increase the ecological resilience of the land they manage, the economic resilience of their businesses, and the social resilience of rural communities through the continued presence of agriculture. 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 SFS will also offer a revenue stream separately to income generated from the farm, which will be unaffected by volatility in trading conditions. This income stream should also support resilient rural communities.

Improving farm viability and the resilience of rural communities could have a positive impact on providing opportunities for young people. This could contribute towards addressing issues such as high levels of outward migration from rural Wales by young people and help existing farmers in succession planning.

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 in Section 2 details the expected positive impacts on physical and mental well-being from the Scheme, and our Biodiversity Impact Assessment (Annex F) and Environmental Wellbeing section (Section 5) outline the expected environmental benefits.

With regard to tree planting on farmland, the SFS is designed to support farmers to increase tree cover in appropriate locations – both for the environment and the farm business – alongside other actions which will deliver the Welsh Government’s desired outcomes. The Scheme will support farmers in the delivery of SLM and specifies actions that will be supported in line with the definitions of agriculture and agricultural activities as set out in the Act.

The SFS is designed to keep Welsh farms active and resilient, providing a stable income stream, which will enable farmers to remain on their land and allow them to pass on resilient farm businesses to future generations.

The SFS is also designed to work towards tackling the nature and climate emergency in a way that is beneficial for farms and rural communities. This is in line with the Welsh Government’s existing commitments, as laid out in the Well-being of Future Generations (Wales) Act 2015,²⁰⁵ and our Carbon Budget, which states that the transition to Net Zero should be ‘fair and prosperous’²⁰⁶. The Welsh Government’s approach through the SFS is to promote land sharing practices which support and enable the sustainable production of food alongside the delivery of the other outcomes we are seeking.

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

We do not consider access to be an issue for rural people with regards to the SFS, as farms are predominantly in rural areas and will be its principal target.

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

The SFS will be open to farmers in Wales regardless of age or any other personal or household characteristics. With regards to people in rural communities more generally, including discussion on the Welsh language, further details can be found in our Equality Impact Assessment (Annex B), Welsh Language Impact Assessment (Annex E), and Socio-economic Duty Impact Assessment (Annex G).

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

The SFS is expected to directly impact the provision of agricultural services to rural areas. It is also expected to support a thriving, sustainable rural economy, which should make living in rural areas a more attractive and viable option for individuals of all ages and professions, including those whose work provides vital services to local people.

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 of land to implement the SFS.

The SFS will pay participating farmers to manage their land to meet the SLM objectives set out in the Agricultural (Wales) Act 2023. The SFS has been designed to be available to all farmers over 3ha or 550 hours of activity.

The use of restrictive covenants between Welsh Government and the landowner is not part of the Scheme.

A review²⁰⁷ commissioned by Welsh Government considered the capitalisation of public support for agriculture into land prices and concluded:

- Both empirical and theoretical findings have suggested that agricultural subsidies increase land prices and rent and thus generate impacts beyond the primary recipient of the public investment (the active farmer).
- There is limited consensus on the magnitude of the actual capitalisation effects of subsidies, as this depends on a number of factors such as the type of support, imperfections in factor markets, the structure of competition in the food supply chain and transaction costs.
- Interactions between location effects and land market regulations are often a far more important driver for price and rent than public sector subsidy.
- Land price increases due to subsidies reduce the overall impact of public sector payments on agricultural income.
- Increases in the price of land or the rent required to manage it have a negative effect on land mobility and a subsequent indirect negative effect on farm restructuring.

- The degree of transparency of a subsidy has a direct impact upon the extent of capitalisation. This information asymmetry is mainly associated with Pillar 2 payments, where, for example, landowners are not aware of the total value of agri-environment payments their tenants receive, nor the additional costs of participation, so are less able to reflect any profit element in the rental price.

Overall, it is too soon to say whether the SFS will have a material impact on the price of agricultural land in Wales. Please see the SFS Business Case for a quantitative assessment of the potential economic impacts of the Scheme.

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 has previous experience delivering support schemes and advisory services to farmers, who are often located on difficult terrain, and this 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?

The majority of farms in Wales are small businesses and contribute to the resilience of rural communities. Data from 2022 shows 58% of Welsh farms are classed as 'Very Small' based on their turnover²⁰⁸. With an average of 2.14 workers per farm in 2020,²⁰⁹ it is highly likely that the vast majority of Welsh farms would be classed as 'micro-entities' (having fewer than 10 employees in addition to meeting criteria relating to turnover). In 2017, almost two-thirds of farms had the equivalent of one or less full-time employees²¹⁰.

Evidence 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 both direct and indirect ways²¹¹. The evidence found there is a 'clear link between the activities of rural businesses and the resilience of rural communities' in relation to employment creation and service/product delivery²¹². It also found that 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 review from the West Midlands notes the importance of small businesses contributing to the economic resilience of local communities²¹³. It states that

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 resilience²¹⁴.

Research into the impacts of transitioning away from BPS in the South-West of England examines the wider implications of farm business ceasing to trade, observing ‘there is a wider impact, like the ripples in the water when a stone hits, across the rural economy’²¹⁵. It acknowledges the interconnectivity between agriculture and industries such as tourism and food and drink, and highlights that while ‘the revenue coming into farming is at least partly spent in the rural economy’, it is extremely challenging to model the exact impact the changes to farming support might have²¹⁶.

Evidence from the responses to our consultation, *Sustainable Farming and our Land* (2019),²¹⁷ demonstrates Welsh farms also play this key economic role within their local economies and communities. Our published summary of responses notes,

[respondents] often made impassioned statements concerning the important role that agriculture plays in ensuring the vibrancy of rural communities. From these perspectives, the health of the agricultural sector is closely linked to the broader economic fortunes of the rural communities in which they live. Moreover, respondents saw agriculture to be closely intertwined in the social, linguistic and cultural fabric of rural life²¹⁸.

The SFS will have impacts for all farm businesses in Wales, including farm SMEs and micro-entities. It is designed to support all types of eligible farms across Wales to deliver SLM and will provide advice and support in order to assist them in this transition. Given the role smaller businesses often play in supporting rural resilience, it is expected that providing support for farms to deliver SLM will have positive effects for the communities they are embedded in. The SLM objectives reflect the fact that the resilience of agricultural businesses within the communities and local economies in which they operate is an important factor in ensuring food is produced in a sustainable manner.

The SFS will provide support for the wider industry and the supply chain outside the farm gate for activity that meets the definition of ancillary activities and the strategic objectives of the Agriculture (Wales) Act 2023. This would have a positive impact for rural businesses and the wider rural community.

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 SFS is concerned with agriculture, there is no specific provision necessary relating to infrastructure or for enhancing rural broadband.

Rural Payments Wales has experience in reaching customers in more isolated rural areas, and the SFS will incorporate this experience and 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?

The SFS is designed to support thriving and resilient rural communities through enabling Ministers to provide support to farmers for the delivery of SLM. The SFS intends to provide farmers with a meaningful, stable income stream. Data from 2017/18 shows that without payments from the Basic Payment Scheme (BPS), only 41% of farms in Wales made a profit²¹⁹. Further assessment of the potential impacts of the SFS with regard to causes of deprivation can be found in the Socio-Economic Duty Impact Assessment (Annex G).

The 'digital divide' is more prevalent in Wales than other UK nations, with 7% of the population (an estimated 170,000 people) unable to access or use the internet²²⁰. Populations within Wales who are particularly vulnerable to digital exclusion include people in rural communities, older adults, and first-language Welsh speakers²²¹. As such, digital exclusion is an issue affecting some farmers in Wales due to such contributing factors as lack of access to broadband services, the prevalence of first-language Welsh speakers within this industry, and the fact that older farmers may be less likely to use the internet more generally due to lack of digital skills and/or motivation. This could mean that digitally excluded farmers are unable to access the SFS, simply through not being aware of it, if the primary means of promotion are digital. We have carried out varied communications programme prior to the introduction of the SFS to reach as many farmers as possible, allowing them to make an informed choice about whether or not to enter the Scheme. Between the publication of the final Scheme in summer 2025 and the Scheme commencing in January 2026, a range of engagement activities are being designed so farmers are aware of the final Scheme detail and what participation in the Scheme means for them. These activities include a series of in person roadshows and providing engagement materials via the stakeholder network.

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 4 consultations on our proposals for the future of agricultural support in Wales. The first of these, *Brexit and our Land*,²²² was published in July 2018. We published a full, independent summary of the responses to the consultation (12,203 responses, of which 1,036 were substantive and a further 11,160 were submitted from seven distinct campaigns),²²³ and our response to the consultation responses was also published²²⁴.

In 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* (2019)²²⁵. An independent summary of the responses to that consultation was also published (3,322 responses, of which 508 were substantive and 2,816 were submitted from three distinct campaigns)²²⁶.

Our third consultation asked for views on the proposals for the Agriculture (Wales) Bill²²⁷ (which has since become an Act) and our draft assessment of potential impacts. In light of the responses to the consultation (1,119 responses, of which 232 were substantive and 887 were submitted from a campaign),²²⁸ a number of changes were made to the content of the Bill²²⁹.

Our final consultation, *Keeping farmers farming*, was published in March 2024²³⁰ alongside our response²³¹. The consultation received 12,108 responses, of which 3,228 were substantive, in relation to revised Scheme proposals²³². The findings from the consultation went on to influence changes to the Scheme's design.

Alongside 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.

We have also conducted a programme of co-design, which has allowed stakeholders to work collaboratively with the Welsh Government in shaping policy and the SFS. The engagement events for the first phase of co-design took place between March and October 2020, and insights from this programme are now publicly available²³³. In total, over 1,900 stakeholders engaged with the co-design programme, the vast majority of whom were farmers.

Our second phase of co-design, where farmers and other stakeholders were invited to provide feedback on the Outline Proposals for the SFS, was undertaken in 2022; insights from this programme are also now publicly available²³⁴. A total of 1,445 stakeholders, who were predominately farmers, engaged with the co-design process²³⁵.

To coincide with our final consultation *Keeping farmers farming*, a series of 10 information roadshows were held across Wales attended by approximately 3,200 farmers.

Between June 2024 and up to end of April 2025 the SFS Ministerial Roundtable, Officials Working Group, Trees and Hedgerows Stakeholder Working Group and the Carbon Sequestration Evidence Review Panel have met over 50 times.

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

The assessment of the impacts of the SFS has been informed by the responses to the consultations carried out during the development of the Agriculture (Wales) Act 2023 and the co-design process for the SFS (set out above), as well as other evidence sources which are referenced in the footnotes to this impact assessment.

Key stakeholders have contributed to the refinement of SFS proposals between June 2024 up to the end of April 2025, mainly through collaboration. The work of the Carbon Sequestration Evidence Review Panel resulted in a Summary Report published in November 2024,²³⁶ and a fuller technical report published in April 2025²³⁷.

What other evidence would inform the assessment?

Please see the SFS Business Case for a quantitative assessment of the potential impacts of the scheme. This assessment includes, for example, modelling outputs from the Environment and Rural Affairs Monitoring and Modelling Programme (ERAMMP)²³⁸.

This modelling allows us to estimate the impacts of the SFS' actions on land use, agriculture and environmental outcomes based on data drawn from full-time farms across Wales.

D. DATA PROTECTION IMPACT ASSESSMENT SCREENING

Title of proposal: Sustainable Farming Scheme			
Name of Information Asset Owner: Hugh Morgan			
PIA reference number: SFS_PIA_0.1			
<p>Please describe your proposal:</p> <ol style="list-style-type: none"> <i>If this is a change to an existing system/ project/ process/ policy then please outline the present arrangements (and how personal data is currently processed) and then outline the changes, including whether personal data will now be shared with third parties.</i> <i>If this is a new system/ project/ process/ policy then please detail how the new system/ project/ process/ policy will work, including how the personal data will be processed and whether the personal data will be shared with 3rd parties.</i> <i>IMPORTANT - Will the proposal involve the development of new legislation/measures that will require the processing of personal data by Welsh Government or any other parties?</i> <p>Welsh Government is Data Owner and Processor and must meet the Data Protection Principles set out in <u>Data Protection Act 2018</u>.</p> <p>Personal data will continue be collected, processed and managed by Rural Payments Wales (RPW) Division within Welsh Government.</p> <p>Whilst the Sustainable Farming Scheme is a new domestically funded agricultural support scheme for Wales; the personal data collection, storage, use and sharing will be similar to the legacy European Common Agricultural Policy (CAP) subsidy regime it replaces, which was managed by RPW.</p> <p>Some of the scheme actions will require additional support from the Farming Connect service, which is a Welsh Government owned service, managed by a contracted 3rd party. RPW and Farming Connect system integration has been developed to share personal data where farmers want to register for the additional support. Additionally, Natural Resources Wales will be part of the scheme administration, utilising RPW systems.</p> <p>Finally, non-personal information relating to individual farm practices and livestock numbers will be collected, processed and shared with DEFRA to calculate and return a Green House Gas emission score for the proposed Farm Level Carbon Baseline.</p>			
<p>Has data protection impact screening or assessment already been carried out?</p> <p>No. This will be completed once the final scheme is approved.</p>			
<p>Does the proposal involve the processing of personal data by Welsh Government or any other parties?</p> <p>Yes, by Welsh Government and delivery partners as outlined above.</p> <p>Please tick the personal data items that will be processed (this list is not exhaustive):</p> <p>Personal</p> <table border="1"> <tr> <td> <ul style="list-style-type: none"> Name </td> <td> <ul style="list-style-type: none"> Telephone numbers Date of birth </td> </tr> </table>		<ul style="list-style-type: none"> Name 	<ul style="list-style-type: none"> Telephone numbers Date of birth
<ul style="list-style-type: none"> Name 	<ul style="list-style-type: none"> Telephone numbers Date of birth 		

<ul style="list-style-type: none"> • Name address • Business address • Postcode • Email address 	Driving licence number Passport / ID card number Photographs / images (which could be used to identify an individual) Other (please specify)
Special Category	
Racial / ethnic origin Political opinions Religious / philosophical beliefs Trade union membership Physical / mental health conditions Sexual life Sexual orientation Criminal & court records (inc. alleged offences)	Biometric data e.g. DNA, finger prints
If special category personal data is being processed, is this data being collected mandatorily (i.e. without the data subjects having an option to not provide it)? Not applicable	
Do any of the data subjects whose personal data will be processed fall into the following categories? No Children (under the age of 12) Patients Asylum Seekers Welsh Government employees	
Please give an indication of the scale of the processing (e.g. pan-Wales; targeted group) Details Pan Wales, targeted group is farmer businesses and agricultural land-owners (potentially up to 25,000 businesses in Wales)	
For the personal data being processed, please indicate	
Who the data controller is?	Details: Welsh Government
Any data processors?	Details: Rural Payments Wales
Will the data be shared?	Details: Data may be shared with delivery Partners and Control and Enforcement bodies (if required and justified): <ul style="list-style-type: none"> • Farming Connect • Natural Resources Wales • Animal and Plant Health Agency • Veterinary Medicine Directorate • Welsh Local Authorities • Food Standards Agency Wales • British Cattle Movement Services (BCMS) • EID Cymru (Multi Species Wales, a replacement of the BCMS) • Regulatory authorities, such as HM Revenue and Customs and the Police

	<ul style="list-style-type: none"> • DEFRA
<p>What is the statutory basis for processing the data? NB – GDPR itself does <u>not</u> provide a statutory legal basis to process personal data.</p> <p>Agriculture (Wales) Act 2023 (see Sections 8 to 10, Section 12 and Part 3 Chapter 1)</p>	
<p>Have legal Services confirmed that the basis outlined above provides the necessary statutory gateway for processing (including any proposed sharing)?</p> <p>Yes</p>	
<p>Will the proposal involve new or significantly changed processing of personal data about each individual?</p> <p>No, the SFS will be delivered using existing Welsh Government processes and IT systems used by RPW and Farming Connect.</p>	
<p>Will the personal data be consolidated, linked or matched with data from other sources?</p> <p>Yes, with data held by Government Gateway (which is being replaced by GOV.UK OneLogin) Farming Connect and potentially EID Cymru (Multi Species Wales) as the scheme develops.</p>	
<p>Will the personal data be used for automated decision making?</p> <p>No</p>	
<p>Will the personal data result in systematic monitoring of data subjects?</p> <p>No</p>	
<p>Does the proposal involve new or changed data collection, retention or sharing policies/practices for personal data?</p> <p>Yes, under the new proposal personal data will be shared with Farming Connect</p>	
<p>Do you have a clear retention policy and what practical things are in place for you to ensure that your Retention Policy is applied?</p> <p>Yes, the scheme will adhere to Welsh Government retention policies. The data controller has established disposal routines to meet retention requirements.</p>	
<p>Will the proposal involve the introduction of privacy-intrusive technologies such as</p> <ul style="list-style-type: none"> • Smart cards • RFID tags • Biometrics • Visual surveillance (e.g. CCTV) • Profiling, data mining or logging electronic traffic • Other (please provide details) • Earth Observation and Remote Sensing Digital image and video recording of aerial photography and satellite imagery of land parcels claimed by farming businesses – personal information not included • Locator technologies (e.g. GPS, mobile phone tracking) – Geo-tagged photos of project works submitted as evidence by claimants – personal information not included 	
<p>Will the proposal involve new or changed identity management or authentication processes?</p> <p>Yes. The data controller will be changing authentication processes from Government gateway to Gov.Uk One Login</p>	
<p>Will the proposal have the effect of enabling identification of individuals who were previously anonymous?</p> <p>No</p>	

For completion by Information Rights Unit

<p>Is a Data Protection Impact Assessment (DPIA) required for this proposal?</p> <p>Yes, Article 35(1) of the UK GDPR states that a DPIA is required when processing is “likely to result in a high risk”. The Article 29 Working Party (WP29) has set out nine criteria that should be considered and meeting two or more of these would require a DPIA to be carried out. This proposal meets the following WP29 criteria:</p> <ol style="list-style-type: none"> 5. Data processed on a large scale. Met due to the potential number of individuals engaged, the duration of the processing and the geographical extent of the processing. 6. Matching or combining datasets. Met due to the data being linked to data held by OneLogin, Farming Connect and potentially EID Cymru. <p>Article 35(4) requires the ICO to publish a list of processing operations that are likely to be high risk and require a DPIA. The ICO’s list includes 10 types of processing that automatically require a DPIA, one of which is:</p> <ul style="list-style-type: none"> • Match data or combine datasets from different sources. <p>This will be met due to the data being linked to data held by OneLogin, Farming Connect and potentially EID Cymru.</p> <p>Please see below for the DPIA.</p>
<p>Has advice on UK General Data Protection Regulation (UK GDPR) compliance been provided?</p> <p>Yes (as below):</p> <p>Does the proposal require a Privacy Notice to be drafted?</p> <p>Yes. To inform data subjects accessing the scheme of how their personal data will be processed.</p> <p>Does the proposal require consultation with the ICO under UK GDPR Art 36(4)?</p> <p>No. However, the ICO will need to be consulted if, after completing the DPIA and having mitigating measures in place, it identifies high risk.</p> <p>Does the proposal require a contract between Welsh Government as data controller and a third-party processor?</p> <p>Yes. With external delivery partners who have a role in administrating and validating the scheme and who will be processing personal data on behalf of the Welsh Government.</p> <p>Does the proposal require a data sharing agreement to be drafted?</p> <p>Yes. With delivery partners the Welsh Government will be sharing personal data with, in order that those delivery partners to undertake their legal duties. Upon receipt of personal data, the delivery partners will become controllers and need to ensure their processing is compliant with the UK GDPR.</p>

Data Protection Impact Assessment (DPIA)

Identify the key privacy risks and the associated compliance and corporate risks. Larger-scale PIAs might record this information on a more formal risk register.

Privacy Issue	Corporate Risk	Compliance Risk	Organisational Risk
<ul style="list-style-type: none"> • Inadequate disclosure controls that increase the likelihood of information being shared inappropriately. • The context in which information is used or disclosed can change over time, leading to it being used for different purposes without people's knowledge. • The sharing and merging of datasets can allow organisations to collect a much wider set of information than individuals might expect. 	<ul style="list-style-type: none"> • Non-compliance with the data protection legislation can lead to sanctions, fines and reputational damage. • Information is inconsistent between services leading to ineffective or inefficient services 	<ul style="list-style-type: none"> • Non-compliance with the Privacy and Electronic Communications Regulations (PECR). • Non-compliance with the GDPR. 	<ul style="list-style-type: none"> • Information, which is collected and stored unnecessarily, or is not properly managed so that duplicate records are created, is less useful to the business. • Data losses which damage individuals could lead to claims for compensation

Privacy solutions

Steps that will be taken in order to reduce a privacy risk may include:

- Deciding not to collect or store particular types of personal data.
- Devising retention periods which only keep information for as long as necessary and planning secure destruction of information.
- Implementing appropriate technological security measures.
- Ensuring that staff are properly trained and are aware of potential privacy risks.
- Developing ways to safely anonymise the information when it is possible to do so.
- Producing guidance for staff on how to use new systems and how to share data if appropriate.
- Using systems which allow individuals to access their information more easily and make it simpler to respond to subject access requests.
- Taking steps to ensure that individuals are fully aware of how their information is used and can contact the organisation for assistance if necessary.
- Selecting data processors who will provide a greater degree of security and ensuring that agreements are in place to protect the information which is processed on an organisation's behalf.
- Producing data sharing agreements which make clear what information will be shared, how it will be shared and who it will be shared with.

- Consulting with any affected parties both internally and externally. Consultation can be used at any stage of the Privacy Impact Assessment (PIA) process.

Have the risks been eliminated, reduced or accepted? Who has approved the privacy risks involved in the project? What solutions need to be implemented?

Risk	Proposed Solution
<ul style="list-style-type: none"> • Inadequate disclosure controls that increase the likelihood of information being shared inappropriately. • The context in which information is used or disclosed can change over time, leading to it being used for different purposes without people's knowledge. • The sharing and merging of datasets can allow organisations to collect a much wider set of information than individuals might expect. • Non-compliance with the data protection legislation can lead to sanctions, fines and reputational damage. • Information is inconsistent between services leading to ineffective or inefficient services. • Non-compliance with the Privacy and Electronic Communications Regulations (PECR). • Non-compliance with the GDPR. • Information, which is collected and stored unnecessarily, or is not properly managed so that duplicate records are created, is less useful to the business. • Data losses which damage individuals could lead to claims for compensation 	<ul style="list-style-type: none"> • Secure systems to share data. Robust staff training. Robust agreements with 3rd parties. • Clearly articulated, well thought out privacy notices, and strict adherence to the conditions disclosed at collection. • Clearly articulated and agreed usage terms for information collected for the SFS, fully reflected in privacy notices. • Fully adhere to WG corporate processes to ensure that Data Protection legislative requirements are met. • Reuse information across services to ensure consistency. • Ensure technical solution fully addresses PECR requirements. • Ensure that GDPR requirements fully integrated into the system and data collection design. • Ensure that the design solution collects and stores information once, reducing administrative burden for customers and administrators. • Follow WG Corporate information security rules and ensure 3rd parties sign up to the same terms.

Who is responsible for integrating the PIA outcomes back into the project plan and updating any project management paperwork?

Rural Payments Wales

Who is responsible for implementing the solutions that have been approved?

Rural Payments Wales

Who is the contact for any privacy concerns which may arise in the future?

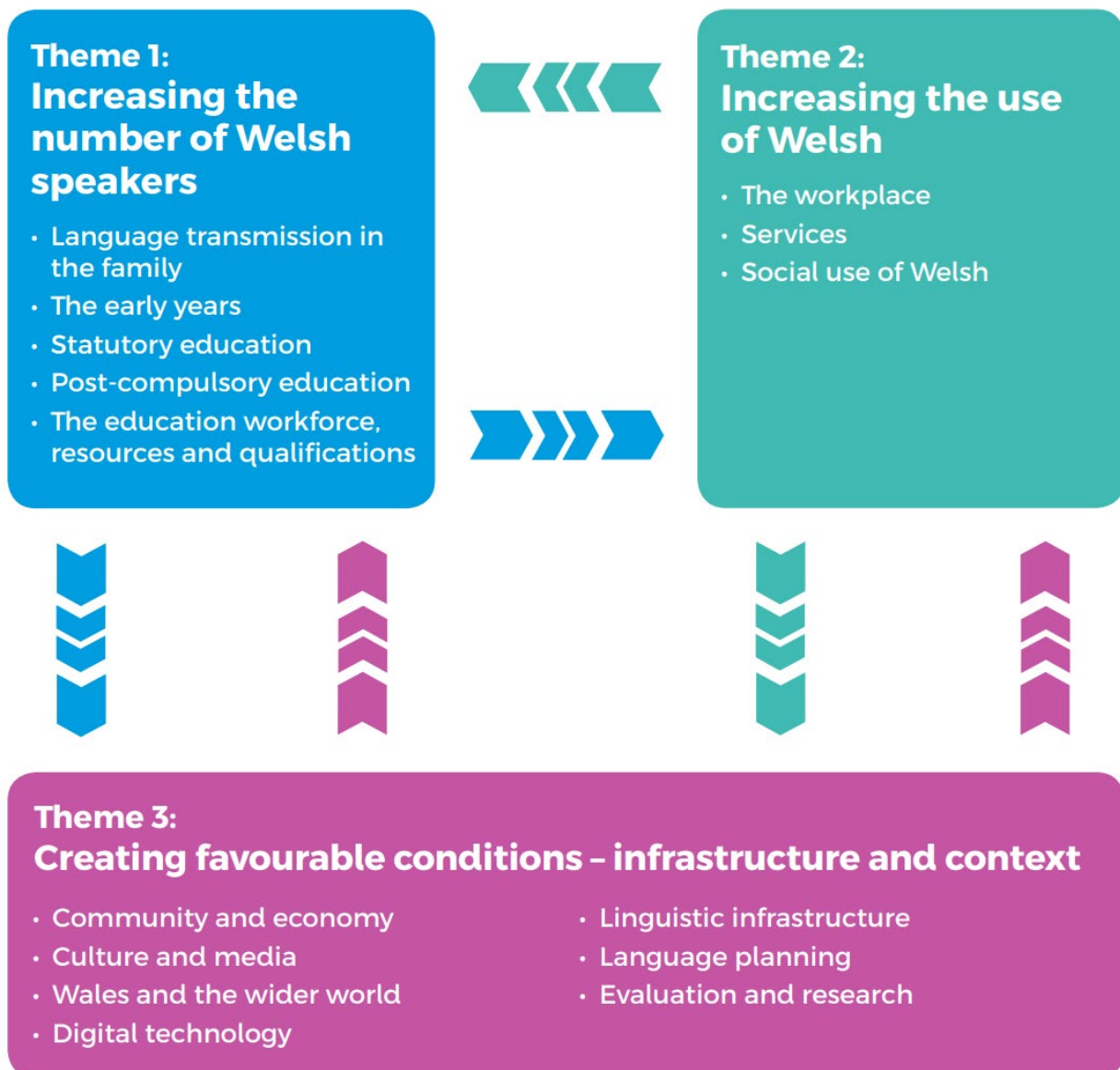
Head of Rural Payments Wales, the Information Asset Owner for Sustainable Farming Scheme operational implementation and delivery.

E. WELSH LANGUAGE IMPACT ASSESSMENT

*Cymraeg 2050*²³⁹ is our national strategy for increasing the number of Welsh speakers to a million by 2050.

The Welsh Government is fully committed to the strategy, with the target of a million speakers included in its Programme for Government. 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.

The *Cymraeg 2050* strategy²⁴⁰ has three interrelated themes:



1. Does the proposal demonstrate a clear link with the Welsh Government's strategy for the Welsh language? – Cymraeg 2050 A million Welsh speakers and the related Work Programme for 2021-2026? Cymraeg 2050 work programme 2021-2026

Context

Census data from 2021 shows 17.8% of people in Wales²⁴¹ aged 3 and over are able to speak Welsh²¹. 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 (64.4%), Isle of Anglesey (55.8%), Ceredigion (45.3%) and Carmarthenshire (39.9%). These local authorities are all largely rural in nature. The local authority with the highest number of Welsh speakers is Gwynedd (73,600), followed by Carmarthenshire (72,800)²⁴².

*Cymraeg 2050*²⁴³ 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, as well as supporting the Welsh language across the whole of Wales. 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 decreased in the hundred years up to the 2021 Census, from 37.1% of the population in 1921 to 17.8% in 2021. Across age groups, the percentage able to speak Welsh is highest amongst 5- to 15-year-olds²⁴⁴.

Regionally, Carmarthenshire saw the largest drop in the percentage able to speak Welsh between 2011 and 2021 – from 43.9% in 2011 to 39.9% in 2021²⁴⁵. In addition, Powys, Denbighshire, Pembrokeshire and Ceredigion all saw a decrease of two or more percentage points in the proportion of Welsh speakers. Increases in the proportion of Welsh speakers were seen in Cardiff, Vale of Glamorgan, Merthyr Tydfil and Rhondda Cynon Taf. Figure 1a shows the change in the proportion of people aged three and over able to speak Welsh between 2011 and 2021 at the local authority level, and Figure 1b shows the change in the proportion of people aged three and over able to speak Welsh between 2011 and 2021 at the Lower Layer Super Output Area (LSOA) level.

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

²¹ Note that the Census does not ask those living in England about their Welsh language ability

Figure 1a. Change in proportion able to speak Welsh, by Local Authority, between 2011 and 2021²⁴⁶

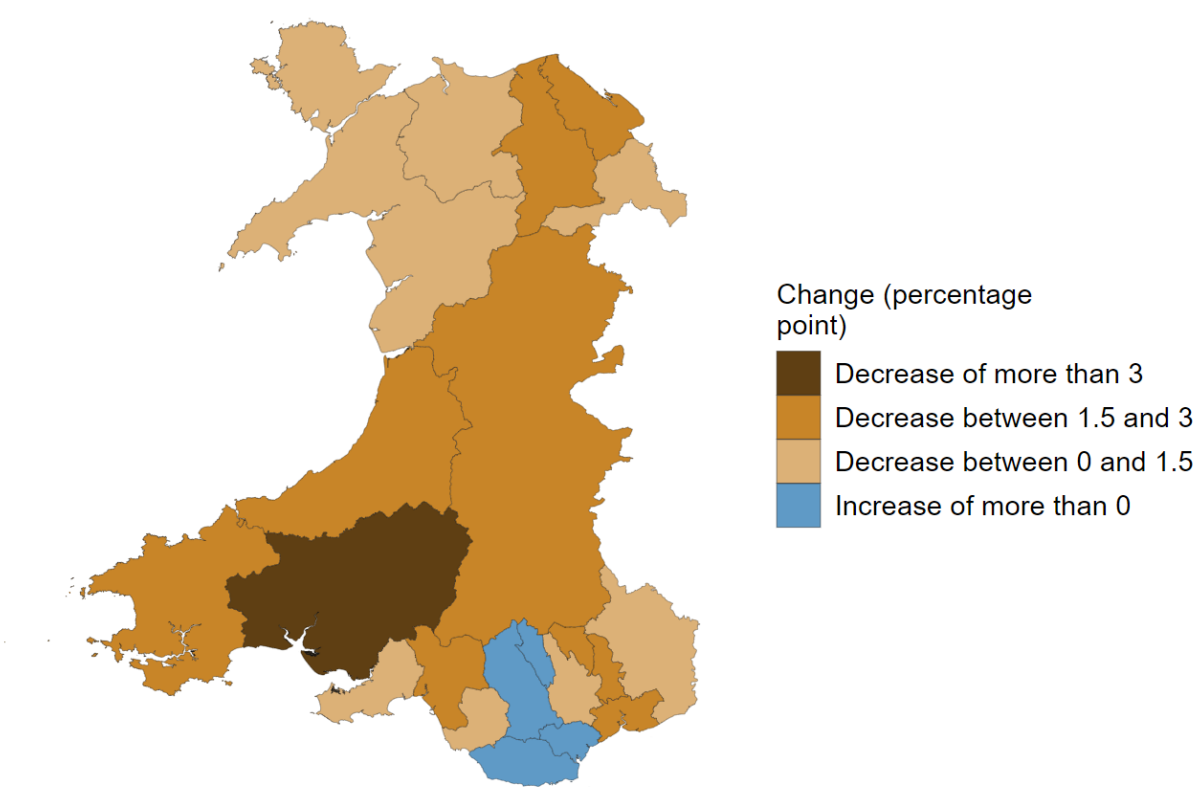
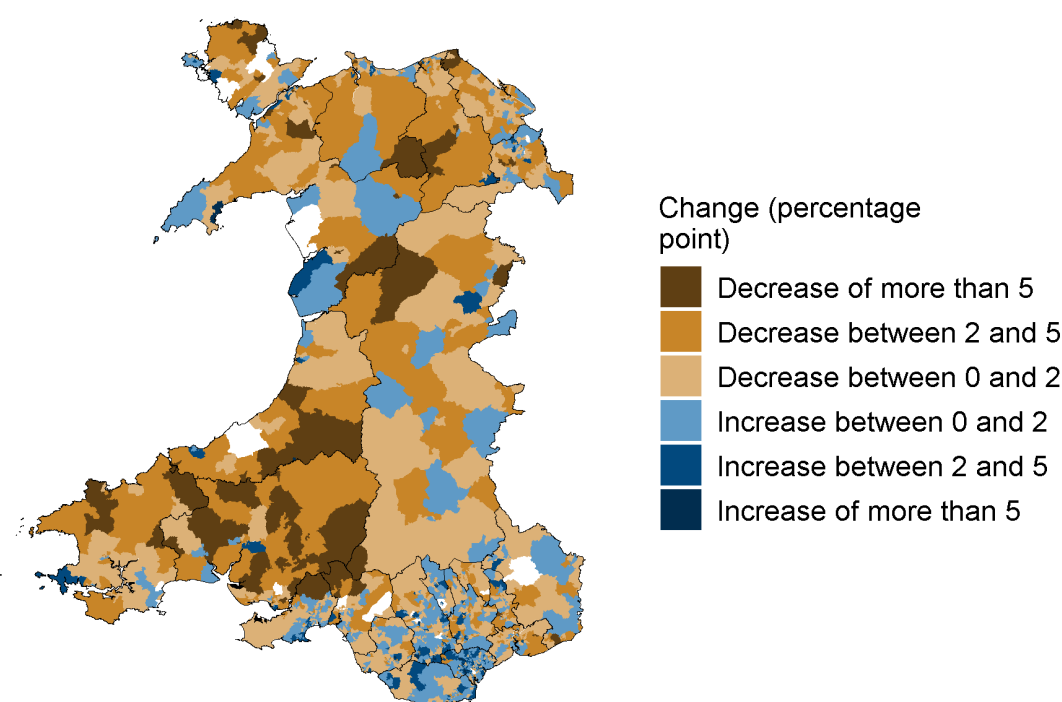


Figure 1b. Change in proportion able to speak Welsh, by Lower Layer Super Output Area (LSOA), 2011 and 2021²⁴⁷



Other data sources:

The Welsh Government publishes a range of other statistics about Welsh language ability from various data sources, from both surveys and administrative data sources. For example:

- The *Welsh Government's National Survey for Wales (NSW)*²⁴⁸ provides statistics about the Welsh language ability of adults aged 16 years or older on an annual basis. It also includes statistics about how often Welsh speakers speak the language, and how fluent they consider themselves to be.
- The *ONS' Annual Population Survey (APS)*²⁴⁹ provides statistics about the Welsh language ability of people aged three years or older. It also includes statistics about how often Welsh speakers speak the language. These statistics are available every three months.

While these data sources should not be compared directly with Census data due to differences in the way that the information is collected for example, they are used to monitor trends in Welsh language ability between Censuses. They also include data on self-reported level of ability and frequency of use. The Census remains the official data source regarding the number of Welsh speakers in Wales.

*NSW data*²⁵⁰ for 2022-23 estimates that 34% of the Welsh population aged 16 and over can speak some Welsh. Of those reporting Welsh language ability, 32% were fluent in Welsh,

15% spoke “a fair amount” of Welsh, 29% could speak “a little” Welsh, and 23% could say “just a few words”²².

APS data for the year ending 30 September 2024 estimates that the number of people aged three and over in Wales able to speak Welsh was 851,700 (27.7% of the population)²⁵¹. The APS also estimated that 19.5% of the population use Welsh at least weekly²⁵².

Information about Welsh language skills in the Census is based on a person’s self-assessment of their ability. In some cases, especially for children, Welsh language ability was reported by another person, for example, a parent or guardian.

Census 2021 was held during the coronavirus (COVID-19) pandemic, on 21 March 2021. This followed periods of lockdown, remote learning for children and many people were working from home. It is not known how the pandemic may have impacted peoples’ reported Welsh language ability (or perception of the Welsh language ability of others).

Differences in the estimates of Welsh language ability between the census and household surveys such as the APS are longstanding, and both the ONS²⁵³ and the Welsh Government²⁵⁴ have explored possible reasons for some of these differences in the past.

While household surveys typically provide us with higher estimates of Welsh-speaking ability, this is the first time that the Census has estimated declining numbers of Welsh speakers, and the APS has estimated increasing numbers of Welsh speakers.

Following the publication of *Census 2021*, we are prioritising work to examine the differences between these data sources in more detail, including the exploration of innovative approaches such as data linking, to ensure we have a coherent evidence base which can be used for decision making.

We have published a workplan²⁵⁵ which outlines the work that the ONS and the Welsh Government are undertaking to improve our understanding of the main survey and administrative data sources used to produce statistics about the Welsh language.

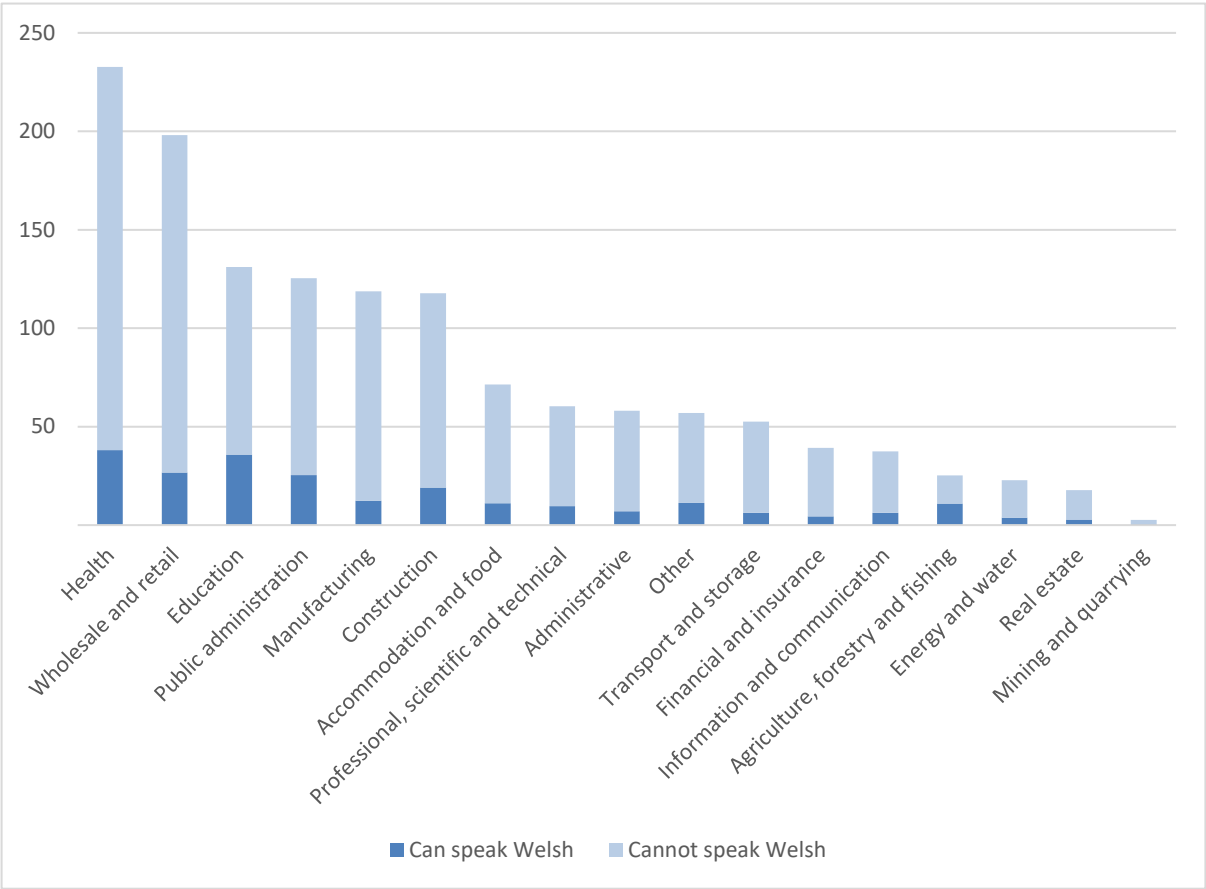
Agriculture and the Welsh Language

Census 2021 data²⁵⁶ shows that despite the small size of the agricultural sector, 2% of all workers in Wales, agriculture accounts for a relatively larger share of all Welsh speakers (5% of all workers who speak Welsh).

The agriculture sector (including fishing and forestry) has the highest proportion of Welsh speaking workers in Wales at 43% (Figures 3a and 3b). This is in comparison with the average for workers across all sectors at 17%.

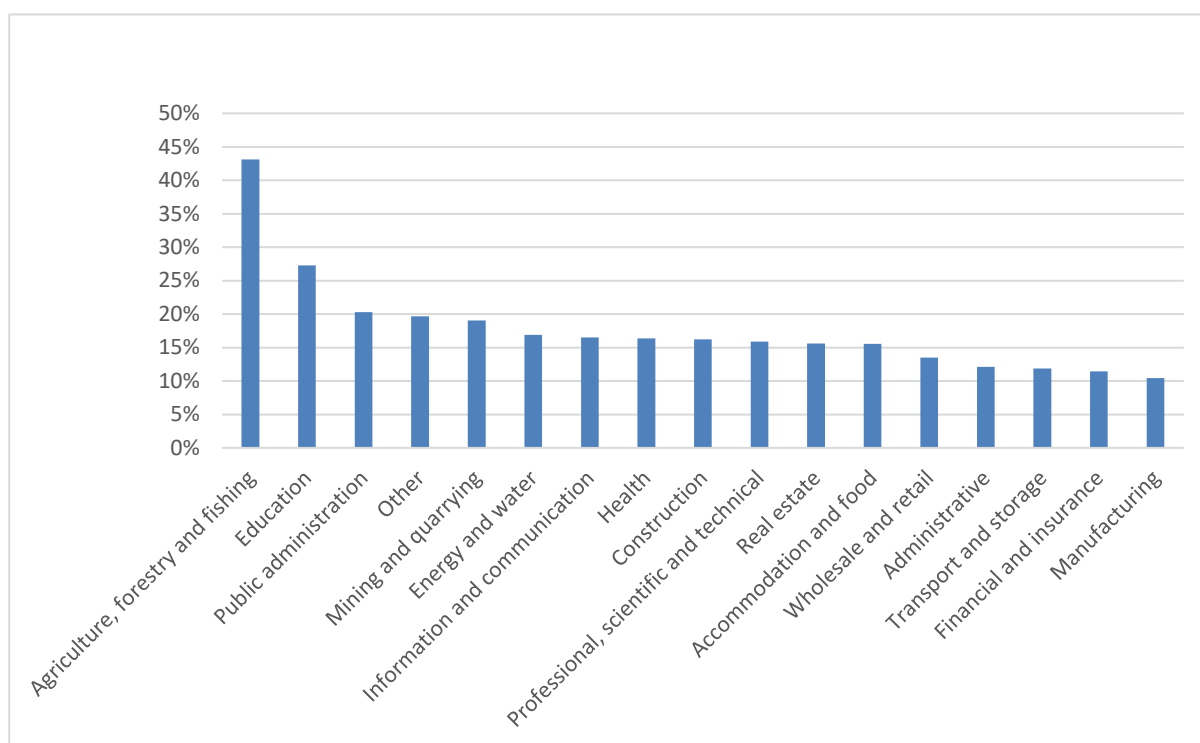
²² For the population (16 and over) as a whole, this equates to 11% being fluent in Welsh, 5% speaking “a fair amount” of Welsh, 11% speaking “a little” Welsh, and 8% able to say “just a few words”. Percentages may not sum due to rounding.

Figure 3a. Number of workers who speak Welsh by industry²³ (thousands), 2021 ²⁵⁷



²³ 'Other' includes Arts, entertainment and recreation, Other service activities, Activities of households as employers, and Activities of extraterritorial organisations and bodies

Figure 3b. Percentage of workers who can speak Welsh by industry²⁴, 2021²⁵⁸

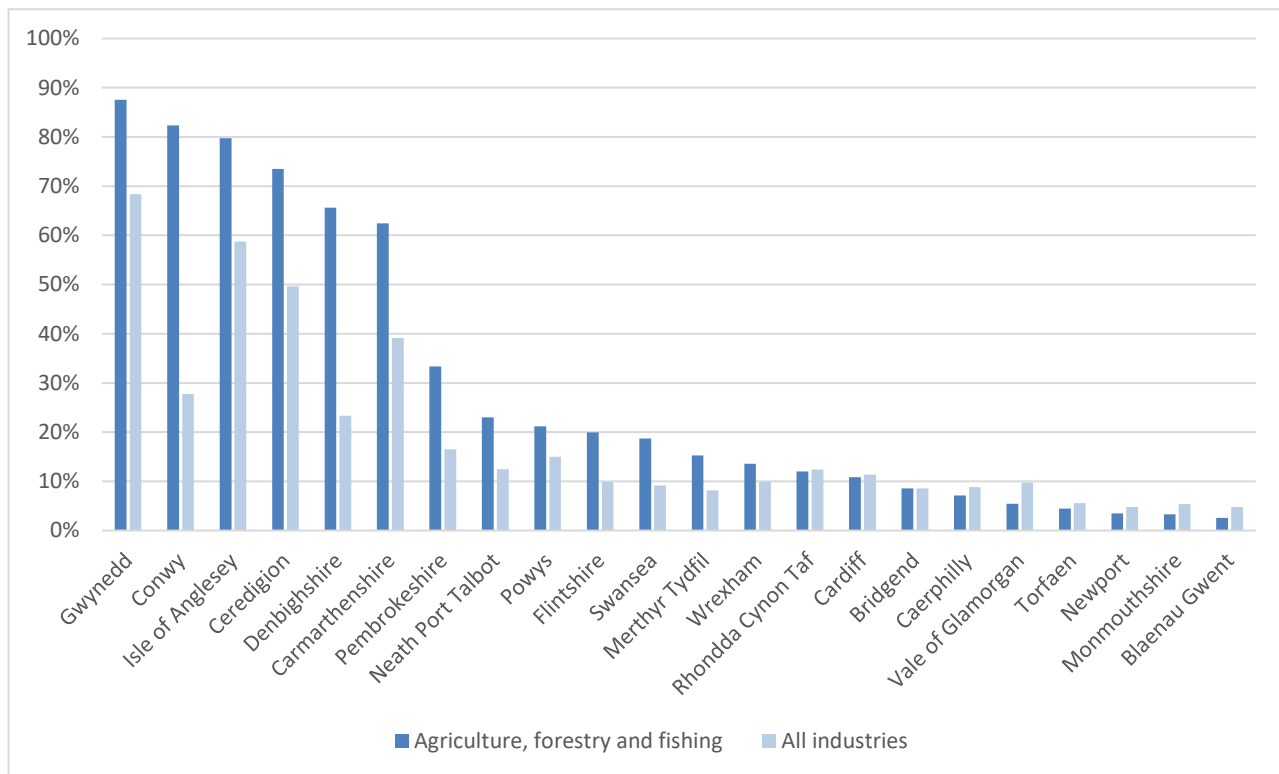


Looking across all local authorities, 88% of agriculture, forestry and fishing industry workers in Gwynedd speak Welsh, which is higher than the average across all industries in the county (68%). In Blaenau Gwent the proportion of Welsh speakers for agriculture, forestry and fishing is 3%, compared with an average of 5% speaking Welsh across all industries (Figure 4)²⁵⁹. There is also variation amongst more rural local authorities where agriculture is a prominent industry. For example, 21% of agriculture, forestry and fishing workers in Powys speak Welsh (a proportion that is above the Welsh average average) compared with 73% in Ceredigion. These more rural local authorities are, in many cases, the same areas which saw larger decreases in the general proportion of Welsh speakers between the 2011 and 2021 censuses (Figure 1a)²⁶⁰.

Higher shares of Welsh speakers within the agriculture, forestry and fishing industry are found in rural local authorities that also have higher shares of Welsh speakers across the whole work force (Figure 4)²⁶¹. However, there is a trend for the share of Welsh speakers within agriculture, forestry and fishing 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 (59%) but the share of agriculture, forestry and fishing industry workers speaking Welsh in the local authority is higher (80%)²⁶². The difference is most pronounced in Conwy and Denbighshire, suggesting a higher relative importance of the industry for the Welsh language in these Local Authorities.

²⁴ 'Other' includes Arts, entertainment and recreation, Other service activities, Activities of households as employers, and Activities of extraterritorial organisations and bodies

Figure 4. Percentage of workers in Agriculture, forestry and fishing who can speak Welsh compared with All Industries, by Local Authority, 2021²⁶³



The three themes of *Cymraeg 2050* are linked, and agriculture already has a high proportion of Welsh speakers relative to other industries. There is the potential, therefore, for greater use of Welsh in agriculture in an environment that has greater potential to provide favourable conditions for the language, compared with other industries. Conversely, any potential negative impacts of changes to the industry generally, such as the displacement of agricultural workers following farm business loss, could lead to negative impacts on the Welsh language through dispersal of Welsh speakers, reduced proportion of speakers in rural areas, a reduction in the everyday opportunities to use Welsh, or a combination of these factors.

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*²⁶⁴ examined the relationship between language ability, use, and employer needs across 8 sectors in Wales. It found:

- 68% of agri-food businesses²⁵ (including agriculture) had staff with Welsh language skills compared with 66% of all businesses; the highest was childcare at 94%

²⁵ Defined using Standard Industry Classification codes. Includes production and manufacturing but excludes retail.

- 34% of agri-food staff in the surveyed businesses were reported to have Welsh language skills, compared with 24% of staff across all businesses; the 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, whereas 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 more favourable conditions for use of the Welsh language compared with other industries, and that this extends beyond interactions occurring within the business. For farms, interactions occurring outside of the business will include trade of animals, fodder, machinery etc. and a variety of other activities. For the 43% of farms²⁶⁵ 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 2021-22*²⁶⁶ suggest Welsh speakers often feel they are part of strong communities; people who agreed that they felt a sense of belonging to their community were more likely to speak Welsh in everyday life compared with those that disagreed. A feeling of belonging is also likely to be associated with interactions with other members of the community, and these interactions may occur in Welsh²⁶⁷.

In their report, *Farming – Bringing Wales Together*²⁶⁸, National Farmers' Union (NFU) Cymru conclude that 'Welsh farmers are key promoters and protectors of Welsh culture, heritage and language', given the high proportion of Welsh speakers in agriculture and the extent to which farmers contribute to their communities. The report emphasises that 'many farmers or individuals involved with the agricultural industry undertake leadership and voluntary roles in rural communities which contribute to community cohesion'. Involvement in formal community networks and activities can be related to agriculture (e.g. technical groups, Young Farmers Clubs (YFCs), agricultural shows), or be unrelated (e.g. local council, church/chapel, sports clubs, community support groups, music and drama groups), while other networks will be less formal (friendships, chatting with neighbours). Through involvement in these networks, Welsh speaking agricultural workers and their families support the use of Welsh in a variety of settings.

Welsh language and the Sustainable Farming Scheme

Given the high proportion of Welsh speakers within the agriculture industry, changes to the structure of the agricultural sector have the potential to alter the contribution the sector has on the resilience of the Welsh language. This is particularly relevant if there is a change to the outward migration of Welsh speakers from rural areas as a result of the Sustainable Farming Scheme (SFS), or the inward migration of non-Welsh speakers. These factors will depend, in part, on the economic impacts of the support provided through the SFS. The SFS will provide the principal mechanism through which the Welsh Government will give financial support to the agricultural sector. Independent economic analysis and modelling has been undertaken to provide evidence as to how the proposed changes will impact different farm types and sizes across Wales, this analysis can be found in the SFS Business Case. Further detail on the Economic Impact Assessment can be found in Section 4.

The SFS does not contain specific actions pertaining to the Welsh language; however, supporting the Welsh language within an agricultural context, both directly and indirectly, is set as an objective in the Agriculture (Wales) Act 2023. In the Act, there is also an explicit purpose for which Ministers can provide support to sustain the Welsh language and promote and facilitate its use.

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

The SFS can therefore support and contribute towards *Cymraeg 2050* in a number of ways.

First, the SFS will reward farmers for undertaking actions in line with Sustainable Land Management, which will create a stable income stream for participating farms in rural communities. This income stream will be unaffected by changes in wider commodity markets and the trading environment and therefore help to create resilience for both farm businesses, including for agricultural tenants, and the wider community.

Resilient agricultural businesses contribute to creating employment for younger Welsh speakers both now and in the future, on-farm and in local businesses, therefore supporting the agricultural industry and wider rural communities. This could help retain people in Welsh speaking communities and reduce the need for young people to seek employment elsewhere, helping to address the issue of outward migration in relation to the health of the Welsh Language.

Second, the SFS will, through the framework of SLM, 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 that the land can continue to be farmed in the future.

Third, the SFS will see the continued provision of 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 provided 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 life²⁶⁹.

In addition, the SFS will contain a Collaborative Layer which will encourage and provide opportunities for farmers to work together over larger areas. Getting involved in collaboration will provide opportunities for Welsh speaking farmers to work together, give new speakers the opportunity to work alongside native speakers and practice their language skills, and give non-Welsh speaking farmers exposure to the language in their day-to-day work. Collaborative projects are expected to follow the existing Integrated Natural Resources Scheme approach which asks applicants to demonstrate how their proposals will support and encourage use of the Welsh language, and we anticipate that SFS participants would be encouraged to do the same.

2. 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 the sustainability of Welsh speaking communities (both positive and/or adverse effects)?

The primary impacts on Welsh speaking communities will come through the general provision of support to the agriculture industry, which has a particularly high proportion of Welsh speakers. Research²⁷⁰ on 'Small'²⁶ and 'Very Small'²⁷ farms in Wales provides some understanding of the role of Welsh farms in their communities. Between them, these Small and Very Small farms account for 87% of all farms in Wales. Very Small farms account for 59% of Welsh farms, but a proportionally lower amount of standard output (5%) and land (15%). Small farms (28% of Welsh Farms) account for 22% of output and 45% of farmland. Small farms are more likely to resemble a 'traditional' family farm and Very Small farms more likely to be considered a 'lifestyle farm'.

The research found that farmers on Small farms were more likely than those on Very Small farms to²⁸:

- Have previous experience of farming*
- Have inherited or taken over the family farm
- Be generating income from the farm to make a living*
- Be reliant on trade surplus and Basic Payment Scheme (BPS) payments for their living
- Be participating in an agri-environment or conservation scheme*
- Be able to speak Welsh fluently*

²⁶ Defined as farms with a standard output between €25,000 and €125,000.

²⁷ Defined as farms with a standard output below €25,000.

²⁸ *Indicates that the finding is statistically significant.

- Speak Welsh daily
- Speak Welsh in the home*
- Be involved in 'many' social or farming organisations
- Engage, collaborate and socialise with other farmers*
- Report feeling part of the farming and rural communities

Farmers on Very Small farms were more likely to have purchased their farm, be involved in a 'few' social or farming organisations, and were twice as likely to be educated to degree level.

Welsh speaking farmers were found to be more likely to feel part of the rural community and reported higher levels of involvement in social and farming organisations than those who did not speak Welsh. Welsh speakers were also more likely to have inherited their farm, with non-Welsh speakers more likely to have purchased it.

This evidence suggests that the farmers who are farming to make a living, and are more likely to be engaging with government support schemes, are also those who are more likely to be Welsh speakers, part of well-established farming families, and have higher levels of participation in their local communities. It is important to note that the study does not consider the characteristics of Medium, Large, or Very Large farms²⁹. Given that these Small farms are more likely to be in receipt of BPS, then it follows that they will be more likely to be impacted by any changes to the support system, either positively or negatively. If farms are unable to continue trading, then there could be subsequent impacts for the local farming community, the local rural community, and the Welsh language, depending on what happens to the farm and the farming family in those circumstances.

A study on social capital in hill farming in Cumbria²⁷¹ noted that having fewer large farms in an area is substantially different to having lots of small farms, in terms of social capital and scope for collaborative efforts. It also noted the strong bonds of trust and casual agreements that have developed and been in place over many years and multiple generations (e.g. for collaboration and commons grazing arrangements). The evidence from Cumbria suggests that changes in the number and structure of farms can lead to the weakening of social capital and community cohesion; in Wales, this could also impact on the Welsh language and the sustainability of Welsh speaking communities.

The Welsh Government aims to promote the sustainability of farms through the SFS, supporting them to become more resilient to the challenges presented by climate change and changes in the trading environment. In addition, by producing food and 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.

In their report on the *triple challenges of Brexit, Covid-19 and Climate Change, Public Health Wales*²⁷² highlight that farmers, agricultural workers and those in rural communities may be

²⁹ Defined as farms with a standard output between €125,000 to €250,000, €250,000 to €500,000 and more than €500,000 respectively.

disproportionately impacted by climate change through factors such as lost employment, reduced economic output and worsening working conditions due to extreme weather events. The SFS is designed to support farmers to take necessary action in the face of the climate emergency and build resilience to mitigate against the effects of climate change. This should, in turn, help support the sustainability of Welsh speaking rural communities.

The SFS has been designed on the principle it should be available to different types of farm, including tenant farms. There will also be a period of transition between the current system of support and the proposed SFS to allow farms to adjust and to ensure no farmer experiences a sudden cessation of their current Basic Payment Scheme payments, regardless of whether or not they choose to join the SFS.

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 arising from the SFS. The SFS will support continued professional development, by requiring participants to complete a minimum of 6 hours of learning, plus Health and Safety learning, each Scheme year as a specific Universal Action and offering opportunities for further learning under the Optional Layer.

Supporting a thriving agricultural industry should provide 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. This contributes toward the *Cymraeg 2050* goal of creating favourable conditions for the Welsh language; a benefit to fluent speakers and learners alike.

As is currently the case through Farming Connect there will be a variety of training opportunities available within and alongside the SFS to those working in agriculture, which will be delivered bilingually, in line with the Welsh Language Standards. Bilingual courses and learning material will provide opportunities for learners to immerse themselves in the Welsh language, and become familiar with industry-specific terminology, which may encourage them to use Welsh more frequently in the course of their work.

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 services 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 SFS will include provision of an advisory service, tailored to supporting the delivery of Sustainable Land Management. This service will be delivered bilingually, in line with the Welsh Language Standards.

Farming Connect is in regular contact with a large proportion of Welsh farmers through its newsletters, knowledge transfer events and face to face support. The service provided via Farming Connect already hosts events and activities delivered in Welsh as the predominant language, which will continue to be a feature of the advisory service in the SFS.

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 SFS will be available bilingually. In dealing with farmers through Rural Payments Wales online, 7.51% of contacts have requested communications in Welsh. However, this does not reflect the level of engagement in Welsh since many of those who have requested correspondence in English revert to Welsh when having face to face or telephone conversations.

In their response to our 2020 consultation, *Sustainable Farming and Our Land*²⁷³, the Welsh Language Commissioner reported hearing anecdotal evidence that written material in Welsh is not as accessible as equivalent material in English. It may also be the case that a lack of Welsh language options in the past has resulted in farmers having grown accustomed to conducting the paperwork aspect of their business in English and simply requesting English correspondence by default. As we continue to develop the administrative aspects of delivering the SFS and associated support services, we will consider what can be done to ensure that Welsh language material is written in a style that reflects everyday speech and vocabulary. Encouraging Welsh speakers (and learners who feel able) to take up Welsh language correspondence options would contribute towards *Cymraeg 2050* by increasing the number of people using Welsh in their everyday lives.

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

To date, 4 consultations (*Brexit and our Land*, *Sustainable Farming and our Land*, the *Agriculture (Wales) White Paper*, and *Keeping farmers farming*) have been completed on the future of agricultural support in Wales. 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 that the Welsh language would suffer considerably. Respondents also emphasised that 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 that 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.

In total, 1,119 responses were received over the course of the *Agriculture (Wales) White Paper* consultation, which also asked respondents to comment on the first draft of the Integrated Impact Assessments. This included 232 responses from individuals and organisations, and a further 887 submitted through a campaign organised by the League Against Cruel Sports. Respondents expressed similar sentiments to the previous two consultations with regard to the Welsh Language, and some offered suggestions on how the proposals could support Welsh language usage, including through encouraging greater bilingualism and the importance of using Welsh more routinely in Welsh Government and across departments.

12,018 responses were received in response to the *Keeping farmers farming* consultation. Responses to questions on Welsh language largely focused on the negative perception that the SFS proposals would be detrimental to farming in Wales and therefore be detrimental to the use of the Welsh language in rural communities. Respondents raised the issue of needed to offer a fully bilingual Scheme, and to highlight the need for advice and guidance to be provided bilingually.

The updated proposals included in the updated Scheme Outline published in November 2024 included a number of changes such as reducing the overall number of Universal Actions from 17 to 12 and removing the proposed requirement for 10% tree cover on each farm. These changes made as a result of partnership work with the Ministerial Roundtable were designed to make the Scheme more accessible to all farmers, including those in Welsh speaking communities.

The Farming Connect report *Iaith y Pridd (The Language of the Land)*²⁷⁴ 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 the Agriculture (Wales) Act 2023 and our design of the SFS:

- 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.

The SFS will reward active management of the land. This will help to support farm businesses, the wider economy and helping to sustain resilient Welsh speaking rural communities. In addition, it is a key principle of the Scheme that farmers should be kept on the land as reflected in the strategic objectives of the Act.

We have engaged in a programme of co-design with farmers and other land managers in our consideration of the SFS. This has helped us to understand potential unintended consequences with regard to the Welsh language. All co-design work was undertaken bilingually, and participants

were able to engage in Welsh if they preferred³⁰. In the first phase of co-design, participants were asked to provide feedback on the scheme's potential impact on the Welsh language and a summary of the responses can be found in section 8.5 of the report²⁷⁵. Responses were mainly focussed on the potential impacts on smaller farms, and respondents expressed both optimism around positive opportunities within the SFS and concern in relation to potential negative consequences. The second phase of co-design was centred on the specific actions proposed for the SFS²⁷⁶. A stakeholder feedback form was available for organisations and other individuals to contribute their views on the outline scheme proposals, and a desire for greater detail regarding practical support for Welsh speakers in the SFS was raised through this mechanism²⁷⁷.

Analytical work has been carried out to estimate the economic impact of the SFS at the farm business, sector and regional levels. The results of this work have informed the assessment of the potential positive and negative impacts of the SFS on rural communities, and therefore the Welsh language as set out in the business case for the Scheme.

How will you know if your policy is a success?

As is currently the case with agricultural schemes, the SFS will be subject to formal monitoring and evaluation to help Welsh Government establish the impact of the Scheme and guide any changes that may need to be made in the future.

Early evaluation of the SFS will focus on topics such as Scheme uptake and participation, and allow us to explore potential barriers, including those related to language.

³⁰ In both phases of co-design, participants were able to complete the surveys and participate in one-to-one discussions in either English or Welsh, a proportion of the group sessions were conducted in Welsh with the remainder undertaken in English but including Welsh speakers. This equated to 8 workshops out of 28 in Phase 1 and 4 workshops out of 17 in Phase 2.

F. BIODIVERSITY IMPACT ASSESSMENT

Ecosystems – their constituent communities of organisms and the physical environment within which they interact – provide the foundations for life on Earth. They regulate our climate and nutrient cycles, provide us with oxygen to breathe, produce raw materials and energy, food to nourish us, and inspire artistic expression, among many other services. Biodiversity, the full variety of life, is the fundamental property of ecosystems that provides stability and resilience to change – allowing the services that sustain our wellbeing to continue.

As with the other UK nations, biodiversity in Wales has experienced many decades of decline and degradation, following at least the Industrial Revolution. Modelled evidence put forward in the latest *State of Nature: Wales* report indicates that Wales is ‘one of the most nature-depleted countries on Earth’²⁷⁸.

Some of the key pressures that have led to biodiversity loss, identified by the UK National Ecosystems Assessment²⁷⁹ and the State of Nature Report 2023,²⁸⁰ include:

- Unsustainable agricultural land management
- Urbanisation
- Pollution
- Climate change
- Invasive non-native species

As approximately 90% of Welsh land is agricultural, the farming sector can play a central role to help reverse the decline of, and enhance, the country’s biodiversity.

The Welsh Government is committed to improving the biodiversity of Wales. Recent policies and acts reflect this goal, together with our commitment to tackling the nature and climate emergency. For instance:

- The Well-being of Future Generations (Wales) Act 2015 contains the ‘Resilient Wales’ goal, which aims for Wales to be ‘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)’²⁸¹.
- Section 6 of the Environment (Wales) Act 2016 places a duty on Welsh Ministers and public authorities to seek to maintain and enhance biodiversity and in so doing promote the resilience of ecosystems and in so doing Welsh Ministers must have regard to the *United Nations Environmental Programme Convention on Biological Diversity of 1992*²⁸².
- The Welsh Government’s Nature Recovery Action Plan²⁸³ states our ambition to reverse the decline in biodiversity. It sets out how the Welsh Government will deliver the commitments of the *UN Convention on Biological Diversity’s (CBD) Strategic Plan* for

Biodiversity and the associated Aichi Biodiversity Targets,³¹ to halt the decline in our biodiversity by 2020 and then reverse that decline. A revised plan is expected to reflect the goals of the Kunming-Montreal Global Biodiversity Framework (GBF)²⁸⁴.

- The *GB Invasive Non-Native Species Strategy 2023 – 2030*²⁸⁵, which Welsh Ministers have adopted, recognises the devastating impacts that invasive species have on biodiversity and includes actions aligning with the *CBD Global Biodiversity Framework* target 6 to reduce the rates of introduction and establishment of INNS by half by 2030²⁸⁶.
- The 2021-2026 Programme for Government committed to ‘embed our response to the climate and nature emergency in everything we do’²⁸⁷.
- The Welsh Government has committed to meet the GBF goals and targets, which includes the target to restore 30% of land, freshwater, and sea by 2030 (the ‘30 by 30’ initiative)³². The Biodiversity Deep Dive recommendations developed ‘a set of collective actions we can take immediately to support meaningful delivery of the CBD ‘30 by 30’ goal, recognising the capabilities we have in Wales and reflecting our duties and approach under the Wellbeing of Future Generations and Environment (Wales) Acts’²⁸⁸. Given the amount of land the agriculture industry manages, a significant opportunity exists for farming to contribute towards delivering this target such as through the restoration and management of protected sites and the creation of ‘other effective area-based conservation measures’^{289,33}.
- The GBF sets the mission: *To take urgent action to halt and reverse biodiversity loss to put nature on a path to recovery for the benefit of people and planet by conserving and sustainably using biodiversity and by ensuring the fair and equitable sharing of benefits from the use of genetic resources, while providing the necessary means of implementation.* The GBF has 23 action-oriented global targets for urgent action over the decade to 2030²⁹⁰.
- The Agriculture (Wales) Act 2023 has set the objective to maintain and enhance the resilience of ecosystems and the benefits they provide, as one of the Sustainable Land Management (SLM) objectives.

These acts, plans, and policies have prepared the ground for the Sustainable Farming Scheme (SFS), which is intended to support several positive environmental outcomes under the SLM

³¹ 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.

³² ‘30 by 30’ refers to protecting and effectively managing at least 30% of our land, freshwater, and sea for nature by 2030. It is one of a number of targets which form part of a Global Biodiversity Framework (GBF) agreed at COP15.

³³ Guidance on other effective area-based conservation measures (OECMs) - resource | IUCN OECMs are a key for meeting ‘30 by 30’ and halting and reversing biodiversity loss. The SFS layers, especially the Collaborative Layer, will be a key mechanism for creating OECMs.

objectives. In relation to biodiversity, the SFS intends to deliver against the SLM objective of ‘maintaining and enhancing the resilience of ecosystems’, but in many cases other actions and outcomes within the SFS are expected to also positively impact biodiversity, e.g. improving air and water quality, and reducing green-house gas (GHG) emissions.

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

Embedding Biodiversity

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

The Environment (Wales) Act 2016 and Agriculture (Wales) Act 2023 (the Act) explicitly address the need to maintain and enhance levels of ecosystem resilience, of which biodiversity is a fundamental component. Ecosystem resilience consists of:

- Diversity: both within and between species, and within and between ecosystems
- Extent: areas large enough to sustain populations, support ecological processes and cope with pressures such as predation and the risks associated with climate change.
- Condition: impacts and pressures managed so the environment can support a range of organisms and healthy populations.
- Connectivity: organisms and populations able to move within and between ecosystems.
- Adaptability: ability of ecosystems to adapt to change.

The Agriculture (Wales) Act 2023 requires Ministers to provide support and regulate for agriculture in a way they consider best contributes to achieving the SLM objectives, which includes the objective to maintain and enhance ecosystem resilience. This will embed biodiversity into government decision making.

The SFS has been designed to deliver SLM outcomes, which includes ‘maintaining and enhancing the resilience of ecosystems.’ Biodiversity is the core element of resilience, for example, providing the functional redundancy against which ecosystem processes can be sustained after disturbance. Biodiversity has therefore been a foundational component of the SFS design from its early stages. The SFS Actions, in all layers of the Scheme, which aim to deliver other SLM outcomes should also, in many cases, positively impact biodiversity, and vice versa.

The SFS positive outcomes can be expected to have cascading environmental benefits, because of the interdependence between ecosystems. For example, establishing a riparian buffer area (e.g. shrubs and trees along watercourses) to improve freshwater quality can simultaneously create habitat for grassland, woodland, and freshwater species, and reduce chemical pollution reaching the marine environment²⁹¹. Similarly, woodland and hedgerow creation upstream can mitigate

extreme flood and drought risk in freshwater ecosystems, improving water retention, infiltration, and ground water recharge^{292, 293, 294}.

2. Have you considered the impacts and positive opportunities for action for biodiversity at the early stages of thinking or project design?

The SFS aims to integrate positive action for biodiversity at the farm business level. The SFS will enable funding, training, and advisory support to be provided to farms to deliver the outcomes we are seeking, including the maintenance, enhancement and creation of habitats, ecosystem resilience alongside sustainable food production.

The requirements for the SFS Universal Layer will necessitate all participating farms to manage at least 10% of their land to benefit biodiversity. Farmers will be supported to record their existing habitat on the Single Application Form (SAF) which will identify the need for additional temporary habitat, where the required 10% threshold has not been met. The requirement for having a designated site Management Plan and Schedule of Works agreed with NRW will be the basis through which the condition of designated sites are intended to be improved.

Additionally, the adoption of activities available under the Optional Layer on participating farms may be conditional on an assessment by Welsh Government. Such activities may be more complex, targeted, and tailored to each individual holding, and would be supported by technical advisors, and may include actions that could:

- Enhance the condition and quality of semi-natural habitat.
- Identify suitable areas for either creating, or reverting to, habitat.
- Identify species poor marginal areas where woodland creation would be most suitable.
- Act as a signposting and decision-making advisory service to guide and support the farmer in the design and delivery of wider actions tailored to their farms' characteristics and business circumstances.

The Optional Layer activities for organic support and conversion will also encourage biodiversity maintenance and growth. Organic farming systems, with their combination of increased habitat area and forbidding of most artificial inputs, increase the number of species present on farms^{295, 296}. Studies have shown that organic farming may influence greater soil life biodiversity;²⁹⁷ greater floral²⁹⁸ and invertebrate species richness and abundance;^{299, 300} increased bird biodiversity;^{301, 302} and increased mammal biodiversity, particularly for small mammals such as wood mouse, bank vole and common shrew³⁰³.

3. What impacts will procurement have on biodiversity, including global biodiversity?

The SFS is a voluntary scheme intended to positively impact biodiversity. Farms can choose to enter the Scheme, and receive payment for the Universal, Optional and Collaborative Layer Actions suitable to undertake on their particular holding. Many of these actions are designed to contribute towards the maintenance and enhancement of the resilience of ecosystems, and therefore positively impact biodiversity in Wales.

Wales is internationally important for global biodiversity, such as for its seabird colonies off Pembrokeshire, Anglesey, and the Llŷn Peninsula³⁰⁴. 11% of Wales's land area (including freshwater and coastal areas to high watermark) is also, taken together, designated as Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites and National Nature Reserves (NNRs)³⁰⁵. Given the focus on agricultural land, the SFS can be expected to deliver the greatest positive impacts for terrestrial and freshwater habitats, which will include restoration, and conservation of such areas.

The SFS is intended to support the SLM objective of enhancing the resilience of ecosystems, which in turn will contribute to the additional objectives of mitigating and adapting to climate change, as well as conserving and enhancing the countryside and cultural resources, and the sustainable production of food. These outcomes of the SFS are interdependent and could therefore have cascading positive impacts for the environment and biodiversity.

4. Are products sourced sustainably?

The SFS will not of itself source products. However, the Scheme is underpinned by the principle of Sustainable Land Management. Part of this includes supporting farms to become more resilient, enabling them to farm within a competitive and changing world whilst operating within the natural capacity of their land. In turn this will ensure the sustainable production of food, now and over the longer term.

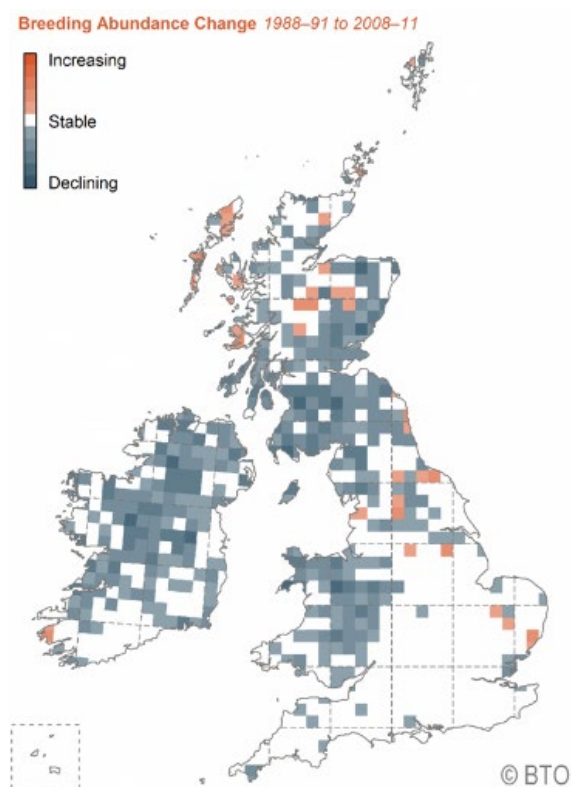
The Optional Layer of the Scheme will also support farmers to enhance and manage the assets on their farms such as woodlands. Woodland management can provide a number of positive environmental benefits such as enhancing habitats, but it can also directly benefit the farm business. Moreover, woodlands can offer the opportunity for growing timber to sequester carbon. A significant economic benefit of managing woodland would be the production of sustainable and responsibly produced timber and wood fuel.

5. Does your project include the use of materials or practices harmful to biodiversity?

The SFS is designed to support the sustainable management of resources in a way which retains and enhances biodiversity. The SFS is intended to raise the environmental performance across Wales by supporting farmers to consider and adopt practices of benefit to biodiversity and appropriate to their farm business.

However, the Scheme in relation to the creation of new woodland and agroforestry could have the unintended potential to harm certain habitats if not managed correctly. For example, a link has been identified between the decline of curlews and other ground-nesting birds and the loss of habitat in relation to agricultural intensification and woodland creation and expansion^{306, 307, 308}. The curlew is currently in a state of rapid decline across Wales, the UK, and the EU (see figure, below). The place-based approach encouraged by the SFS framework will view such biodiversity costs against potential biodiversity benefits.

Figure 5: Map from the latest BTO Bird Atlas showing change in abundance of breeding curlew across the UK³⁰⁹.



As curlew are ground-nesting birds, they depend on specially selected habitat for nesting, incubating, rearing chicks, and avoiding predators³¹⁰. If afforestation occurs in, or near, open landscapes where there were previously little or no trees, changes in habitat can make it unsuitable for them³¹¹. Moreover, curlew are typically site-faithful, which means that breeding pairs will usually return to the same nesting areas every spring; as such, long-term habitat management is a crucially important factor to halt or reverse their decline³¹².

Changes to habitat such as afforestation through the SFS will need to be carefully managed and considered through the HBR process and will have certain exclusions such as where there are priority habitats (see section 7 of the Environment [Wales] Act 2017). In the specific case of curlew, Scheme participants who wish to create new woodland in an Important Curlew Area, will be encouraged to take expert advice or consult NRW for pre-application advice.

6. Does it require partners and beneficiaries to consider the impacts and opportunities for positive action for biodiversity at the early stages of thinking and project design?

As noted above, the requirements to enter the SFS Universal layer include the management of 10% of land for the benefit of biodiversity. From launch of the SFS, therefore, all participants will be required to not only consider but directly work towards creating positive impacts and action for

biodiversity. NRW and farmers will be involved in developing site management plans and a schedule of works on designated sites.

Through the Collaborative Layer, farmers and other organisations are expected to collaborate on projects intended to have a positive impact on biodiversity, with the SFS building on the experience of the current Integrated Natural Resources Scheme.

7. Is the consideration of biodiversity a requirement of funding applications and project specifications?

The consideration of biodiversity is an essential requirement of the SFS. Part of the baseline requirements for entering the SFS determine that all habitat is to be retained and maintained as part of the Universal Layer of the SFS, which all farms must meet in order to receive any funding.

The reporting of habitat areas on SAF will need to be undertaken by all participants as part of the SFS application process. This will determine the mandatory Actions that participating farms either need or can choose to undertake to be financially rewarded for land management practices expected to benefit habitat and biodiversity.

8. Does your evaluation of these seek to ensure that biodiversity is maintained and enhanced?

The SFS has been designed to provide support for agriculture in a way that best contributes to achieving SLM objectives, including the objective to ‘maintain and enhance ecosystem resilience.’ This has embedded biodiversity into the Government support mechanism within the SFS.

Working in partnership with NRW, designated sites will need to have a Management Plan in place by 2030. The Schedule of Works included in the Management Plan will provide opportunities to apply for additional funding within the Optional or Collaborative Layers, and other biodiversity related funding mechanisms for targeted support to improve the management and condition of the site.

As previously discussed, farmers will need to actively manage at least 10% of their land to maintain and enhance semi-natural habitats.

This will be achieved primarily through the retention and maintenance of existing semi-natural grassland habitats; with new or existing broadleaved woodland and/or hedgerows in good condition. However, where there is still insufficient semi-natural habitat available, farmers will need to select actions to create temporary habitat features on improved agricultural land.

Farmers will be required to bring all of their habitat areas into management under SFS to retain and maintain as part of the Universal layer and be financially rewarded for doing so. Options will also be available to reward farmers for creating new habitat, woodland and hedgerows as well as restoring and managing existing ones. Farmers will for example be incentivised and rewarded for restoring and managing existing wildlife ponds and/or establishing a number of temporary ponds

(scrapes) as appropriate on their farm. The area utilised/committed through these Optional Layer activities will be eligible to contribute towards the 10% minimum area managed to benefit biodiversity requirement.

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

The SFS has been designed for integration at farm business level. This will enable farms to access funding, training, and advisory support to deliver SLM outcomes, which include the maintenance and enhancement of ecosystem resilience alongside sustainable food production.

From the outset, farmers will be able to assess the likely level of financial incentives and support available through joining the SFS, and review against independent options they may otherwise consider. The SFS will financially reward participating farms to take undertake actions to directly benefit the maintenance, management, and enhancement of biodiversity.

For instance, farms will be required, under the Universal Layer of the SFS, to bring existing trees and farm woodlands on their holdings, into maintenance. Crucially, this means farmers will be paid to retain and maintain existing woodland. Additionally, under the Optional Layer, they will also be supported to integrate more trees into their farming system and manage existing woodland to benefit their farm, the environment, and wider society. Some of these benefits would include:

- Support to protect our irreplaceable ancient and veteran woodlands, which are important for biodiversity and our heritage.
- Improving air quality by capturing ammonia emissions from livestock housing and slurry stores or buffering sensitive sites such as ancient woodlands from ammonia.
- Enhancing and protecting biodiversity by creating and linking up habitats.
- Improving animal welfare by offering shade and shelter for livestock and biosecurity by thickening farm boundaries with wider hedges and tree planting.
- Lowering the risk of flooding by slowing the flow of water.
- Improving water quality by breaking up surface run-of, improving soil stability and lowering nutrient pollution.
- Reducing the negative impacts of invasive non-native species
- Offering recreation opportunities by allowing the public to access them.

Participating farms may also be supported, through the SFS Optional and Collaborative Layers, to undertake and be financially rewarded for actions that would benefit biodiversity, habitat management, and sustainable production. For instance, these potential support options may include the management of woodland habitat to grow timber to sequester carbon or produce sustainable and responsibly produced timber; and/or further collaborative projects in which farm businesses could manage their woodland collectively for potential actions that would benefit habitat, sustainability, and biodiversity.

Furthermore, at the farm business level, many of the SFS actions could deliver cost savings to the farm business (e.g. soil testing and integrated pest management leading to a reduction in inputs)

as well as biodiversity benefits. For those actions which may not achieve direct cost savings, the ability to provide financial support for them to be undertaken will further support action for biodiversity. In combination, this will support farms to build biodiversity into business planning.

10. Has it considered whole of life costs which include the value of biodiversity and natural resources within the cost benefit analysis, even if this is an informal process?

Outputs from the Environment and Rural Affairs Monitoring & Modelling Programme (ERAMMP) Integrated Modelling Platform (IMP) have informed design of the SFS³¹³. The IMP considers long-term environmental outcomes arising from policy interventions. An overview of the economic impacts of the SFS is provided in Section 4. An analysis of the costs and benefits of the Scheme, which considers the value of environmental outcomes where possible, is included in the Scheme Business Case.

11. Have you thought about how enhancing biodiversity can help deliver across WG's activities for example, to support active recreation, education, flood prevention, and local food growing. (For example, green roofs help to provide wildlife habitats, reduce energy consumption and improve drainage systems.)

The resilience elements of the SFS are intended to support biodiversity, whilst simultaneously delivering other SLM outcomes. For example, as outlined above, the creation of new woodland habitats would benefit biodiversity, and also mitigate against flood and drought risk, improve water and air quality, improve animal welfare, and may in some instances also offer recreation possibilities for the public through improved access to nature. Similarly, establishing a riparian area (e.g. shrubs and trees along watercourses) to improve water quality could also enhance woodland and protect aquatic habitats.

Information and signposting will also be available on Farming Connect for those looking to diversify into timber production, carbon storage, recreation, etc. For instance, opportunities to enhance woodland to become part of the National Forest network can offer enhanced environments for community well-being recreation and the other multilevel benefits it offers.

12. Has it considered the long-term costs of degradation of biodiversity and natural resources, and the potential for savings for health and well-being, flood risk etc?

The SFS requires entrants to meet legal regulatory standards and to deliver against its Universal Actions. Together these set a baseline designed to, at a minimum, retain and maintain the current/existing habitat/biodiversity level.

The Universal Payment is designed to financially recompense and incentivise farmers within the SFS to retain and maintain existing, and potentially develop new, habitat types on their holdings and ensure the degradation of biodiversity and natural resources does not occur.

Some farms may also contain habitats that include designated sites, which require targeted site-specific management. Such sites play a vital role in reversing biodiversity decline, and when well

managed could deliver many of the desired SLM outcomes and ecosystem services that are crucial to achieve our policy commitments and ambitions.

One of these protected habitats includes peatlands, which are amongst the most carbon-rich ecosystems on Earth. Peatlands in Wales store c.25-30% of all soil carbon yet account for only 4% of Wales³¹⁴. In a natural condition, peatlands have a net cooling effect on climate, help manage the storage and supply of water, reduce fire risk, and support biodiversity. They also provide important nesting and feeding grounds for many wading birds, as well as important habitats for rare insects and plants. Due to the unique flora and fauna they support, and their global rarity, blanket bogs have sometimes been referred to as the 'rainforests' of the UK.

Wales holds approximately 82,000-90,000³¹⁵ ha of peatland, but only 10% are deemed to be in a favourable condition³¹⁶. 50% of the peatland resource is designated as SSSI and there is significant area within designated landscapes; c.33% of the resource has no nature or landscape designation. The National Peatland Action Programme has restored 3,000 ha, between 2020 to 2023³¹⁷. An estimated further c.2,000ha has been restored through EU LIFE funding, Heritage Lottery Fund, eNGOs, Water Companies, Glastir and the Sustainable Management Schemes. The SFS has also been designed to assist with the ongoing management and maintenance of peatland habitats and other special designated sites under the management of participating farms.

Management of existing special designated sites and areas of habitat, their improvement in condition and the creation of new ones through the Universal and Optional layers of the SFS has the potential to improve biodiversity, mitigate climate change, and reverse habitat degradation dependent on location, uptake and the baseline condition of the site.

13. Can it encourage partners and beneficiaries to take these costs and savings into account?

At the farm business level, actions within the SFS are targeted at delivering SLM, which can simultaneously deliver cost savings to the farm business (e.g. soil testing leading to a reduction in inputs, healthier livestock, improved soil health and higher yields, etc.) whilst delivering biodiversity benefits. For those actions which may not achieve direct cost savings, the SFS will offer direct financial support for actions to be undertaken further supporting action for biodiversity.

As already outlined, entry into the SFS will involve declaring all existing habitat areas which will help participants understand the requirements they need to meet and facilitate calculation of likely payment through the Universal Layer. This information will help give farmers a whole site baseline for their farms on entry into the SFS, allowing for individual costs and savings to be considered.

Farms participating in the SFS will also be required to undertake, as a minimum, self-assessment once a year against Key Performance Indicators (KPIs). By regularly measuring their performance, farms would be able to compare themselves against their own past performance and the

performance of their peers. This is intended to allow them to identify where improvements can be made to lower their costs and become more sustainable by making better use of their resources. It is expected that the adoption of basic benchmarking using KPIs could lead to a step change in farm performance, increasing a farms' ability to adapt to change and improve their impact on the environment, leading to a more prosperous and resilient industry. Some of the key benefits of benchmarking through KPIs, are expected to include:

- A better understanding of how farm business is performing, allowing them to drill down further if they want to and go on to improve their performance.
- Allow farmers to understand, and evidence, the impacts of the changes they are making on the ground.
- Enable farmers to make more sustainable decisions and lower their carbon footprint, linking to other SFS actions like animal health improvements or making better use of grass.

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

14. Can you work with partners and beneficiaries to promote understanding of biodiversity?

Setting 'maintaining and enhancing the resilience of ecosystems' as one of the SLM outcomes in the Agriculture (Wales) Act 2023, has enabled Welsh Government to directly fund initiatives supporting biodiversity in line with the Nature Recovery Action Plan. This includes the ability to support specialist training and Continued Professional Development (CPD) on biodiversity for farm businesses.

The Welsh Government and its procured service providers will continue to work with stakeholders and delivery partners on an integrated approach to advice and guidance, which along with direct communication and engagement will raise awareness of and support positive actions delivering benefits for biodiversity.

15. Can you promote the benefits of access to biodiversity through the delivery of public goods and services such as social care, community development, health and recreation?

The intention of the SFS is to provide benefits to biodiversity and ecosystems in Wales by supporting farms to undertake actions which deliver SLM outcomes. This is a significant shift from the Basic Payment Scheme (BPS). Through the expected outcomes of the SFS, improvements in soil, water, animal welfare, and air quality should support the sustainable production of food together with the general health of communities.

Inasmuch as agricultural land comprises 90% of all land in Wales, farmers are in a critical position to play a significant role in helping Wales contribute to the global fight against climate change.

For example, one of the intended outcomes of SLM is 'Maintaining and enhancing public access to, and engagement with, the countryside and the historic environment'. The SFS will offer Optional

level support actions to enhance public access. Over two thirds of public rights of way in Wales are on farmland and therefore are a crucial source of access to biodiversity, the natural environment, and our landscapes. Optional Layer activities within the SFS include supporting furniture improvements on public rights of way and improving the visitor experience e.g. information boards about biodiversity. These actions will provide the public with a greater opportunity to enjoy the outdoors and further their understanding of the biodiversity of Wales.

16. Can you provide, or source, specialist training where necessary?

Under the Universal Layer, there will be a requirement for any business owner/partner within the farm business to complete 6 hours of Continued Professional Development (CPD) learning, plus a Health and Safety module, on an annual basis.

This will establish a baseline level of CPD learning for all farmers within the SFS, by providing an overview across a range of key development areas including health and safety. Learning topics and delivery methods will be for the farmer to choose as long as they meet the required criteria. The six hours of learning can be completed in any way. One course of 6 hours can count; equally, 6 hour-long online modules will be acceptable. It is also encouraged that the learning is shared throughout the farm business, farm staff and wider family where appropriate.

The Farming Connect programme will provide training along with other services in support of SFS and aligned to the SLM Objectives.

17. Can you link to other communications strategies and initiatives for biodiversity, for example award schemes, local events?

The SFS intends to positively impact biodiversity. The Scheme's Universal layer will require farmers to actively manage at least 10% of their land to benefit biodiversity. The SAF will support farmers to identify the broad habitat types present against which there will be specific management actions and outcomes a farmer needs to complete and achieve.

The 10% biodiversity target will be achieved primarily through the maintenance of existing semi-natural habitats. This is envisioned to be similar to that already employed in agri-environment schemes such as Glastir, so there is an opportunity to build on existing communications channels to advertise and present communications concerning actions beneficial for biodiversity within the SFS.

Farming Connect will also signpost farmers to advice and information, for example on the timber market if they wish to expand their woodlands beyond the Universal requirement, or if they want to diversify into the timber market.

Improving our evidence, understanding and monitoring

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

Throughout the development of the Agriculture (Wales) Act 2023, and the consultation and co-design development of the SFS, the best available and up-to-date evidence of biodiversity has been used to inform the Scheme and this impact assessment. Future State of Nature reports and ongoing monitoring through the National Field Survey³¹⁸ will continue to form an important part of the evidence base. Outlined below is some key biodiversity evidence of relevance to the SFS.

*State of Nature: Wales, 2023*³¹⁹

The most recent *State of Nature: Wales*³²⁰ reported the following key findings:

- 18% of species are threatened with extinction from Wales³⁴
- There has been an average 20% decline in terrestrial and freshwater species abundance (since data available in 1994)³⁵.
- There are variable patterns of change in the distributions of invertebrate species - the distributions of 993 species declined (33%) and the distributions of 953 species increased (31%).
- The flora of Wales is greatly changing³⁶. Many epiphytic bryophytes have started to recover from the effects of previous industrial pollution while the distributions of flowering plants found in upland habitats have declined.
- Wales is a 'stronghold' for seabirds with 7 regularly monitored species of seabird showing little change in abundance in Wales since 1986³⁷ whereas declines in average abundance have been recorded in other areas of the UK.

SoNaRR

*The Second State of Natural Resources Report (SoNaRR): Assessment of Biodiversity*³²¹ identified the following opportunities to support ecosystem resilience on enclosed farmland, in particular:

- Create resilient ecological networks by restoring and creating habitats within and around production systems.
- Agroforestry and hedgerow expansion. Increase the numbers of trees and hedges to sequester carbon and increase ecosystem services while maintaining the primary purpose of food production.
- Promote nature-friendly land management with horse owners. Approximately 6% of Enclosed Farmland is managed for equines. Currently this land is not considered in land use policy and is often poorly managed.
- Sustainable use and management of nutrients. Use soil analysis, nutrient planning and precise application methods to minimise artificial inputs and meet crop requirements.

³⁴ Of 3,897 species that have been assessed using Red List criteria

³⁵ Within this general trend, 140 species have declined in abundance (37%) and 107 species have increased (28%).

³⁶ Since 1970 the distributions of 42% of flowering plant species have decreased across Wales and 40% have increased. For bryophyte species the distributions of 44% have decreased and 46% have increased.

³⁷ To note, there is variation within this average trend, and these figures pre-date the current outbreak of Highly Pathogenic Avian Influenza.

- Promote interventions to prevent ammonia release to the air including covering slurry stores, restricting urea-based fertilisers and injecting slurry.

Glastir Monitoring and Evaluation Programme (GMEP)

The GMEP programme³²² monitored ten high level outcome biodiversity indicators which cover the countryside as a whole and for Priority Species and Habitats. These results inform assessment of future Glastir impacts and long-term national trends. The baseline assessment, in particular, identified:

- Changes in habitat condition as a result of management can take a long time to be realised, highlighting the importance of consistency in approach
- Areas which have been targeted for improvement over a number of years, e.g. Blanket Bog and Purple Moor Grass and Rush Pasture, have seen an improvement in condition
- An increase in hedgerows being managed but a decline in woody species richness
- Positive trends over the last ten years for the presence of plant species indicating good condition for habitat and improved land. No change for woodland and arable

Wales National Trends and Glastir Evaluation

This ERAMMP report³²³ evaluates the current national trends of Wales' natural resources and the outcomes of the Glastir agri-environment scheme. Some of the key findings, include:

Landcover

- 7% increase (+23,600ha) in woodland cover; Glastir funded the planting of approximately 3,780ha (+1%).
- Significant increase (+ 2,200km) in the length of hedgerows planted and restored, the majority funded by Glastir; and there was an improvement in condition.

Biodiversity

- Declines in plant species richness (-8%), bird (-13 to 35%) and pollinator (-23 to 75%) indicators across Wales.
- Land with Glastir management options slowed or halted the decline of plant species richness for Wales as a whole and bird indicators in arable, woodland, grassland and hedgerows.

Broad Habitat

- ERAMMP experts reviewed the evidence as a whole and concluded that 12 (63%) habitats and landscape features were in a state of concern or had declined; 6 were stable (32%); 1 (5%) had improved (Hedgerows) over the last 10 years.

Local Environment Record Centres

Our ERAMMP evidence review included *A Review of the Contribution of Species Records held by Local Environmental Record Centres in Wales*³²⁴.

The ongoing modelling and monitoring programme includes the National Field Survey which enables reporting of long-term trends and has informed our priorities. Biodiversity monitoring is a significant component of this work and provides an important evidence base from which to develop and monitor future support.

ERAMMP Evidence Reviews

The Environment and Rural Affairs Monitoring & Modelling Programme (ERAMMP), has provided evidence in relation to the SLM of the Welsh agricultural landscape through collaboration with a large consortium of partners, bringing the best of their expertise and ongoing activities across the monitoring and modelling community.

The programme aims to provide business-critical evidence and expertise through the three interrelated components of **Monitoring** (the National Field Survey), **Modelling** (the Integrated Modelling Platform) and the provision of **Evidence** and expert advice.

We have commissioned a range of evidence reviews from ERAMMP³²⁵ to inform our proposals for the SFS, including on the following issues relevant to biodiversity:

- Soil nutrient management
- Sward management
- Ecosystem resilience
- Flood risk management
- Systems approach to greenhouse gas emission reductions
- Improving air quality

These evidence reviews were part of a wider evidence pack produced by a community of reviewers across disciplines. This ensured a consensus was established and a rigorous, up to date evidence base was provided for policy development. Together, some 849 peer-reviewed research papers were drawn upon.

Species and habitats of principal importance published under Section 7 of the Environment (Wales) Act

Habitat management actions within the SFS are intended to have a refined list of management actions and measurable outcomes, and a consolidated/grouped number of habitat types and communities, based on the list of Section 7 Priority Habitats within the Environment (Wales) Act 2017, to reduce the size and complexity of habitat options available (a similar approach to Glastir).

A habitat management action review group made up of WG officials and NRW specialists has examined and considered each habitat management action proposal to determine:

- The make-up of habitat types and their groupings to be operationalised under the SFS
- Which elements of each habitat management action and their outcomes should form part of delivery and under which layer
- The verifiability and evidence need of actions
- NRW has been tasked with reviewing the permissions and consents to review the application and consenting process with a view to ensure consistency of approach pan Wales
- A comprehensive habitat list, their related management actions, evidence & verification requirements, consents etc. will be presented to illustrate and capture all of the above.

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

The evidence cited above, includes of some of the key information and sources used to make policy decisions to date on the SFS, and that which will continue to be considered.

As already discussed, all entrants to the SFS will undertake a Habitat Baseline Review Level 1 (HBR1) process in order to capture all habitat types within their holdings. This review will help determine which actions a participant may need to take as part of the SFS, for the duration of the contract. As outlined, above, such actions have been based on up-to-date knowledge of the key impacts on biodiversity.

20. Do you know what the drivers of change and key negative factors are which could arise from your proposal?

The ERAMMP evidence reviews, described above, assessed the logic chain and causal links to outcomes for a range of potential interventions. This work also considered the trade-offs and co-benefits for each intervention³²⁶. Interventions were found to rarely affect only single outcomes indicating opportunity for delivery of multiple benefits but also that trade-offs need to be considered in order to avoid the delivery of one outcome to the detriment of others.

The reviews also highlighted that some potential actions to deliver outcomes had a spatial element related to whether the benefits would be realised or added value could be gained. This was also found for biodiversity actions. For example, undertaking an action across a number of connected farms or at catchment scale can offer the opportunity for added value. Voluntary collaborative funding options within the SFS will support farmers to undertake various collaborative activities at a landscape scale.

21. Are you satisfied that these do not apply or have been avoided?

The SLM framework intends to avoid negative trade-offs by requiring the SFS to consider how SLM objectives can best be achieved. This helps to ensure that drivers of change, and potential negative factors, are considered holistically. Ultimately, due to the Scheme's voluntary nature, farms will be able to consider independently whether or not to participate in it.

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

The Agriculture (Wales) Act 2023 introduced the requirement to monitor and report on the delivery of SLM outcomes, which will be achieved through the SFS. The SFS will be subject to robust monitoring and evaluation and the findings will be made publicly available to inform our knowledge for biodiversity.

23. Can it support citizen-science initiatives, and monitoring schemes?

There is no plan for the SFS to actively contribute to citizen-science initiatives or monitoring schemes at present, but this could be a possibility in the future.

24. Have you ensured that any biodiversity data collected is made publicly available?

In line with the requirements of the Agriculture (Wales) Act 2023, the Welsh Government will report annually about the scale of habitat on farms in the SFS, how they are progressing and, at the end of each reporting period, will provide an assessment of the impact of the support provided. This will include assessment of biodiversity impacts which will be achieved through ongoing monitoring and evaluation, including analysis of biodiversity data collected as part of the National Field Survey. The findings will be made publicly available.

The farm level data can also be used by the farmer to positively demonstrate to consumers and retailers the sustainability credentials of their farm, including in relation to biodiversity.

Governance and support for delivery of biodiversity action**25. Can your proposal support biodiversity action in any way?**

The SFS has been designed to deliver SLM outcomes through supporting the sustainability of the agricultural sector. Many Scheme Actions are designed to directly deliver against the SLM outcome for 'maintaining and enhancing the resilience of ecosystems'; however, many of its other actions (and their anticipated positive environmental impacts) are also expected to benefit biodiversity.

The SFS Universal Actions intended to directly support biodiversity, include:

- Maintenance of all existing semi-natural habitat
- Where a holding has less than 10% existing semi-natural habitat, it will be necessary to create temporary improved land
- The management of existing trees, woodland and hedgerows
- The requirement to have an agreed Management Plan and Schedule of Works in place for designated sites under the farmer's sole control

Voluntary Optional Layer activities that would support biodiversity, may include:

- Management or enhancement of habitats above the 10% minimum including more bespoke site-specific actions
- Make the best use of grassland through alternative approaches to grazing such as introducing multispecies leys and mixed grazing
- The creation of new woodland and the management of existing woodland, including ancient woodland
- Creation, restoration, and re-planting of hedgerows
- Management and control of invasive non-native species
- Farms will have the opportunity to take up actions concerned with the management of peatland (characterised by raised and blanket bogs, wet heaths, mires and fen vegetation types)
- Farmers will be supported to establish a buffer strip alongside watercourses
- Farmers will be rewarded for introducing additional ponds and scrapes where it is appropriate to do so
- Support will be given for the conservation and retainment of water. Farmers will be supported to:
 - Install water harvesting reuse equipment
 - Install clean and dirty water separation infrastructure
- Natural flood management actions such as water harvesting
- Farmers will be supported to deliver more for protected landscapes. These actions will be bespoke to the farm and surrounding area and will align with the special qualities of Areas of Outstanding Natural Beauty or a National Park. This approach is being tested through the new Ffermio Bro: Farming in Designated Landscapes scheme

Voluntary Collaborative Layer activities that would benefit biodiversity, may include:

- Support collective grazing management agreements on common land
- Support collaboration to create interconnected habitats across landscapes through joining up habitat land, taking into account any local or national species recovery priorities
- Support for projects to manage and create joined up woodlands at a scale larger than the individual farm to benefit the farm, environment, and wider society
- Support for projects to restore and manage peatland shared by multiple farmers
- Support for collaborative management of protected sites to deliver SLM outcomes
- Support for collaborative management of invasive non-native species
- Farmers will be encouraged to collaborate across a catchment to lower the risk of flooding. They will be rewarded for taking up actions collectively including practices such as introducing leaky barriers, offline storage areas or floodplain woodland
- Support for landscape-scale collaborative projects which enhance the historic environment and landscape, including in our Designated Landscapes, across multiple farms

26. Can staff get involved in practical action?

Multiple teams within the Welsh Government will be involved in the operation of the Scheme, such as processing applications and making payments, providing guidance, undertaking monitoring and evaluation and in ensuring compliance with the scheme requirements.

27. Can you fund action directly, or indirectly?

The SFS will be a direct funding opportunity for participants.

28. Can you support partnerships and/or collaboration for local and community-based biodiversity action?

As noted above, there are options within the SFS to work collaboratively on enhanced biodiversity and habitat outcomes, which will trigger additional financial support through the SFS.

Can your proposal help to build capacity for biodiversity action?

29. Can you support skills acquisition and training?

We want to ensure our agricultural industry has the right knowledge to be able to improve productivity and resilience and deliver the outcomes we are seeking, including the maintenance and enhancement of ecosystem resilience.

Building skills for biodiversity action has been developed as part of the support offer within SFS. This will be offered through a range of channels including:

- CPD requirements
- Specialist advice
- Knowledge transfer exercises
- Farm demonstration events

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.

The SAF process will help farmers to understand where and how Universal Actions can be applied on farm. Whilst carrying out the review, applicants will have access to relevant data sets, crib sheets, online support and guidance to assist them.

Under the Optional Layer, habitat-management on semi-natural land would involve a more complex, targeted, tailored, narrow and deep approach to management. Farmers who wish to enter this layer would be supported to carry out some of the advanced assessments. This optional level should enable farmers to further advance their specialist knowledge and capability around identifying and managing some of the more nuanced biodiversity opportunities on their land.

Furthermore, where a relevant designated site is identified, a process will be established to administer the instigation of farmer liaison and subsequent site visit to take forward development of the Management Plan. A suitably competent assessor, with the required balance of technical,

administrative and inter-personal skills, and any other specialist deemed necessary given the features of importance on the site, will visit the area. The farmer will work closely with the assessor and management control to ensure what is proposed is workable and deliverable, and to agree the basis for a Management Plan and Schedule of Works that can be implemented under the Optional and Collaborative elements. The plan development process will also act as a form of knowledge and skills training to a farmer in anticipation and readiness for implementation.

Does your proposal ensure the appropriate level of qualifications of those involved in decision making regarding biodiversity?

30. Can your proposal fund capacity building for biodiversity action?

Habitat Actions within the Scheme will be familiar to those with experience of agri-environment schemes. Others will require an additional level of expertise or support. To aid this, and ease farm's ability to enter the SFS when it is launched, farmers will be supported and advised preceding the launch of the SFS.

The Welsh Government will offer an in-depth review where specialised resource will be available, in the form of advisers with the required balance of technical, administrative, and inter-personal skills to support and deliver against the more complex Optional Layer activities.

Furthermore, by requiring farmers to test their soils as part of the Soil Health Universal Action, they will further build the information and knowledge needed to make informed SLM decisions. These decisions may include choosing from the wider list of SFS Optional Layer activities, which will help them improve their soil structure (e.g. minimum tillage) or to make the best use of their muck and fertiliser (e.g. precision application).

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

The SFS has been developed in line with the duties placed on Welsh Ministers within Section 6 of the Environment (Wales) Act 2016.

The SFS Universal Scheme Requirements will ensure all actions and decisions made on the farm by participants will be evidenced to ensure biodiversity is retained and maintained as a minimum. Optional Layer activities made available will, further, contribute towards the enhancement of biodiversity.

Safeguarding species and habitats of principal importance

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

Compliance with regulatory requirements will apply to all farmers in Wales, including those wishing to join the SFS. Confirming regulatory compliance is a requirement of the Scheme and

breaches may jeopardise part or all of the Universal Payment. The SFS will offer payments to farmers across Wales for carrying out a set of Actions which go above and beyond what is required by legislation.

32. Has any requirement for licences, monitoring and/or enforcement been considered and actioned?

Any requirement for licenses, monitoring, and enforcement will be considered and actioned to ensure ongoing compliance with legislation.

33. Has any requirement for EIA/SEA/HRA been identified and actioned?

For the purpose of a Habitats Regulations Assessment (HRA) the Sustainable Farming Scheme programme is not expected to be a plan or project. It is a voluntary Scheme designed to meet the SLM Objectives for those farmers participating in the Scheme.

The requirements of the Universal, Optional and Collaborative Layers are only applied on acceptance of the application to join the Scheme, or individual actions. It is likely that HRA will need to be considered once farmers have entered into the SFS and specific Universal, Optional or Collaborative Actions under the SFS are undertaken on the relevant land that could constitute a 'plan or project' for the purpose of an HRA. The operational process to achieve this will be agreed with NRW in advance of any applications being submitted in 2026.

Conservation and protection of semi-natural habitats outside of designated sites is regulated by various Environmental Impact Assessment Regulations in Wales. In an agricultural context, it is covered by the Environmental Impact Assessment (EIA) (Agriculture) (Wales) Regulations 2017 (as amended), which prohibits agricultural improvement projects on semi-natural land without first applying to Welsh Government for a screening decision.

The methodology for delivering the SFS assessment process will be based on and closely mirror that employed by the Welsh Government's EIA.

The SFS Universal management habitat actions to be carried out will be directly related to the habitat community/vegetation type/category present, or to be created, so that the habitat in question is retained and maintained in good environmental condition in a similar approach to previous sustainable land management schemes. These will be established in the Scheme Requirements document and final Scheme Guidance. Optional Layer activities will be specifically targeted to improve condition or create new habitat.

34. Have any impacts or opportunities for positive action for Section 7 species and habitats been identified and actioned?

As part of the SFS, farmers are expected to have a fully developed and agreed management plan in place ready for implementation where designated sites are under the farmer's sole control.

There are opportunities outside designated sites to enhance priority habitats under the Optional and Collaborative Layers of the Scheme.

Does the proposal seek first to maintain and enhance biodiversity?

35. Have you selected the option which avoids loss and/or damage to biodiversity, and promotes the resilience of ecosystems?

Through its aim of delivering SLM objectives, the SFS is designed to address biodiversity loss and increase ecosystem resilience. Section 25, above, lists many of the proposed actions within the SFS which aim to directly maintain and enhance biodiversity.

36. Only where the balance of environmental, economic, social and cultural benefits³⁸ provided by your proposal is such that there may be some loss of habitat or species, have you sought to enhance biodiversity elsewhere on the site, or, where there is no other option, offsite?

The SFS has been designed to support the SLM objective of ‘maintaining and enhancing ecosystem resilience’. Existing semi-natural habitats as defined by related EIA Agriculture regulations, will be retained and maintained, which includes any semi-natural habitat present above the 10% needed to enter into the SFS. Optional Layer activities are also available to incentivise habitat management, creation, and enhancement. As such, the SFS aims not only to retain and preserve already existing habitats, and the species that depend on them, but also enhance, and create new habitats and work towards the enrichment of biodiversity.

Moreover, where a holding has less than the 10% existing habitat needed to meet the Universal habitat threshold requirement, it will be necessary to create temporary habitat on improved land. These are designed to act as wildlife corridors and pollinator friendly areas on improved grassland, arable land or land used within an arable rotation. The farmer must elect to make up the shortfall by selecting one or more from a variety of suitable management actions. The actions to choose from will include:

- Fallow crop margins
- Unfertilised, unsprayed, and unharvested cereal and linseed headlands
- Fixed rough grass margins on arable land
- Rotational rough grass margins on arable land
- Unsprayed spring sown cereal and protein crop mix with stubbles retained
- Establishment of mixed leys on improved land (also referred to as multi-species or herbal leys)
- Establish a wildlife cover crop on improved land
- Management or control of Invasive non-native species
- Unsprayed, unfertilized and uncultivated buffer adjacent to existing habitat (including open water) on improved grassland
- Late cut improved grasslands

³⁸ Taking proper account of the benefits and intrinsic value of natural resources, including biodiversity, and ecosystems

- Allow improved grassland to set seed

37. Does your proposal contribute to maintaining and enhancing biodiversity across Wales?

As outlined above, the SFS will require entrants to manage at least 10% of their land as habitat. Where there is insufficient habitat available to meet the 10% requirement, farmers will need to select actions to create permanent or temporary habitat features to enhance the biodiversity on their land.

We have conducted a range of evidence reviews (Keenleyside and others)³²⁷ 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 that an estimated 9% of Wales is comprised of semi-natural grassland³²⁸ and around 90% of land is agricultural,³²⁹ the SFS offers the potential to deliver improvements in biodiversity across Wales.

Increasing the resilience of our natural environment

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

Maintaining and enhancing ecosystem resilience is set as one of the four SLM objectives, and a key characteristic of the SFS. Ecosystem resilience is expected to be enhanced through Optional and Collaborative Actions that will support building stronger networks of habitats and promoting connectivity. Evidence shows that the following actions which are consistent with SLM, would help promote habitat connectivity at a landscape scale^{330, 331, 332}:

- 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 wildlife corridors
- Improving the condition of land between habitat patches to increase permeability
- Improving the diversity, extent, connectivity, and condition of landscape features such as hedgerows, field margins and water courses
- Developing networks of habitats
- Encouraging large continuous areas of habitat at a landscape scale

39. Does it work with nature, and consider the use of nature-based solutions first and foremost?

As the SFS aims to deliver SLM outcomes, agricultural businesses will be supported through the SFS to farm in a sustainable way. As such, farms will be supported to work with nature, where

possible, and use nature-based solutions, to improve the sustainability of the agricultural sector in Wales.

40. Are any nature-based solutions native and bio-diverse?

Several nature-based solutions in the SFS are native and bio-diverse. For instance, the SFS will support farmers to maintain, enhance and manage their existing woodland and hedgerow habitats. The Universal and Optional actions that provide this support can benefit the farm business whilst also delivering other social and environmental benefits, such as:

- Improving air quality by capturing ammonia emissions from livestock housing and slurry stores or buffering sensitive sites such as ancient woodlands from ammonia
- Enhancing and protecting biodiversity by creating and linking up habitats
- Improving animal welfare by offering shade and shelter for livestock and biosecurity by thickening farm boundaries with wider hedges and tree planting
- Lowering the risk of flooding by slowing the flow of water
- Improving water quality by breaking up surface run-off, improving soil stability and lowering nutrient pollution
- Offering landscape and recreation opportunities by allowing the public to access them

41. Can it restore or contribute to the restoration of degraded habitats?

Several actions within the SFS intend to restore, or contribute towards the restoration of, degraded habitats. In particular, the Universal and Optional Actions in relation to the protected designated sites network will aim to achieve this. According to NRW's 2020 baseline evaluation project,³³³ which assessed around half of the features on Welsh Sites of Special Scientific Interest (SSSI), showed that:

- An estimated 20% of features are in favourable condition
- Around 30% are in unfavourable condition
- Around 50% are not in a desired state
- Furthermore, most sites in Wales are not under any active management agreement

Wales's SSSI, Special Protection Areas (SPA) and Special Areas of Conservation (SAC) are crucial for biodiversity and are an important part of the farmed landscape. As well as playing a vital role in reversing biodiversity decline, well-managed protected sites can deliver many of the desired SLM outcomes and ecosystem services that are crucial to achieve our policy commitments and ambitions.

Our ambition is for all designated sites, or parts of designated sites under full and sole control of the applicant entering the SFS, to be under effective management by the end of the programme period. As a minimum under the Universal Layer, participants will be required to draw up a management plan for such sites. Under the Optional Layer, however, farmers will be able enter a management agreement and actively work towards the protection and restoration of such protected habitats.

42. Can it contribute to building resilient ecological networks of habitats?

Through the Collaborative Layer of the SFS, farmers will be given the option to work together to link up, build, and manage ecological networks of habitats, building on the experience of the Integrated Natural Resources Scheme. For instance, the SFS may support Collaborative Action for:

- Projects to manage and create joined up woodlands at a scale larger than the individual farm to benefit the farm, environment, and wider society
- The creation of interconnected habitats across landscapes through joining up habitat land, taking into account any local or national species recovery priorities
- The collaborative management of protected sites to deliver SLM outcomes
- Invasive non-native species removal and eradication
- Landscape-scale collaborative projects which enhance the historic environment and landscape, including in our Designated Landscapes, across multiple farms

43. Does the proposal improve site management to improve habitat or species condition at any scale? e.g. planting native species, providing wildflower areas for pollinators, leaving areas of unmown grass; and improving connectivity between valuable habitats

The habitat management actions within the SFS aim to improve habitat and species condition across a range of scales, which will ultimately be determined by the mandatory requirements or voluntary actions of each participant and the particular environmental qualities of their holdings.

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

The SFS will enable the maintenance and creation of landscape features which provide important habitats for wildlife on agricultural land across Wales and will safeguard protections for these habitats which may otherwise have been lost.

The evidence base that underpins the range of actions in the SFS³³⁴ suggests, to increase the resilience of habitat networks in Wales, the 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 in the SFS.

45. Does your proposal support the creation of new habitats, such as local orchards, native hedges, wildflower meadows or other areas of native, bio-diverse green space?

The SFS will support the management, maintenance, enhancement, and creation of new habitat areas within agricultural land.

Under the Universal layer of the SFS, farmers will be required to actively manage at least 10% of their land to benefit biodiversity. This is expected to be achieved primarily through the retention and maintenance of existing habitats. Yet, where there is insufficient semi-natural habitat available, farmers will need to select actions to create temporary habitat features on other agricultural land to reach the 10%. The SFS will also support the creation of new habitats.

Moreover, support will be provided for pastures to revert to flower rich meadows with the right management. New habitat features like these can be even more valuable where they are located to connect areas of existing habitat to allow wildlife to move around the landscape. The SFS will offer additional Optional and Collaborative funding opportunities to encourage the creation of interconnected habitats across landscapes, maximising environmental outcomes at a landscape scale through tailored collective actions.

46. Can habitat creation contribute to developing resilient ecological networks?

The targeting of Optional Layer activities will support the identification of suitable areas to enhance habitats and ecosystems. These include identifying opportunities for marginal semi-natural land, areas for tree planting, and opportunities to create more ponds and scrapes.

Other actions within the SFS Collaborative Layer, for example graziers, landowners and delivery partners working together to improve the condition of commons, will offer opportunities for joined up approaches across different landowners and organisations to connect up and broaden wildlife and habitat networks, which could increase their resilience.

Tackling key pressures on species and habitats

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

Change in land use

One of the key outcomes of SLM is to encourage and create more resilient ecosystems on agricultural land. The intention of the SFS is to encourage small changes in land use in appropriate places to enhance biodiversity and protect habitats rather than attempt large scale land-use changes in localised areas, which could lead to unintended circumstances.

Where there are holdings located within or partly within designated sites, where the applicant has full and sole control and which enter the SFS, the applicant is required to have a management plan drawn up and agreed between relevant parties. This should ensure any potential negative impacts are carefully considered and mitigated before any changes to the land are applied.

Causing air, water, light, noise or vibration pollution?

A number of direct funding opportunities within the SFS are intended to enhance habitats and species and deliver wider benefits such as improved air and water quality which also benefit biodiversity.

SFS applicants will need to consider any potential negative impacts and how these can be mitigated before applying for the additional Optional or Collaborative Layers.

Any proposed changes in land use to achieve SLM (e.g. tree planting to increase carbon sequestration) would need approval through the EIA regulations on an individual project basis over five hectares in the usual way with due regard being given to biodiversity at the intended site.

Increased access to the countryside has the potential to have negative impacts on local habitats and species if users of access are not aware of the Countryside Code and their responsibilities in the natural environment. The SFS will offer additional optional funding opportunities through the Optional and Collaborative Layers to support educational and awareness raising activities for those who may be less familiar with the rural environment. This includes funding information boards to remind visitors of their Countryside Code responsibilities.

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

This would include:

- *Pollution control*
- *Invasive non-native species*
- *Sustainable Urban Drainage Systems*
- *Climate Change, etc.*

Taking action to reduce pollution, control invasive non-native species and mitigate and adapt to climate change are all consistent with the delivery of SLM. Entry to the SFS is also reliant on applicants meeting the regulatory requirements already in place in Wales. Farming Connect will offer advice, training and guidance to support land users to understand and comply with regulatory requirements.

49. How will any negative impacts be mitigated?

Have whole system approaches and native, bio-diverse nature-based solutions been used to reduce pollution and mitigate climate change?

As the SFS has been designed to deliver SLM outcomes, it will encourage a whole system approach to maintaining and enhancing the environmental, social, and economic sustainability of agriculture in Wales. Supporting farmers in planning what action they can take to best deliver these objectives, which include mitigating against climate change, should reduce unintended negative impacts. The Scheme is a whole farm approach to ensure Actions are not localised or selective, therefore farmers are not able choose which fields are not included and therefore where the Scheme requirements do not apply.

The funding support is intended to allow direct action to be taken to reduce pollution and mitigate climate change in agriculture. Many of the outcomes we are seeking can be delivered through actions which deliver cascading co-benefits, further supporting a whole system-approach.

Does your proposal employ best practice for the sustainable management of agriculture, fisheries, forestry and construction?

The Actions and support within the SFS have been developed to consider how to support best practice for the sustainable management of agriculture across Wales. Broadly defined, below, participating farms will be supported to:

- **Reduce, reuse and recycle inputs, nutrients and waste:** The SFS aims to help farms use minimal inputs and make the best use of their resources to have fewer losses to the environment, improving air and water quality and making them more efficient and profitable. This will be achieved through supporting participants to:
 - Make best use of artificial fertiliser through nutrient management and soil testing
 - Prioritise the use of manure and fertility building
 - Make best use of supplements, antibiotics and medicines
 - Minimise use of pesticides and herbicides through integrated pest management
 - Make best use of grassland through alternative approaches to grazing, introducing multispecies leys and mixed grazing
 - Lower the environmental impact of ammonia emissions
- **Reduce on farm emissions and maximise carbon sequestration:** The SFS aims to help farms become more efficient, lower their greenhouse gas emissions, and enhance existing carbon stocks through sequestration. This will be achieved through supporting participants to:
 - Adopt energy efficiency practices
 - Employ the Animal Health Improvement Cycle (AHIC)
 - Manage and maintain semi-natural grassland and restored peatland
 - Create new and manage existing agro-forestry, hedgerows and woodland
- **Protect and enhance the farm ecosystem:** The SFS aims to support farms to work well with their ecosystems, using nature-based solutions for healthy living soils and rich farm and nature diversity. This will be achieved through supporting participants to:
 - Protect soils from erosion and degradation
 - Manage habitats and species, via:
 - Habitat maintenance and creation
 - creation of temporary habitat on improved land
 - Management of designated sites
 - Ensure water is protected from pollution, via:
 - Lowering the risk of diffuse pollution
 - Protected watercourse banks
 - Conserve and retain water, via:
 - The restoration/management/creation of ponds and scrapes
 - Water harvesting and storage

- **Benefit people, animals and places:** We will help farmers to proactively promote and improve their own wellbeing, as well as the wellbeing of their families, workforce, the wider community and their livestock. We will support farms to enhance the beauty of the natural environment and provide opportunities for people to interact with rural culture, landscapes and heritage. This is intended to be achieved through supporting participants to:
 - Maintain and enhance the historic environment, heritage and beauty
 - Enable people to engage with and access the natural environment
 - Ensure livestock have a good quality of life
 - Invest in people providing fair work and creating a valued workforce
 - Be proficient to practice safely and efficiently

Does your proposal include action to support pollinators?

Evidence³³⁵ 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^{336, 337}.

Tying the SFS direct funding opportunities to SLM objectives will address some of the challenges facing pollinators including habitat loss, environmental pollution, and climate change.

Universal, Optional, and Collaborative Actions to maintain and create habitat will benefit pollinators. SFS actions which could be of benefit to pollinators include, but are not limited to:

- Soil testing
- Integrated pest management assessments
- Create new and manage existing agro-forestry, hedgerows and woodland
- Management and maintenance of all existing semi-natural habitat
- Habitat creation
- Management of Designated Sites
- Where less than 10% of habitat exists, the creation of temporary habitat on improved land
- The restoration and management of ponds and scrapes
- Strategic action to tackle invasive non-native species, particularly plants, by supporting collaborative action among farmers and other stakeholders and landowners
- Several of the optional actions will include measures to reduce the impact of invasive non-native animals as well as plants. These options will aid in our statutory requirement to implement a rapid response to the arrival of new invasive species of animal as well as plants, recognising these may spread naturally as a result of climate change
- Under the Collaborative Layer of the Scheme, Landscape-Scale activity actions include the management and control of invasive non-native species (INNS)

G. SOCIO-ECONOMIC DUTY ASSESSMENT

What evidence has been considered to understand how the proposal contributes to inequalities of outcome experience as a result of socio-economic disadvantage?

Socio-economic disadvantage means living in less favourable social and economic circumstances than others in the same society and encompasses a variety of factors. These include income and wealth, but also deprivation in relation to factors such as work, health, and the physical environment.

Farmers

The National Statistics Socio-economic classification (NS-SEC) is a system which uses occupation and employment relations to group individuals into socio-economic groups. It uses the Standard Occupation Classification (SOC) codes and the following categories describing employment relations:

1. Employers – large organisations;
2. Employers – small organisations;
3. Self-employed – no employees;
4. Managers – large organisations;
5. Managers – small organisations;
6. Supervisors;
7. Other employees.

The resulting NS-SEC structure is as follows:

1. Higher managerial, administrative and professional occupations
 - 1.1. Large employers and higher managerial and administrative occupations
 - 1.2. Higher professional occupations
2. Lower managerial, administrative and professional occupations
3. Intermediate occupations
4. Small employers and own account workers
5. Lower supervisory and technical occupations
6. Semi-routine occupations
7. Routine occupations
8. Never worked and long-term unemployed

While the classification itself is reasonably simple and does not necessarily indicate socio-economic deprivation, it is useful in that NS-SEC has been shown to be indicative of peoples' life experiences, behaviours and outcomes. For example, data from the Office for National Statistics

(ONS) shows that NS-SEC is a reasonable predictor of life expectancy³³⁸, maternal age³³⁹, marital status of new parents, and smoking prevalence³⁴⁰. Those in a higher socio-economic category typically live longer and are less likely to smoke, with women giving birth later into adulthood once married. Those in a lower socio-economic category are more likely to experience the reverse, with experiences, behaviours and outcomes that are considered to be less favourable and detrimental to overall health and wellbeing.

Furthermore, the NS-SEC is indicative of employment characteristics, such as “...remuneration (hourly or weekly wages versus monthly or annual salaries, payments for overtime, whether on an incremental pay scheme), job prospects (opportunities for promotion and notice period) and work autonomy (deciding the pace, the timing and/or the planning of tasks)”³⁴¹. Those in a lower socio-economic category are more likely to experience less favourable employment conditions, and there is evidence showing that this has health impacts as well as impacts on income and wealth.

Nonetheless, it is important to note that the NS-SEC does not contain information on level or nature of earnings, hours worked, contract type (if an employee) or education level.

Farmers in Wales are typically self-employed with no employees, or employ a small number of staff, and therefore fall into category 4 in the NS-SEC system. Other farm workers may be classed in categories 4, 5, 6, or 7 depending on their role.

There is, however, a wide variety of experience among farmers with regard to income and wealth, which will impact standard of living and outcomes. In the financial year 2023-24, average farm business income³⁹ for all farms in Wales was £30,700, but there was substantial variation by farm type. The average farm business income for dairy farms was £67,500, the average for cattle and sheep LFA (Less Favoured Areas) farms was £22,200, and the average for cattle & sheep (lowland) farms was £23,000³⁴². While dairy farms have experienced higher average farm business income than other farm types over the last decade, they also experience year-on-year volatility, which leads to uncertainty for farmers.

The majority (68%) of respondents to a 2021 survey of Small and Very Small farms in Wales³⁴³ reported that at least one person in the household was engaged in off-farm employment or self-employment in order to supplement household income. In addition, almost half (47%) of respondents reported running other, non-agricultural activities from their holding. By far the most common activity was provision of tourism accommodation, such as holiday lets, bed and breakfast, camping, and glamping. Other sources of income included contracting work, production of renewable energy and equine activities. Many farming households in the study also reported that, direct payments from the Basic Payment Scheme were an essential part of

³⁹ Farm business income represents the financial return to all unpaid workers (such as farmers, their partners, other family workers etc.) and is comparable to net profit from agricultural activities. It includes income from basic payment schemes and agri-environment payment schemes.

their income, with Small farms being more likely to report this (69% compared with 45% for Very Small farms).

It is evident that despite being in the middle of the NS-SEC classification structure, some farmers face high levels of pressure on their farm business income, and in turn their household income, which may lead to material deprivation and impact on their quality of life. Public Health Wales also cite low levels of income and the uncertainty surrounding the financial viability of the farming sector as a key challenge in relation to the mental health of farmers³⁴⁴.

The Agriculture (Wales) Act 2023 sets Sustainable Land Management (SLM) as the policy framework for agriculture in Wales.

The delivery of SLM objectives through the SFS is intended to positively impact the socio-economic circumstances of farms and rural communities. This is underpinned by the requirement that the objectives should be delivered in a way which:

- a. meets the needs of the present without compromising the ability of future generations to meet their own needs, and
- b. contributes to achieving the well-being goals in section 4 of the Well-being of Future Generations (Wales) Act 2015.

The SFS is expected to impact farmers' socio-economic circumstances in the following key ways:

1. The SFS will provide support for the delivery of the SLM outcomes we are seeking. This can provide participating farmers with an income stream which is stable, and not affected by factors such as market volatility.
2. Specifically, support can be given under the purpose to improve the resilience of agricultural businesses as set out in the Act, in line with the SLM objectives. This contributes to reducing disadvantage in the short term and provides protection against future shocks or sources of disadvantage.
3. Many aspects of SLM can be achieved in ways which offer a financial benefit for the farm business. For example, nutrient management planning supports improved air and water quality but also reduces input costs through reduced fertiliser use. Improved energy efficiency can lead to cost savings.

The change from the current support mechanisms to the SFS has the potential to have negative socio-economic effects. There will be a managed transition to the new system, to ensure there is no sudden cessation in funding for any farmer and mitigate potential negative impacts.

Rural communities

While the biggest impacts of the SFS will be felt by farmers, we recognise the key economic, social, and cultural role that agriculture plays in rural Wales, and as such, the SFS is expected to have an impact on rural communities more generally. Socio-economic disadvantage can lead to

inequality of outcome in areas such as education, health, personal security and living standards. The Welsh Index of Multiple Deprivation (WIMD)³⁴⁵ provides a suite of indicators relating to factors which are linked to deprivation. In general, the picture for households living in rural areas is mixed:

- **Income:** There is no clear trend with regards to Income deprivation in rural areas. Affluent areas in cities and towns tend have the lowest levels of deprivation while the least affluent areas in cities and towns tend to have the highest levels of deprivation. Rural areas fall in between these two extremes.
- **Employment:** Similarly to the Income domain, the extremes of Employment deprivation occur in cities and towns, while rural areas fall on a spectrum between the two.
- **Health:** Rural areas have moderate to good outcomes across all health indicators in the WIMD with no obvious pattern; the most severe health deprivation occurs in urban areas.
- **Education:** The picture for Education in rural areas is very similar to that of Health, with moderate to good outcomes across all Education indicators and no clear pattern.
- **Access to services:** This is the primary domain in which rural areas consistently show high levels of deprivation. For some residents, the distance to services may be manageable and accepted as a sacrifice worth making to obtain other lifestyle benefits associated with rural areas. For others, particularly those who are older or disabled, difficulty accessing services may be especially challenging and directly contribute to a poorer quality of life.
- **Housing:** Rural areas do not generally have high numbers of people living in housing that is overcrowded or in a state of disrepair, however, people in rural areas are more likely to live in housing that is of poor quality or contains serious hazards.
- **Physical Environment:** Rural areas tend to score poorly in relation to access to public green space but have high 'Ambient Green Space' scores due to the inherently green nature of the rural environment in Wales. This is in spite of the fact that the WIMD measure includes public rights of way in the countryside³⁴⁶, although rural households may not have any of these within a sufficiently accessible distance⁴⁰. Pollution levels are most problematic in urban environments rather than rural areas, while the flooding risk varies considerably based on other factors.
- **Community Safety:** Rural areas tend to have lower levels of crime and anti-social behaviour than more urban areas, however, it is important to note that the nature and impact of crime and anti-social behaviour in rural areas can be very different from urban areas.

One way in which the SFS could impact on the WIMD domains in rural areas is through enhancing access to the countryside. Under the SFS, the Welsh Government will be able to

⁴⁰ 5-minute walk or 300m distance.

support on-farm action to maintain and enhance public access to and engagement with the countryside and historic environment. Optional Layer activities include a range of measures that farmers would be able to take to deliver enhanced access, which include improving public rights of way and improving the visitor experience. Moreover, Collaborative projects may also be supported under the SFS to improve access for local communities. Enhanced access to the countryside could be of benefit to those who live locally, but also to those who travel from further afield to enjoy the natural environment.

The domains of Health and Education could also see a positive impact as a result of the SFS; a number of the Actions aim to support outcomes such as cleaner air, cleaner water, and higher animal health, which would have positive impacts on human health.

The SFS is to positively impact rural economies, with potential for a positive impact on income and employment. In turn, sustainability of rural communities will contribute towards positive benefits in relation to social capital, culture, and the Welsh language.

What information has been gained through engagement with those effected by the proposal/decision and specifically those who suffer socio-economic disadvantage?

We have conducted 4 consultations so far, *Brexit and our Land*, *Sustainable Farming and our Land*, the *Agriculture White Paper* and *Keeping farmers farming*. We received many responses from individual farmers in Wales as well as numerous organisations that represent them. *Brexit and our Land* received 521 substantive responses from individuals and organisations in farming, *Sustainable Farming and Our Land* received 198, the *Agriculture White paper* received 30, and *Keeping farmers farming* received 2,345; though it is worth noting that not all respondents provided information on industry background and these figures may be an undercount. We have undertaken two phases of co-design in order to allow farmers – those most affected by the SFS – to help shape the future of farming policy in Wales. The co-design project involved participants of different age, farm type, sector, tenure, and involvement with the Welsh Government schemes.

We have attended in-person events where possible, such as the Royal Welsh Agricultural Society Fairs. Roadshows and other in-person events will run throughout the SFS consultation period in order to reach as many farmers as possible across Wales. 10 information roadshows were held as part of the *Keeping farmers farming* consultation, where approximately 3,200 individuals attended.

Have protected characteristics been considered?

Please refer to the Equality Impact Assessment (Annex B) for more details on how the SFS will impact those with protected characteristics.

Have communities of interest and places interest been considered?

The primary communities of interest with regard to the SFS are the agricultural community and the Welsh language community. Given that the SFS concerns the agricultural industry, the impacts on those in the agricultural community have been considered in detail throughout the impact assessment. Impacts on the Welsh language, those who speak it and those who are learning it, have been considered in the Welsh Language Impact Assessment (Annex E).

In addition, the shift in agricultural policy towards SLM means that environmental organisations represent another substantial community of interest. Such organisations have been active in responding to our consultations; *Brexit and our land* received 160 substantive responses from individuals and organisations with environmental interests; *Sustainable farming and our land* received 32; the Agriculture White Paper received 27; and *Keeping farmers farming* received 226. The SFS is explicitly designed to generate positive outcomes for the mitigation of climate change and the decline in biodiversity. A full Biodiversity Impact Assessment can be found in Annex F, while Section 5 of this document deals with Environmental Wellbeing.

The primary communities of place are the rural communities of Wales more generally. The impacts on those living in Rural Areas are detailed in the Rural Proofing Impact Assessment (Annex C), with additional discussion in the Equality Impact Assessment (Annex B), as demographics in rural communities tend to differ from those in urban environments.

What information has been considered regarding future trends?

The Welsh Government declared a climate emergency in 2019 and a nature emergency in 2021. The *Inequality in a Future Wales: Areas for action in work, climate and demographic change* report³⁴⁷ emphasises the link between climate change and inequality, noting that the poorest and most marginalised populations are expected to be the most impacted by climate change. With this in mind, ensuring that legislation in Wales contributes towards addressing the Climate and Nature Emergencies will have an important positive impact on those experiencing socio-economic disadvantage in our society. This aligns with our *Just Transition Framework*³⁴⁸, under which Welsh Government is committed to transition to Net Zero in a fair and equitable way, ensuring nobody is left behind. Households experiencing deprivation are likely to find it more difficult to be resilient to the impacts of climate change in the future; for example, being unable to afford appropriate modifications to their home or move away from an area that is at risk of flooding. Individuals in health deprivation are most at risk from poor quality air.

In their report, *Rising to the Triple Challenge of Brexit, COVID-19 and Climate Change for health, well-being and equity in Wales*, Public Health Wales (PHW) note that farmers and agricultural workers are among those whose vocation will be most affected by climate change. It is therefore important to produce food and manage land in a way that contributes towards the mitigation of climate change to ensure the viability of farms for the farmers of the future, and the security of food for the nation. The report also identifies rural communities as being particularly vulnerable to the 'triple challenge'.

The Agriculture (Wales) Act (2023) has 4 objectives which the actions of the SFS are designed to meet. Strategic objectives concerning the mitigation and adaptation of climate change, the maintenance and enhancement of ecosystems, and the conservation, enhancement and promotion of the countryside and cultural resources and sustaining, promoting, and facilitating the use of the Welsh language are to be achieved alongside the first strategic objective, which is the sustainable production of food and other goods. The Act is therefore designed to address the future trends of the climate and nature emergency and the SFS will allow for the targeting of specific issues such as air pollution, water pollution, and flood risk. For further details of how we expect the SFS to impact climate change and biodiversity please see the Environmental Wellbeing (Section 5) and Biodiversity Impact Assessments (Annex F).

What data has been considered (National and local)

We have considered a wide variety of data sources and other sources of evidence throughout our impact assessments. These include data such as the Welsh Index of Multiple Deprivation, Census and survey data from the Office for National Statistics, academic literature, and research produced by organisations with an interest in agriculture. In combination, these different sources allow us to assess the potential impacts of the SFS in relation to multiple factors of relevance with regard to socio-economic status.

How could the proposal potentially further exacerbate inequality of outcome experienced as a result of socio-economic disadvantage?

Please provide detail regarding inequalities of outcome likely to be impacted and those people and communities likely to be impacted

It is not expected that the SFS will impact anyone in a manner that exacerbates inequality of outcome due to socio-economic disadvantage.

Nonetheless, we recognise that the SFS represents a substantial change in agricultural policy in Wales, and this will need to be considered so as to minimise the risk of anyone being adversely affected, particularly with regard those who already experience socio-economic disadvantage. In order to mitigate against adverse impacts, there will be a transition period between the current Basic Payment Scheme and the SFS. This will mean that no farmer will experience a sudden cessation of the payments they receive, regardless of whether or not they choose to enter the SFS.

For further detail on how we expect the SFS to impact on different demographic groups, including those with protected characteristics, please refer to the Equality Impact Assessment (Annex B).

How could the decision potentially improve outcomes for those who experience socio-economic disadvantage?

Please provide detail regarding outcomes that will be improved and for who.

The legislative framework of the Agriculture (Wales) Act (2023), and the SFS, are designed to align with existing legislation and the Welsh Government's commitments in regard to the climate and nature emergency, and the wellbeing of future generations.

The first way in which the SFS could support improved outcomes for those who experience socio-economic disadvantage is improved health outcomes. Cleaner air and water in particular will reduce the risks to health, particularly among more vulnerable groups. In addition, enhanced access to the countryside could provide more opportunities for recreation and exercise, benefiting both physical and mental health. Further details on the health impacts of the SFS are provided in Section 2 of this document.

The second way that the SFS could support those experiencing socio-economic disadvantage is through reduced flood and drought risk. People experiencing deprivation typically have reduced agency to change their situation, for example, by moving to a different property if their home is in an area at high risk of flooding. As such, setting Sustainable Land Management as the framework for farming in Wales could be of particular benefit to those experiencing disadvantage, due to the positive environmental outcomes the SFS is designed to enable.

More specifically there are a number of ways in which the SFS is designed to benefit farmers, improving outcomes for those who experience socio-economic disadvantage.

Participation in the SFS will provide farmers with a stable income stream, providing certainty in regard to their own financial situation and also their ability to employ workers and contractors. This stability is intended to provide economic benefits, which in turn may have mental health benefits through the alleviation of uncertainty and financial stress. It is also expected to have positive social benefits through the continued membership of farmers and their families within their communities.

Sustainable Land Management is a holistic framework which is designed to be beneficial for both the environment and farmers. There are actions within the SFS which are designed to help farmers to reduce their costs, having a positive impact on their incomes. SLM is also designed to improve resilience against the negative impacts of climate change as well to directly mitigate against it, which will help farm businesses to prepare for the future and to ensure that the farm remains viable for future generations.

How will you monitor the impact of this decision? (Please consider wider outcomes)

Does new monitoring information need to be collected? If so, what?

The Agriculture (Wales) Act (2023) provides the powers for monitoring and evaluation of Sustainable Land Management as a whole, and of the SFS. A monitoring and evaluation strategy is being developed and will detail how Welsh Government intends to assess the delivery of environmental, economic, social, and cultural outcomes.

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- ¹ [Welsh Government \(2024\), 'Sustainable Farming Scheme: Proposed scheme outline'](#)
 - ² ['Welsh Government \(2023\), 'Agriculture \(Wales\) Bill: Explanatory memorandum'](#)
 - ³ ['Welsh Government \(2022\), 'Sustainable Farming Scheme: Outline proposals for 2025'](#)
 - ⁴ ['Welsh Government \(2019\), 'Brexit and our land: Securing the future of Welsh farming: Our response'](#)
 - ⁵ [Welsh Government \(2022\), 'Sustainable Farming and our land: Our response'](#)
 - ⁶ [Welsh Government \(2021\), 'Agriculture \(Wales\) White Paper: Summary of responses'](#)
 - ⁷ [Welsh Government \(2024\), 'Sustainable Farming Scheme: Keeping farmers farming: Summary of responses'](#)
 - ⁸ [Welsh Government \(2021\), 'Co-design for a Sustainable Farming Scheme for Wales'](#)
 - ⁹ [Welsh Government \(2023\), 'Sustainable Farming Scheme co-design: Final report'](#)
 - ¹⁰ [ADAS \(2023\), 'Sustainable Farming Scheme: Analysis of feedback to the outline scheme proposals'](#)
 - ¹¹ [Welsh Government \(2024\), 'Sustainable Farming Scheme: Carbon sequestration evidence review panel: Summary report'](#)
 - ¹² [Food and Agriculture Organisation of the United Nations \(FAO\), 'Sustainable Land Management'](#)
 - ¹³ [Natural Resources Wales \(2020\), 'State of Natural Resources Report \(SoNaRR\) for Wales 2020'](#)
 - ¹⁴ [Natural Resources Wales \(2020\), 'State of Natural Resources Report \(SoNaRR\) for Wales 2020'](#)
 - ¹⁵ [Osborne R and Evans N \(2019\), 'Friend or foe? UK farmers' relationships with the weather', Journal of Rural Studies, Volume 72, pages 205 to 215](#)
 - ¹⁶ [Osborne R and Evans N \(2019\), 'Friend or foe? UK farmers' relationships with the weather', Journal of Rural Studies, Volume 72, pages 205 to 215](#)
 - ¹⁷ [Bullock J M, and others \(2017\), 'Resilience and food security: Rethinking an ecological concept', Journal of Ecology, Volume 105, pages 880 to 884](#)
 - ¹⁸ [Farmwell Wales](#)
 - ¹⁹ ['Committee on Climate Change \(2020\), 'Land use: Policies for a Net Zero UK'](#)
 - ²⁰ [Naghavi M, and others \(2024\), 'Global burden of bacterial antimicrobial resistance 1990–2021: A systematic analysis with forecasts to 2050', The Lancet, Volume 404, Issue 10459](#)
 - ²¹ [Naghavi M, and others \(2024\), 'Global burden of bacterial antimicrobial resistance 1990–2021: A systematic analysis with forecasts to 2050', The Lancet, Volume 404, Issue 10459](#)

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- ²² See, Wilson E O, (1984) 'Biophilia', Harvard University Press: Cambridge; [Bowler, D E, and others \(2010\), 'A systematic review of evidence for the added benefits to health of exposure to natural environments', BMC Public Health, Volume 10, Number 456](#); [Capaldi C A, and others \(2015\), 'Flourishing in nature: A review of the benefits of connecting with nature and its application as a wellbeing intervention', International Journal of Wellbeing, Volume 5, Number 4](#); [Bratman G N, and others \(2019\), 'Nature and mental health: An ecosystem service perspective', Science Advances](#); [Pritchard A \(2019\), 'The relationship between nature connectedness and eudaimonic well-being: A meta-analysis', Journal of Happiness Studies, Volume 21, pages 1145 to 1167](#)
- ²³ [Welsh Government \(2020\), 'June 2020 Survey of Agriculture and Horticulture: Results for Wales'](#)
- ²⁴ [Newton, J \(2007\), 'Wellbeing and the natural environment: A brief overview of the evidence'](#)
- ²⁵ [Newton, J \(2007\), 'Wellbeing and the natural environment: A brief overview of the evidence'](#)
- ²⁶ [Pretty J, and others \(2006\), '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: Volume 50 , Number 2](#)
- ²⁷ [Pretty J, and others \(2006\), '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: Volume 50 , Number 2](#)
- ²⁸ [Barton J, and others \(2009\), 'The health benefits of walking in greenspaces of high natural and heritage value', Journal of Integrative Environmental Sciences, Volume 6, Number 4, pages 261 to 278](#)
- ²⁹ [Turunen A W, and others \(2023\), 'Cross-sectional associations of different types of nature exposure with psychotropic, antihypertensive and asthma medication', Occupational and Environmental Medicine, Volume 80, Issue 2](#)
- ³⁰ [Health and Safety Executive \(HSE\) \(2024\), 'Work-related fatal injuries in Great Britain, 2024'](#)
- ³¹ [Health and Safety Executive \(HSE\) \(2024\), 'Work-related fatal injuries in Great Britain, 2024'](#)
- ³² [Farming Connect, 'Health and Safety'](#)
- ³³ [Public Health Wales and Mental Health Foundation \(2019\), 'Supporting farming communities at times of uncertainty', Public Health Wales NHS Trust and Mental Health Foundation](#)
- ³⁴ [Burren LIFE Project \(2010\), 'Final technical report'](#)
- ³⁵ [Countryside and Community Research Institute \(2010\), 'Estimating the incidental socio-economic benefits of environmental stewardship: Final report'](#)
- ³⁶ [Countryside Recreation Network, 'A countryside for health and wellbeing: Executive summary'](#)
- ³⁷ [Roberts S E, and others \(2013\), 'High-risk occupations for suicide', Psychological Medicine, Volume 43, Issue 6, pages 1231 to 1240](#)

-
- ³⁸ [Office for National Statistics \(2022\), 'Suicide by occupation, England and Wales, 2011 to 2021 registrations'](#)
- ³⁹ [Public Health Wales and Mental Health Foundation \(2019\), 'Supporting farming communities at times of uncertainty', Public Health Wales NHS Trust and Mental Health Foundation](#)
- ⁴⁰ [Public Health Wales and Mental Health Foundation \(2019\), 'Supporting farming communities at times of uncertainty', Public Health Wales NHS Trust and Mental Health Foundation](#)
- ⁴¹ [Suess-Reyes J S and Fuetsch E \(2016\), 'The future of family farming: A literature review on innovative, sustainable and succession-oriented strategies', Journal of Rural Studies, Volume 47, Part A, pages 117 to 140](#)
- ⁴² [Public Health Wales and Mental Health Foundation \(2019\), 'Supporting farming communities at times of uncertainty', Public Health Wales NHS Trust and Mental Health Foundation](#)
- ⁴³ [Farmwell Wales](#)
- ⁴⁴ [Hounsborne B, and others \(2006\), 'A note on the effect of farmer mental health on adoption: The case of agri-environment schemes', Agricultural Systems, Volume 93, Issue 3, pages 229 to 241](#)
- ⁴⁵ [Public Health Wales and Mental Health Foundation \(2019\), 'Supporting farming communities at times of uncertainty', Public Health Wales NHS Trust and Mental Health Foundation](#)
- ⁴⁶ [Public Health Wales and Mental Health Foundation \(2019\), 'Supporting farming communities at times of uncertainty', Public Health Wales NHS Trust and Mental Health Foundation](#)
- ⁴⁷ [Welsh Government \(2021\), 'Evaluation of the knowledge transfer, innovation and advisory services programme: Final report \(summary\)'](#)
- ⁴⁸ [Public Health Wales \(2020\), 'Air pollution and health in Wales'](#)
- ⁴⁹ [Environment \(Air Quality and Soundscapes\) \(Wales\) Act 2024](#)
- ⁵⁰ [Jones L, and others \(2019\), 'Environment and Rural Affairs Monitoring & Modelling Programme \(ERAMMP\): ERAMMP Technical Annex 8: Improving air quality and well-being', ERAMMP report to Welsh Government](#)
- ⁵¹ [Wales Health Impact Assessment Support Unit and Public Health Wales \(2019\), 'The public health implications of Brexit in Wales: A health impact assessment approach: Technical report: Part 1'](#)
- ⁵² [National Atmospheric Emissions Inventory, 'Ammonia'](#)
- ⁵³ ['Climate Change Committee \(2020\), 'Land use: Policies for a Net Zero UK'](#)
- ⁵⁴ [Fann N, and others \(2011\), 'Maximizing health benefits and minimizing inequality: Incorporating local-scale data in the design and evaluation of air quality policies', Risk Analysis, Volume 31, Issue 6, pages 908 to 22](#)

-
- ⁵⁵ [Health and Safety Executive \(HSE\), 'Fatal injuries in agriculture, forestry and fishing in Great Britain 2022/23'](#)
- ⁵⁶ [Health and Safety Executive \(HSE\), 'Farm child UK: Part 1 and part 2'](#)
- ⁵⁷ [Health and Safety Executive \(HSE\), 'Children and public safety'](#)
- ⁵⁸ [IHS Markit \(2021\), 'Understanding farmer motivations: Very small and small farms', report to Welsh Government'](#)
- ⁵⁹ [IHS Markit \(2021\), 'Understanding farmer motivations: Very small and small farms', report to Welsh Government'](#)
- ⁶⁰ [Well-being of Future Generations \(Wales\) Act 2015](#)
- ⁶¹ [Welsh Government \(2016\), 'Light Springs through the dark: A vision for culture in Wales'](#)
- ⁶² [Natural Resources Wales, 'Area Statements'](#)
- ⁶³ [Natural Resources Wales, 'Area Statements'](#)
- ⁶⁴ [Natural Resources Wales, 'Area Statements'](#)
- ⁶⁵ [Welsh Government \(2024\), 'Sustainable Farming Scheme: Proposed scheme outline'](#)
- ⁶⁶ [Welsh Government \(2024\), 'Sustainable Farming Scheme: Proposed scheme outline'](#)
- ⁶⁷ [National Sheep Association, 'Sheep worrying by dogs survey results'](#)
- ⁶⁸ [UK Government, 'The Countryside Code'](#)
- ⁶⁹ [Prosser H \(2022\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): ERAMMP report 68: Review of GHG emission reduction and carbon sequestration in agriculture to inform agriculture and land use policy', ERAMMP report to Welsh Government'](#)
- ⁷⁰ [Natural Resources Wales \(2020\), 'State of natural resources report \(SoNaRR\) for Wales 2020'](#)
- ⁷¹ [Natural Resources Wales, 'Area Statements'](#)
- ⁷² [Dickie I and Neupauer S \(2020\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERRAMP\): ERAMMP report 40: SFS economic value: Logic chains', ERAMMP report to Welsh Government'](#)
- ⁷³ [Welsh Government \(2025\), 'Sustainable Farming Scheme: Carbon sequestration evidence review panel: Full report'](#)
- ⁷⁴ [Alison J, and others \(2019\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): Sustainable Farming Scheme evidence review technical annex: Annex 3: Soil carbon management', ERAMMP report to Welsh Government](#)
- ⁷⁵ [Welsh Government \(2022\), 'Synthesis of Welsh Soil Evidence'](#)

-
- ⁷⁶ [Tuomisto H L, and others \(2012\), 'Does organic farming reduce environmental impacts? A meta-analysis of European research', Journal of Environmental Management, Volume 112, pages 309 to 322](#)
- ⁷⁷ [Dickie I and Neupauer S \(2020\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERRAMP\): ERAMMP report 40: SFS economic valuation: Logic chains', ERAMMP report to Welsh Government'](#)
- ⁷⁸ [Keenleyside C B and Old G H \(2019\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERRAMP\): Sustainable Farming Scheme evidence review: Annex 9: Flood mitigation', ERAMMP report to Welsh Government](#)
- ⁷⁹ [Natural Resources Wales, 'South Central Wales Area Statement'](#)
- ⁸⁰ [Keenleyside C B and Old G H \(2019\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERRAMP\): Sustainable Farming Scheme evidence review: Annex 9: Flood mitigation', ERAMMP report to Welsh Government](#)
- ⁸¹ [Keenleyside C B and Old G H \(2019\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERRAMP\): Sustainable Farming Scheme evidence review: Annex 9: Flood mitigation', ERAMMP report to Welsh Government](#)
- ⁸² [Keenleyside C B and Old G H \(2019\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERRAMP\): Sustainable Farming Scheme evidence review: Annex 9: Flood mitigation', ERAMMP report to Welsh Government](#)
- ⁸³ [The Royal Society \(2020\), 'Soil structure and its benefits'](#)
- ⁸⁴ [The Royal Society \(2020\), 'Soil structure and its benefits'](#)
- ⁸⁵ [National Atmospheric Emissions Inventory \(2025\), 'Greenhouse gas inventories for England, Scotland, Wales and Northern Ireland: 1990-2023'](#)
- ⁸⁶ [AFN Network \(2019\), 'National Farmers Union: Achieving net zero: Farming's 2040 goal'](#)
- ⁸⁷ [Convention on Biological Diversity \(CBD\) \(2009\), 'CBD technical series number 41: Connecting biodiversity and climate change mitigation and adaptation: Report of the second ad hoc technical expert group on biodiversity and climate change'](#)
- ⁸⁸ [Convention on Biological Diversity \(CBD\) \(2010\), 'Decisions adopted by the conference of the parties to the Convention on Biodiversity at its tenth Meeting'](#)
- ⁸⁹ [Natural Resources Wales, 'North West Wales Area Statement'](#)
- ⁹⁰ [Lorenz K and Lal R \(2014\), 'Soil organic carbon sequestration in agroforestry systems: A review', Agronomy for Sustainable Development, Volume 34, pages 443 to 454](#)
- ⁹¹ [Climate Change Committee \(2025\), 'The Seventh Carbon Budget'](#)
- ⁹² [Climate Change Committee \(2024\), 'Progress in reducing emissions 2024 Report to Parliament'](#)

-
- ⁹³ [Climate Change Committee \(2025\) 'Wales' Fourth Carbon Budget'](#)
- ⁹⁴ [Forestry Commission \(2024\), 'There's more to trees than meets the eye'](#)
- ⁹⁵ [Natural Resources Wales \(2022\), 'State of Natural Resources Report \(SoNaRR\) for Wales 2020: Stocks of natural resources are safeguarded and enhanced'](#)
- ⁹⁶ [National Atmospheric Emissions Inventory, 'Air Pollutant Inventories 2005-2022'](#)
- ⁹⁷ [Welsh Government \(2019,\) 'Code of Good Agricultural Practice guidance on reducing ammonia losses from agriculture in Wales'](#)
- ⁹⁸ [Williams J R, and others \(2019\), 'Environment and Rural Affairs Monitoring & Modelling Programme \(ERAMMP\): Sustainable Farming Scheme evidence review technical annex: Annex 1: Soil nutrient management for improved land', ERAMMP report to Welsh Government](#)
- ⁹⁹ [Jones L, and others \(2019\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): Sustainable Farming Scheme evidence review technical annex: Annex 8: Improving air quality and well-being', ERAMMP report to Welsh Government](#)
- ¹⁰⁰ [Jones L, and others \(2019\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): Sustainable Farming Scheme evidence review technical annex: Annex 8: Improving air quality and well-being', ERAMMP report to Welsh Government](#)
- ¹⁰¹ [Department for Environment Food and Rural Affairs \(2018\), 'Scoping UK urban natural capital account: Extending noise regulation estimates: Final report'](#)
- ¹⁰² [Williams J R, and others \(2019\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): Sustainable Farming Scheme evidence review technical annex: Annex 1: Soil nutrient management for improved land', ERAMMP report to Welsh Government'](#)
- ¹⁰³ [Dickie I and Neupauer S \(2021\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): ERAMMP report 40: SFS logic chains', ERAMMP report to Welsh Government'](#)
- ¹⁰⁴ [Dickie I and Neupauer S \(2021\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): ERAMMP report 40: SFS logic chains', ERAMMP report to Welsh Government'](#)
- ¹⁰⁵ [Public Health Wales \(2020\), 'Air pollution and health in Wales'](#)
- ¹⁰⁶ [Natural Resources Wales, 'South Central Wales area statement'](#)
- ¹⁰⁷ [Forest Research \(2007\), 'New pathways to health and well-being: Summary of research to understand barriers to accessing woodland'](#)
- ¹⁰⁸ [Welsh Government \(2019\), 'Welsh Index of Multiple Deprivation \(WIMD\) 2019: Results report'](#)
- ¹⁰⁹ [Fairburn J, and others \(2004\), 'Investigating environmental justice in Scotland: Links between measures of environmental quality and social deprivation'](#)
- ¹¹⁰ [Welsh Government \(2024\), 'Survey of agriculture and horticulture: June 2024'](#)

-
- ¹¹¹ [Banks J and Marsden T \(2002\), 'Integrating agri-environment policy, farming systems and rural development: Tir Cymen in Wales', Sociologia Ruralis, Volume 40, Issue 4, pages 466 to 480](#)
- ¹¹² [Countryside and Community Research Institute \(2010\), 'Estimating the Incidental Socio-economic Benefits of Environmental Stewardship'](#)
- ¹¹³ [Rizov M, and others \(2018\), 'Employment effects of CAP payments in the UK non-farm economy', European Review of Agricultural Economics, Volume 45, Issue 15, pages 723 to 748](#)
- ¹¹⁴ [Welsh Government \(2019\), 'Wales Visitor Survey 2019: UK Staying Visitors'](#)
- ¹¹⁵ [Natural Environmental Research Council and Living with Environment Change \(2016\), 'Agriculture and Forestry Climate Change Impacts'](#)
- ¹¹⁶ [Natural Resources Wales \(2020\), 'State of natural resources report \(SoNaRR\) for Wales 2020'](#)
- ¹¹⁷ [Natural Resources Wales \(2015\), 'Natura 2000 thematic action plan: Climate change and habitat fragmentation'](#)
- ¹¹⁸ [Emmet B A, and others \(2025\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERRAMP\): ERRAMP report 105: Wales national trends and Glastir evaluation', ERAMMP report to Welsh Government](#)
- ¹¹⁹ [National Atmospheric Emissions Inventory \(2025\), 'Greenhouse gas inventories for England, Scotland, Wales and Northern Ireland: 1990-2023'](#)
- ¹²⁰ [Dickie I and Neupauer S \(2021\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): ERAMMP report 40: SFS economic valuation: Logic chains', report to Welsh Government'](#)
- ¹²¹ [Welsh Government \(2025\), 'Sustainable Farming Scheme: Carbon sequestration evidence review panel: Full report'](#)
- ¹²² [Dickie I and Neupauer S \(2022\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): ERAMMP report 68: Review of GHG emission reduction and carbon sequestration in agriculture to inform agriculture and land use policy', ERAMMP report to Welsh Government](#)
- ¹²³ [Welsh Government \(2021\), 'Second all Wales low carbon delivery plan \(2021-2025\)'](#)
- ¹²⁴ [Emmet B A, and others \(2019\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): Sustainable Farming Scheme evidence review: Report 10b: 'Considerations for the new scheme', ERAMMP report to Welsh Government](#)
- ¹²⁵ [Climate Change Committee \(2025\), 'Wales' Fourth Carbon Budget'](#)
- ¹²⁶ [Climate Change Committee \(2025\), 'Wales' Fourth Carbon Budget'](#)
- ¹²⁷ Williams A and Sanders D (2016), 'Greenhouse gas emissions from bovine tuberculosis (bTB) in Wales' report for Welsh Government (available on request)

-
- ¹²⁸ [House of Commons, \(2002\), 'The 2001 outbreak of foot and mouth disease: Report by the Comptroller and Auditor General'](#)
- ¹²⁹ [HM Treasury \(2022\), 'The green book: Central government guidance on appraisal and evaluation'](#)
- ¹³⁰ [Rojas-Downing M M, and others \(2017\), 'Climate change and livestock: Impacts, adaptation, and mitigation', Climate Risk Management, Volume 16, pages 145 to 163](#)
- ¹³¹ [Hossell J E and Hughes G O \(2008\), 'Adapting UK arable agriculture to climate change', HGCA Conference \(23 and 24 January 2008\): Arable cropping in a changing climate](#)
- ¹³² [Gauly M, and others \(2013\), 'Future consequences and challenges for dairy cow production systems arising from climate change in Central Europe: A review', Animal: An International Journal of Animal Bioscience, Volume 7, Issue 5, pages 843 to 859](#)
- ¹³³ [The European Agricultural Fund for Rural Development \(2022\), 'United Kingdom: Rural Development Programme \(Regional\), Wales'](#)
- ¹³⁴ [Welsh Government \(2024\), 'Climate Adaptation Strategy for Wales'](#)
- ¹³⁵ [Welsh Government \(2018\), 'Brexit and our land: Securing the future of Welsh farming: Consultation document'](#)
- ¹³⁶ [Welsh Government \(2019\), 'Sustainable Farming and our land: Consultation document'](#)
- ¹³⁷ [Welsh Government \(2020\), 'Agriculture \(Wales\) White Paper: Consultation document'](#)
- ¹³⁸ [Welsh Government \(2024\), 'Brexit and our land: Summary of responses'](#)
- ¹³⁹ [Welsh Government \(2020\), 'Sustainable Farming and our land: Summary of responses'](#)
- ¹⁴⁰ [Welsh Government \(2021\), 'Agriculture \(Wales\) White Paper: Summary of responses'](#)
- ¹⁴¹ [Welsh Government \(2019\), 'Brexit and our land: Securing the future of Welsh farming: Our response'](#)
- ¹⁴² [Welsh Government \(2020\), 'Sustainable Farming and our land: Our response'](#)
- ¹⁴³ [Welsh Government \(2021\), 'Agriculture \(Wales\) White Paper: Our response and forward plan'](#)
- ¹⁴⁴ [Welsh Government \(2024\), 'Sustainable Farming Scheme: Keeping farmers farming: Summary of responses'](#)
- ¹⁴⁵ [Welsh Government \(2021\), 'Co-design for a Sustainable Farming Scheme for Wales'](#)
- ¹⁴⁶ [ICF \(2023\), 'Sustainable Farming Scheme co-design: Final report', report to Welsh Government](#)
- ¹⁴⁷ [Welsh Government \(2020\), 'Agriculture \(Wales\) White Paper: Consultation document'](#)
- ¹⁴⁸ [Welsh Government \(2024\), 'Sustainable Farming Scheme: Keeping farmers farming: Summary of responses'](#)

-
- ¹⁴⁹ [Well-being of Future Generations \(Wales\) Act 2015](#)
- ¹⁵⁰ [The Health and Safety Executive \(HSE\) \(2023\), 'Fatal injuries in agriculture, forestry and fishing in Great Britain: 1 April 2022 to 31 March 2023'](#)
- ¹⁵¹ [Health and Safety Executive \(HSE\) \(2003\), 'Farm child UK: Part 1 and part 2'](#)
- ¹⁵² [Health and Safety Executive \(HSE\), 'Children and public safety'](#)
- ¹⁵³ [United Nations Children's Fund \(UNICEF\) \(2021\), 'The climate crisis is a child rights crisis: Introducing the Children's Climate Risk Index'](#)
- ¹⁵⁴ [United Nations Children's Fund \(UNICEF\) \(2021\), 'The climate crisis is a child rights crisis: Introducing the Children's Climate Risk Index'](#)
- ¹⁵⁵ [United Nations Children's Fund \(UNICEF\) \(2021\), 'The climate crisis is a child rights crisis: Introducing the Children's Climate Risk Index'](#)
- ¹⁵⁶ [United Nations Children's Fund \(UNICEF\) \(2021\), 'The climate crisis is a child rights crisis: Introducing the Children's Climate Risk Index'](#)
- ¹⁵⁷ [Hickman C, and others \(2021\), 'Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey', The Lancet Planetary Health, Volume 5, Issue 12, pages 863 to 867](#)
- ¹⁵⁸ [Sanson A V, and others \(2019\), 'Responding to the impacts of the climate crisis on children and youth', Child Development Perspectives, Volume 13, Number 4, pages 201 to 207](#)
- ¹⁵⁹ [Hickman C, and others \(2021\), 'Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey', The Lancet Planetary Health, Volume 5, Issue 12, pages 863 to 867](#)
- ¹⁶⁰ [Hickman C, and others \(2021\), 'Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey', The Lancet Planetary Health, Volume 5, Issue 12, pages 863 to 867](#)
- ¹⁶¹ [Wales Institute of Social and Economic Research Data \(WISERD\), 'WISERD education multi-cohort study \(WMCS\) data portal: Results for the question, "How worried are you about climate change?"'](#)
- ¹⁶² [Friends of the Earth \(2022\), 'Air Pollution Analysis: Wales'](#)
- ¹⁶³ [Friends of the Earth \(2022\) 'Air Pollution Analysis: Wales'](#)
- ¹⁶⁴ [Friends of the Earth \(2022\), Air 'Pollution Analysis: Wales'](#)
- ¹⁶⁵ [Friends of the Earth \(2022\), 'Air Pollution Analysis: Wales'](#)
- ¹⁶⁶ [United Nations Children's Fund \(UNICEF\) \(2016\), 'Clear the Air for Children'](#)

-
- ¹⁶⁷ [Mudway I S, and others \(2019\), 'Impact of London's low emission zone on air quality and children's respiratory health: A sequential annual cross-sectional study', The Lancet, Public Health, Volume 4, Issue 1, pages 28 to 40](#)
- ¹⁶⁸ [Royal College of Physicians \(2016\), 'Every breath we take: The lifelong impact of air pollution', Report of a working party, London: RCP](#)
- ¹⁶⁹ [Royal College of Physicians \(2016\), 'Every breath we take: The lifelong impact of air pollution', Report of a working party, London: RCP](#)
- ¹⁷⁰ [Welsh Government \(2019\), 'Index of Multiple Deprivation \(WIMD\) 2019: Results report'](#)
- ¹⁷¹ [Welsh Government \(2019\), 'Brexit and our land: Summary of responses'; Welsh Government \(2020\), 'Sustainable Farming and our land: Summary of responses'; Welsh Government \(2021\), 'Agriculture \(Wales\) White Paper: Summary of responses'; Welsh Government \(2024\), 'Sustainable Farming Scheme: Keeping farmers farming: Summary of responses'](#)
- ¹⁷² [Welsh Government and Public Health Wales \(2018\), 'Working together to reduce outdoor air pollution risks and inequalities'](#)
- ¹⁷³ [Taylor F A and Kuo F E \(2009\), 'Is contact with nature important for healthy child development? State of the evidence', Children and their Environments, Chapter 8, published online by Cambridge University Press](#)
- ¹⁷⁴ [Office for National Statistics \(2024\), 'Population estimates for the UK, England, Wales, Scotland and Northern Ireland'](#)
- ¹⁷⁵ [Office for National Statistics \(ONS\) \(2022\), 'First results from Census 2021 in England and Wales', Census 2021](#)
- ¹⁷⁶ [Welsh Government \(2025\), 'Rural urban classification local authorities 2021', DataMapWales](#)
- ¹⁷⁷ [Welsh Government \(2025\), 'Rural urban classification for OAs 2021', DataMapWales](#)
- ¹⁷⁸ [Office for National Statistics \(ONS\) \(2025\), '2021 Rural Urban Classification', Census 2021](#)
- ¹⁷⁹ [Statistics for Wales \(2009\), 'A statistical focus on rural Wales, 2008 edition'](#)
- ¹⁸⁰ [Office for National Statistics \(ONS\) \(2023\), 'Census 2021 dataset: Age, economic activity status and sex', Census 2021](#)
- ¹⁸¹ [Welsh Government \(2023\), 'Sustainable Farming Scheme Co-design: Final report'](#)
- ¹⁸² [IHS Markit \(2022\), 'Understanding farmer motivations: Very small and small farms, Final report', report to Welsh Government](#) Note: The research considered only 'small' and 'very small' farms; these account for 87% of farms in Wales and cover 60% of Welsh farmland.
- ¹⁸³ [IHS Markit \(2022\), 'Understanding farmer motivations: Very small and small farms: Final report'](#)
- ¹⁸⁴ [Wentworth J \(2024\), 'Issues facing rural communities', UK Parliament](#)

-
- ¹⁸⁵ [Farmers' Union Wales \(FUW\), 'Written evidence submitted by the FUW to Parliament'](#)
- ¹⁸⁶ [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', Public Health Wales NHS Trust and Mental Health Foundation](#)
- ¹⁸⁷ [IHS Markit \(2022\), 'Understanding farmer motivations: Very small and small farms: Final report', report to Welsh Government](#)
- ¹⁸⁸ [Welsh Government \(2024\), 'Anti-racist Wales evidence report: Racism relating to climate change, environment and rural affairs'](#)
- ¹⁸⁹ [Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\) \(2024\), 'Informing, Monitoring and Evaluating Sustainable Land Management'](#)
- ¹⁹⁰ [Natural Resources Wales \(2020\), 'The Second State of Natural Resources Report \(SoNaRR2020\): Assessment of the achievement of sustainable management of resources: Air quality'](#)
- ¹⁹¹ [Natural Resources Wales \(2022\), '2025 bathing water profile'](#)
- ¹⁹² [Jay M, and others \(2012\), 'Towards access for all? Policy and research on access of ethnic minority groups to natural areas in four European countries', Forest Policy and Economics, Volume 19, pages 4 to 11](#)
- ¹⁹³ [Askins K \(2009\), 'Crossing divides: Ethnicity and rurality', Journal of Rural Studies, Volume 25, Issue 4, pages 365 to 375](#)
- ¹⁹⁴ [Office for National Statistics \(ONS\) \(2023\), 'Ethnic group and industry \(current\) dataset'](#)
- ¹⁹⁵ [Royal College of Physicians \(2016\), 'Every breath we take: The lifelong impact of air pollution', Report of a working party, London: RCP](#)
- ¹⁹⁶ [United Nations Children Fund \(UNICEF\) \(2016\), 'Clear the Air for Children'](#)
- ¹⁹⁷ [Welsh Government analysis of data drawn from the Annual Population Survey \(APS\), obtained from the "Create a custom data set" service provided by Nomis, 'RM024: Economic activity status by sex by age'](#)
- ¹⁹⁸ [Welsh Government \(2019\), 'Welsh Index of Multiple Deprivation 2019: Results report'](#)
- ¹⁹⁹ [Welsh Government \(2024\), 'Survey of agriculture and horticulture: June 2024'](#)
- ²⁰⁰ [Welsh Government \(2024\), 'Survey of agriculture and horticulture: June 2024'](#)
- ²⁰¹ [Welsh Government \(2024\), 'Survey of agriculture and horticulture: June 2024'](#)
- ²⁰² [Janet D \(2018\), 'The implications of Brexit for agriculture, rural areas and land use in Wales', Public Policy Institute for Wales](#)
- ²⁰³ [Welsh Government \(2024\), 'Sustainable Farming Scheme: Keeping farmers farming: Summary of responses'](#)

-
- ²⁰⁴ [NFU Cymru \(2017\), 'Farming: Bringing Wales together'](#)
- ²⁰⁵ [Well-being of Future Generations \(Wales\) Act 2015](#)
- ²⁰⁶ [Welsh Government \(2025\), 'Second All Wales low carbon delivery plan \(2021-2025\)'](#)
- ²⁰⁷ [ADAS \(2021\), 'Analysis of the potential economic effects of the Sustainable Farming Scheme on the agricultural sector in Wales: Literature review', report to Welsh Government](#)
- ²⁰⁸ [Welsh Government \(2022\), 'Farming facts and figures, Wales 2022'](#)
- ²⁰⁹ [Welsh Government \(2022\), 'Farming facts and figures, Wales 2022'](#)
- ²¹⁰ [Welsh Government, StatsWales: 'Annual FTE labour proxy on a Farm'](#)
- ²¹¹ [Steiner A and Atterton J \(2014\), 'The contribution of rural businesses to community resilience', Volume 29, Issue 3, pages 228 to 244](#)
- ²¹² [Steiner A and Atterton J \(2014\), 'The contribution of rural businesses to community resilience', Volume 29, Issue 3, pages 228 to 244](#)
- ²¹³ [Leach K \(2013\), 'Community economic development: Localisation, the key to a resilient and inclusive local economy?', Local Economy, Volume 28, Issue 7 to 8, pages 927 to 931](#)
- ²¹⁴ [Leach K \(2013\), 'Community economic development: Localisation, the key to a resilient and inclusive local economy?', Local Economy, Volume 28, Issue 7 to 8, pages 927 to 931](#)
- ²¹⁵ [Countryside and Community Research Institute \(CCRI\) \(2013\), 'Assessing the impact of agricultural transition in Cornwall & the Isles of Scilly, Devon, Dorset and Somerset'](#)
- ²¹⁶ [Countryside and Community Research Institute \(CCRI\) \(2013\), 'Assessing the impact of agricultural transition in Cornwall & the Isles of Scilly, Devon, Dorset and Somerset'](#)
- ²¹⁷ [Welsh Government \(2020\), 'Sustainable Farming and our land: Summary of responses'](#)
- ²¹⁸ [Welsh Government \(2020\), 'Sustainable Farming and our land: Summary of responses'](#)
- ²¹⁹ [Welsh Government \(2019\), 'Agriculture in Wales'](#)
- ²²⁰ [Welsh Government, 'Digital inclusion in Wales'](#)
- ²²¹ [Welsh Government, 'Digital inclusion in Wales'](#)
- ²²² [Welsh Government \(2019\), 'Brexit and our land: Securing the future of Welsh farming: Summary of responses'](#)
- ²²³ [Welsh Government \(2019\), 'Brexit and our land: Securing the future of Welsh farming: Summary of responses'](#)
- ²²⁴ [Welsh Government \(2019\), 'Brexit and our land: Securing the future of Welsh farming: Our response'](#)

-
- 225 [Welsh Government \(2019\), 'Sustainable Farming and our land: Consultation document'](#)
- 226 [Welsh Government \(2020\), 'Sustainable Farming and our land: Summary of responses'](#)
- 227 [Welsh Government \(2020\), 'Agriculture \(Wales\) White Paper: Consultation document'](#)
- 228 [Welsh Government \(2021\), 'Agriculture \(Wales\) White Paper: Summary of responses'](#)
- 229 [Welsh Government \(2021\), 'Agriculture \(Wales\) White Paper: Our response and forward plan'](#)
- 230 [Welsh Government \(2024\), 'Sustainable Farming Scheme: Keeping farmers farming: Summary of responses'](#)
- 231 [Welsh Government \(2024\), 'Sustainable Farming Scheme: Keeping farmers farming: Our response'](#)
- 232 [Welsh Government \(2024\), 'Sustainable Farming Scheme: Keeping farmers farming: Summary of responses'](#)
- 233 [Welsh Government \(2021\), 'Co-design for a Sustainable Farming Scheme for Wales'](#)
- 234 [Welsh Government \(2021\), 'Sustainable Farming Scheme co-design: Final report'](#)
- 235 [Welsh Government \(2021\), 'Sustainable Farming Scheme co-design: Final report'](#)
- 236 [Welsh Government \(2024\), 'Sustainable Farming Scheme: Carbon sequestration evidence review panel: Summary report'](#)
- 237 [Welsh Government \(2024\), 'Sustainable Farming Scheme: Carbon sequestration evidence review panel: Full report'](#)
- 238 [Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\), 'Integrated Monitoring Platform \(IMP\)'](#)
- 239 [Welsh Government \(2018\), 'Cymraeg 2050: A million Welsh speakers'](#)
- 240 [Welsh Government \(2018\), 'Cymraeg 2050: A million Welsh speakers'](#)
- 241 [Office for National Statistics \(ONS\) \(2022\), 'Welsh language, Wales', Census 2021](#)
- 242 [Office for National Statistics \(ONS\) \(2022\), 'Welsh language, Wales', Census 2021](#)
- 243 [Welsh Government \(2018\), 'Cymraeg 2050: A million Welsh speakers'](#)
- 244 [Welsh Government \(2018\), 'Cymraeg 2050: A million Welsh speakers'](#)
- 245 [Office for National Statistics \(2022\), 'Welsh language skills \(detailed\)', Census 2021](#)
- 246 [Office for National Statistics \(ONS\) \(2022\), 'Welsh language, Wales', Census 2021](#)
- 247 [Office for National Statistics \(ONS\) \(2022\), 'Welsh language, Wales', Census 2021](#)

-
- ²⁴⁸ [Welsh Government \(2023\), 'National Survey for Wales: April 2022 to March 2023'](#)
- ²⁴⁹ [Welsh Government \(2025\), 'Welsh language data from the Annual Population Survey: 2024'](#)
- ²⁵⁰ [Welsh Government \(2024\), 'National Survey for Wales: Results viewer'](#)
- ²⁵¹ [Welsh Government \(2025\), 'Annual Population Survey: Frequency of speaking Welsh by local authority and year'](#)
- ²⁵² [Welsh Government \(2025\), 'Annual Population Survey: Frequency of speaking Welsh by local authority and year'](#)
- ²⁵³ [Office for National Statistics \(ONS\) \(2003\), 'Differences in estimates of Welsh language skills'](#)
- ²⁵⁴ [Welsh Government \(2019\), 'Welsh language data from the Annual Population Survey: 2001 to 2018'](#)
- ²⁵⁵ [Welsh Government \(2023\), 'Office for National Statistics \(ONS\) and Welsh Government joint work plan on coherence of Welsh language statistics'](#)
- ²⁵⁶ Welsh Government analysis of data obtained from the “Create a custom data set” service provided by the Office for National Statistics (Create a custom dataset - Office for National Statistics (ons.gov.uk))
- ²⁵⁷ Welsh Government analysis of data obtained from the “Create a custom data set” service provided by the Office for National Statistics (Create a custom dataset - Office for National Statistics (ons.gov.uk))
- ²⁵⁸ Welsh Government analysis of data obtained from the “Create a custom data set” service provided by the Office for National Statistics (Create a custom dataset - Office for National Statistics (ons.gov.uk))
- ²⁵⁹ [Office for National Statistics \(ONS\) \(2022\), 'Welsh language, Wales', Census 2021](#)
- ²⁶⁰ Welsh Government analysis of data obtained from the “Create a custom data set” service provided by the Office for National Statistics (Create a custom dataset - Office for National Statistics (ons.gov.uk))
- ²⁶¹ Welsh Government analysis of data obtained from the “Create a custom data set” service provided by the Office for National Statistics (Create a custom dataset - Office for National Statistics (ons.gov.uk))
- ²⁶² Welsh Government analysis of data obtained from the “Create a custom data set” service provided by the Office for National Statistics (Create a custom dataset - Office for National Statistics (ons.gov.uk))
- ²⁶³ Welsh Government analysis of data obtained from the “Create a custom data set” service provided by the Office for National Statistics (Create a custom dataset - Office for National Statistics (ons.gov.uk))
- ²⁶⁴ [Welsh Government \(2024\), 'Welsh language skills needs in eight sectors'](#)
- ²⁶⁵ [Welsh Government \(2019\), 'Farm incomes: April 2018 to March 2019'](#)
- ²⁶⁶ [Welsh Government \(2024\), 'National Survey for Wales: Results viewer'](#)
- ²⁶⁷ [Welsh Government \(2020\), 'What factors are linked to people speaking the Welsh language?'](#)
- ²⁶⁸ [National Farmers' Union \(2017\), 'Farming: Bringing Wales together'](#)

-
- ²⁶⁹ [Welsh Government \(2021\), 'Evaluation of the knowledge transfer, innovation and advisory services programme'](#)
- ²⁷⁰ [IHS Markit \(2021\), 'Understanding farmer motivations: Very small and small farms: Final report', report to Welsh Government](#)
- ²⁷¹ [Mansfield F, and others \(2004\), 'Social Capital in Hill Farming', report for the Upland Centre](#)
- ²⁷² [Public Health Wales \(2021\), 'Rising to the triple challenge of Brexit, COVID-19 and climate change for health, well-being and equity in Wales'](#)
- ²⁷³ [Welsh Government \(2020\), 'Sustainable Farming and Our Land: Proposals to continue and simplify agricultural support for farmers and the rural economy: Summary of responses'](#)
- ²⁷⁴ [Farming Connect \(2020\), 'Iaith y Pridd Report'](#)
- ²⁷⁵ [Welsh Government \(2021\), 'Co-design for a Sustainable Farming Scheme for Wales'](#)
- ²⁷⁶ [Welsh Government \(2021\), 'Sustainable Farming Scheme co-design: Final report'](#)
- ²⁷⁷ [ADAS \(2023\), 'Sustainable Farming Scheme: Analysis of feedback to the outline scheme proposals', report to Welsh Government](#)
- ²⁷⁸ [State of Nature \(2023\), 'State of nature', the State of Nature Partnership](#)
- ²⁷⁹ [UK NEA \(2011\), 'The UK national ecosystem assessment: Synthesis of the key findings'](#)
- ²⁸⁰ [State of Nature \(2023\), 'State of nature', the State of Nature Partnership](#)
- ²⁸¹ [Welsh Government, 'Well-being of Future Generations \(Wales\) Act 2015: The essentials'](#)
- ²⁸² [The United Nations Environment Programme \(UNEP\) \(1992\), 'Convention on biological diversity, June 1992'](#)
- ²⁸³ [Welsh Government \(2020\), 'The nature recovery action plan for Wales 2020 to 2021'](#)
- ²⁸⁴ [The United Nations Environment Programme \(UNEP\) \(2022\), 'Kunming-Montreal Global Biodiversity Framework', Conference of the Parties to the Convention on Biological Diversity](#)
- ²⁸⁵ [The GB Non-native Species Secretariat \(NNSS\) \(2023\), 'The Great Britain Invasive Non-Native Species Strategy 2023 to 2030'](#)
- ²⁸⁶ [The United Nations Environment Programme \(UNEP\) \(1992\), 'Convention on biological diversity, June 1992'](#)
- ²⁸⁷ [Welsh Government \(2022\), 'Biodiversity deep dive: Recommendations'](#)
- ²⁸⁸ [Welsh Government \(2022\), 'Biodiversity deep dive: Recommendations'](#)
- ²⁸⁹ [Welsh Government \(2022\), 'Biodiversity deep dive: Recommendations'](#)

-
- ²⁹⁰ [The United Nations Environment Programme \(UNEP\) \(2022\), 'Kunming-Montreal Global Biodiversity Framework', Conference of the Parties to the Convention on Biological Diversity](#)
- ²⁹¹ [Stutter M, and others \(2019\), 'Current insights into the effectiveness of riparian management, attainment of multiple benefits, and potential technical enhancements', Journal of Environmental Quality, Volume 48, Issue 2, pages 236 to 247](#)
- ²⁹² [Haubruc P \(2025\), 'A holistic catchment-scale framework to guide flood and drought mitigation towards improved biodiversity conservation and human wellbeing', WIREs Water, Volume 12, Issue 1](#)
- ²⁹³ [Hedgelink, 'Hedge Hub Resources'](#)
- ²⁹⁴ [Montgomery I \(2020\), 'Hedgerows as ecosystems: Service delivery, management and restoration', Annual Review of Ecology, Evolution and Systematics, Volume 51](#)
- ²⁹⁵ [Sanders J, and others \(2025\), 'Benefits of organic agriculture for environment and animal welfare in temperate climates', Organic Agriculture.](#)
- ²⁹⁶ [Tuck S, and others \(2013\), 'Land-use intensity and the effects of organic farming on biodiversity: A hierarchical meta-analysis', Journal of Applied Ecology, Volume 51, Issue 3, pages 746 to 755](#)
- ²⁹⁷ [Gabriel D, and others \(2006\), 'Beta diversity at different spatial scales: plant communities in organic and conventional agriculture', Ecological Application, Volume 16, Issue 5](#)
- ²⁹⁸ [Bengtsson J, and others \(2005\), 'The effects of organic agriculture on biodiversity and abundance: A meta-analysis', Journal of Applied Ecology, Volume 42, pages 261 to 269](#)
- ²⁹⁹ [Bengtsson J, and others \(2005\), 'The effects of organic agriculture on biodiversity and abundance: A meta-analysis', Journal of Applied Ecology, Volume 42, pages 261 to 269](#)
- ³⁰⁰ [Hole D, and others \(2005\), 'Does organic farming benefit biodiversity?', Biological Conservation, Volume 122, pages 113 to 120](#)
- ³⁰¹ [Batary P, and others \(2010\), 'Landscape-moderated importance of hedges in conserving farmland bird diversity of organic versus conventional croplands and grasslands', Biological Conservation, Volume 143, pages 2020 to 2027](#)
- ³⁰² [Chamberlain D, and others \(2010\), 'Does organic farming benefit farmland birds in winter?' Biology Letters, Volume 6, pages 82 to 84](#)
- ³⁰³ [Hole D, and others \(2005\), 'Does organic farming benefit biodiversity?', Biological Conservation, Volume 122, pages 113 to 120](#)
- ³⁰⁴ [State of Nature \(2023\), 'State of nature', the State of Nature Partnership, page 9](#)
- ³⁰⁵ [State of Nature \(2023\), 'State of nature', the State of Nature Partnership, page 30](#)
- ³⁰⁶ [Wilson J D, and others \(2014\), 'Modelling edge effects of mature forest plantations on peatland waders informs landscape-scale conservation', Journal of Applied Ecology, Volume 51, pages 204 to 213](#)

-
- 307 [Franks S E, and others \(2017\), 'Environmental correlates of breeding abundance and population change of Eurasian Curlew *Numenius arquata* in Britain', Bird Study, Volume 64, pages 393 to 409](#)
- 308 [Pálsdóttir A E, and others \(2022\), 'Subarctic afforestation: Effects of forest plantations on ground-nesting birds in lowland Iceland', Journal of Applied Ecology, Volume 59, Issue 10, pages 2456 to 2467](#)
- 309 [Balmer D, and others \(2013\), 'Bird Atlas 2007–11: The breeding and wintering birds of Britain and Ireland', British Trust for Ornithology \(BTO\) Books, Thetford, UK](#)
- 310 [Douglas D J T, and others \(2014\), 'Upland land use predicts population decline in a globally near-threatened wader', Journal of Applied Ecology, Volume 51, pages 194 to 203](#)
- 311 [Douglas D J T, and others \(2014\), 'Upland land use predicts population decline in a globally near-threatened wader', Journal of Applied Ecology, Volume 51, pages 194 to 203](#)
- 312 [Brewin J \(2017\), 'Conserving the curlew', Game and Wildlife Conservation Trust, Fordingbridge: Hampshire](#)
- 313 [Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\), 'Integrated Monitoring Platform \(IMP\)'](#)
- 314 [Natural Resources Wales \(2020\), 'National Peatlands Action Programme, 2020-2025'](#)
- 315 [Natural Resources Wales, 'Information note: Peatlands'](#)
- 316 [State of Nature \(2023\), 'State of nature: Wales', the State of Nature Partnership](#)
- 317 [State of Nature \(2023\), 'State of nature: Wales', the State of Nature Partnership](#)
- 318 [Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\), 'Monitoring'](#)
- 319 [State of Nature \(2023\), 'State of nature: Wales' the State of Nature Partnership](#)
- 320 [State of Nature \(2023\), 'State of nature: Wales' the State of Nature Partnership](#)
- 321 [Natural Resources Wales, 'State of natural resources report \(SoNaRR\) 2020: Biodiversity assessment',](#)
- 322 [Emmett B E \(2017\), 'Glastir Monitoring and Evaluation Programme', report to Welsh Government](#)
- 323 [Emmett B A \(2025\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): ERAMMP report 105: Wales National Trends and Glastir Evaluation', report to Welsh Government](#)
- 324 [Smart S M, and others \(2019\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): ERAMMP report 22: A review of the species records held by local environmental centres in Wales to ERAMMP evidence needs', ERAMMP report to Welsh Government](#)
- 325 [ERAMMP Evidence Reviews can be accessed at: Environment and Rural Affairs Modelling and Monitoring Programme \(ERAMMP\), 'Sustainable Farm Scheme Evidence Review'](#)

-
- ³²⁶ [Emmett B A, and others \(2019\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): ERAMMP report 10A: Integrated analysis', ERAMMP Report to Welsh Government](#)
- ³²⁷ [Keenleyside C B, and others \(2019\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\): Annex 4: Building ecosystem resilience', ERAMMP Report to Welsh Government](#)
- ³²⁸ [Natural Resources Wales, \(2021\) 'State of Natural Resources Report \(SoNaRR\): Assessment of the achievement of sustainable management of natural resources: Semi-natural grasslands'](#)
- ³²⁹ [Welsh Government \(2024\), 'Survey of agriculture and horticulture: June 2024'](#)
- ³³⁰ [Latham J, and others \(2013\), 'Ecological connectivity and biodiversity prioritisation in the terrestrial environment of Wales'](#)
- ³³¹ [Leclère D, and others \(2020\), 'Bending the curve of terrestrial biodiversity needs an integrated strategy', Nature, Volume 585, pages 551 to 556](#)
- ³³² [Natural Resources Wales \(2022\), 'State of natural resources Wales 2020: Biodiversity assessment',](#)
- ³³³ [Natural Resources Wales \(2023\), 'Protected sites baseline assessment 2020'](#)
- ³³⁴ [Keenleyside C B, and others \(2019\), 'Environment and Rural Affairs Monitoring and Modelling Programme \(ERAMMP\) Sustainable Farming Scheme evidence review: Annex 4: Building ecosystem resilience', report to Welsh Government](#)
- ³³⁵ [Natural Resources Wales, 'State of natural resources report \(SoNaRR\) 2020: Biodiversity assessment',](#)
- ³³⁶ [IPBES \(2019\), 'Global assessment report on biodiversity and ecosystem services of the inter-governmental science-policy platform on biodiversity and ecosystem services', Brondizio E S, and others \(editors\), IPBES secretariat, Bonn: Germany](#)
- ³³⁷ [Natural Resources Wales, 'State of natural resources report \(SoNaRR\) 2020: Biodiversity assessment'](#)
- ³³⁸ [Office for National Statistics \(ONS\) \(2022\), 'Longitudinal study \(LS\) based estimates of life expectancy \(LE\) by the National Statistics Socioeconomic Classification \(NS-SEC\): England and Wales'](#)
- ³³⁹ [Office for National Statistics \(ONS\) \(2024\), 'Dataset: Births by parents' characteristics'](#)
- ³⁴⁰ [Office for National Statistics \(ONS\) \(2016\), 'Dataset: Smoking by NS-Sec'](#)
- ³⁴¹ [Chandola T and Jenkinson C \(2000\), 'The new UK national statistics socio-economic classification \(NS-SEC\): investigating social class differences in self-reported health status', Journal of Public Health Medicine, Volume 22, Issue 2, pages 182 to 190](#)
- ³⁴² [Welsh Government \(2025\), 'Farm incomes: April 2023 to March 2024'](#)
- ³⁴³ [IHS Markit \(2021\), 'Understanding farmer motivations: Very small and small farms: Final report', report to Welsh Government](#)

³⁴⁴ [Public Health Wales and Mental Health Foundation \(2019\), 'Supporting farming communities at times of uncertainty', Public Health Wales NHS Trust and Mental Health Foundation](#)

³⁴⁵ [Welsh Government \(2025\), 'Welsh Index of Multiple Deprivation'](#)

³⁴⁶ For further details please refer to: [Welsh Government \(2019\), 'Welsh Index of Multiple Deprivation 2019 \(WIMD 2019\): Technical report'](#)

³⁴⁷ [MacBride-Stewart S and Parken A \(2021\), 'Inequality in a future Wales: Areas for action in work, climate and demographic change', Future Generations Commissioner's Office, 2021](#)

³⁴⁸ [Welsh Government \(2024\), 'Just Transition Framework consultation'](#)