

THE LAND MANAGEMENT CONTRACT

DESIGN AND DELIVERY IN ENGLAND

How future environmental
land management schemes
can work for rural
businesses and deliver
for the environment



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INTRODUCTION

England's countryside is about to see an unparalleled period of change. Leaving the European Union (EU) has provided the opportunity to reform radically the agricultural support system that shapes England's food production, rural communities and natural environment. The governing rules and regulation will return to Westminster and there will be a new arrangement with agriculture's biggest trading partner.

Meanwhile land management in the UK faces a whole range of challenges, from climate change to wildlife habitat loss, soil erosion and water pollution.

Within this context, the CLA has proposed positive, progressive and pragmatic policies that focus on the opportunities of these changes whilst recognising and mitigating the risks.

The CLA's vision for a post-Brexit Food, Farming and Environmental Policy (FFEP) includes policies to boost profitable farming and forestry through

improved productivity, competitiveness and resilience within a thriving rural economy alongside payments for the delivery of public goods.

This report sets out how the Land Management Contract (LMC) can be used to deliver the public goods and services that are valued by society, such as clean water, carbon storage, enhanced public access, biodiversity, heritage and sustainable farming practices, but are not adequately provided through the market.

This report doesn't consider future trading arrangements between the UK, EU or other countries. The UK's future trade deals will be the biggest influence on land management in the UK. Ensuring UK producers can continue to sell into European markets and that agricultural goods produced to lower environmental or animal welfare standards do not undercut British farmers are prerequisites to any successful future environmental land management scheme.

KEY POINT

Improving farming profitability and building long term resilience is essential to the viability of farming businesses and to their ability to deliver public benefits.

i FOOD FARMING AND ENVIRONMENTAL POLICY



Profitable farming and forestry through productivity improvements, market developments and building resilience



Payment for the delivery of public benefits through a **Land Management Contract**



Support for the wider rural economy

SUMMARY

KEY POINT

With the Land Management Contract farmers will become commercial providers of public benefits with Government as the buyer within a fair contract.

The CLA has developed the Land Management Contract (LMC) as a model for the payment for delivery of public benefits. The Land Management Contract will transform the relationship between the public and land managers. The Land Management Contract moves away from the idea of subsidies by creating a new relationship where alongside high-quality food, defined public benefits are provided by land managers.

The LMC will also break the false divide the EU's Common Agricultural Policy has created between forestry and farming. The LMC will integrate sustainable farming practices and woodland management alongside environmental and heritage land use management.

“As well as producing high quality food, England's land managers can deliver public benefits such as thriving wildlife, healthy animals and clean water.”

If the Government is to meet its objectives to enhance the environment and improve agricultural productivity it must develop a new policy that:

- Recognises public goods delivery as a commercial decision for land managers.
- Is a choice not an entitlement.
- Is based on a contractual relationship between Government and land managers.
- Can be adapted to the diversity of England's countryside.

To achieve this the Land Management Contract (LMC) will include four elements:

1. Universal LMC

Available to all land managers who can choose from a menu of positive land management activities and sustainable farming practices. A premium payment will incentivise ambitious delivery.

2. Universal Capital LMC

To support the Universal LMC and provide standalone improvements such as woodland creation, improved infrastructure to reduce pollution and improve animal health.

3. Enhanced LMC

A scheme to make targeted, more complex improvements to land management which encourages collaboration.

4. Landscape Scale Restoration

Large scale, competitive scheme that will address major environmental challenges.

Within a national framework, the design and delivery of the Land Management Contract will be decentralised to allow land managers and authorities to address their local priorities. The CLA has also proposed a set of common sense changes to improve administration.

This report consists of the following sections:

- Delivering the land management contract.
- The design principles of the LMC.
- The public benefits within the LMC.
- Local adaptation and administration.
- Conclusions and next steps.
- Appendices.
 - The World Trade Organisation and domestic agricultural support.
 - References.

CLA ANALYSIS

UK Frameworks and devolution

A UK wide framework for agricultural policy is necessary to meet international obligations and maintain the integrity of the UK's internal market. Agriculture and the environment are devolved matters and the four Governments of the UK should be empowered to implement policies that suit their contexts. This paper sets out the LMC in England. Subsequent papers will consider how the LMC could work in Wales.

DELIVERING THE LAND MANAGEMENT CONTRACT

HOW WILL THE LMC WORK?

The LMC consists of four different elements plus a training and support package. In combination these elements

are intended to match the diversity of aspirations and circumstances of land managers in England whilst also meeting

Government's objective to enhance the environment within future environmental land management schemes.

KEY	KEY ELEMENTS OF LMC	Scale	Access	Ambition	Ongoing or one-off payments
	Universal capital funding To support the Universal LMC.	Farm holding	Universal	Conserve and manage	One-off payment only
	Universal LMC A universally available, broad and shallow multi-annual payment scheme. This will provide environmental and social public benefits.	Farm holding	Universal	Conserve and manage	Ongoing payments only
	Enhanced LMC A more targeted scheme focussed on enhancement and restoration.	Farm holding + incentives for collaboration	Competitive	Enhance	Both
	Landscape scale restoration projects Large scale projects focused on improving degraded areas at scale.	Landscape	Competitive	Restore	Both

WHO WILL BE ELIGIBLE FOR THE LMC?

The LMC is designed to incentivise rural businesses to provide public benefits in a commercial way. It should, therefore, be eligible to anyone who can provide the public benefits.

Over 70% of England is farmed so in most instances it will be farmers who will have the expertise and capacity.

Non-farming land managers with the skills and inclination should be able to apply to provide public benefits. For these businesses the LMC could

supplement their core business with additional income.

To access the Land Management Contract applicants must:

- Have demonstrable management control.
- Be able to meet the contractual obligations that they enter into.
- Not be a public body which receives funding for undertaking the same activity.

TENANT AND LANDLORD

Where one person has sole responsibility for the land, as with an owner occupier, that person can be the sole provider under the LMC. However, much land is managed in more complicated ways. In some cases, different people have different rights in respect of the land, such as with commons, in other cases, responsibilities are shared, as with a tenancy or share farming agreement.

The LMC will be available to anyone with responsibility for an area of land. In more complex situations, different individuals with different responsibilities will be able to enter into different LMCs in respect of the same area but will be encouraged to join together and provide whatever public benefits may be the case under one agreement.

KEY POINT

The EU's Common Agricultural Policy (CAP) requires claimants to qualify as "active farmers". This is an ineffectual administrative burden that is not necessary in a scheme that is based on providing public benefits. As the LMC requires land managers to actively provide defined public benefits the risk of so called 'slipper farmers' is much less than within the CAP.

Tenants must have proof of their landlord's permission if the terms of the LMC go beyond the terms of an agreed, legal tenancy agreement. If the incentives are right and contracts flexible tenants, landlords and common right holders will be able to effectively collaborate.

UNIVERSAL LMC

Available to all land managers who can choose from a menu of positive land management activities. A premium payment will incentivise ambitious delivery.

THE UNIVERSAL LMC WILL:

- Work with commercial businesses.
- Drive change across farm systems.
- Integrate woodland and agriculture.
- Achieve ambitious public benefits.
- Engage the majority of land managers.

The Universal LMC is designed to maximise uptake of ambitious and effective environmental, heritage and farm management activities through inclusive eligibility criteria, a straightforward application process and commercially attractive payment rates.

Key features of the Universal LMC:

- Open to all eligible land managers. If an applicant meets a minimum requirement they will be awarded a contract.
- Rolling application windows.
- Multi-annual agreements between three and ten years, depending on the circumstances of the rural business. For shorter agreements some activities will not be available.
- Improves delivery of public benefits through conserving and managing environment and landscape features as well as other non-environmental public benefits.
- Includes delivery of sustainable farm practices to drive best environmental practice in farm management and land use.
- A menu of activities relevant to each area. Each activity will be allocated a set of points and a payment rate, with a premium payable across the whole area above a threshold.

Payment incentives

The Universal LMC will incentivise delivery through use of a points system with a threshold above which a premium is paid. Land managers will be paid for the individual activities based on the allocated points, but they will only access the premium above the threshold.

Integrated woodland management

Forestry and woodland management are not within the European Union’s competences. This created an artificial barrier to integrated land management. For example, land managers who wanted to access the Basic Payment Scheme were encouraged to clear isolated trees and woods.

The LMC integrates woodland management into land use planning by bringing opportunities for woodland creation and woodland management into the same scheme as animal welfare, environmental and heritage delivery.

This will allow for more flexible land use planning and provide land managers with the ability to get the best from their existing and new woodland assets as part of their wider rural business.

Sustainable farming practices

While management on farms to conserve and expand the space for nature is integral to the LMC, it is only part of what modern farm businesses can provide.

How animals are cared for, energy consumed, soils managed, fertilisers and manures applied and diseases controlled, are as important to farm businesses and environmental delivery as the amount of land assigned to biodiversity. Previous schemes have not considered these crucial, system wide aspects of farm management.

To address this, sustainable farming practices will be an integral part of the Universal LMC, with points based on a set of sustainable farming metrics which could include the following activities:

- Animal health and welfare.
- Nutrient management for air and water protection.
- Pest and disease management.
- Land use suitability.
- Water management.
- Soil health.
- Climate change adaptation.
- Energy efficiency and climate change mitigation.

Vulnerable rural communities and the LMC

Remote rural communities often have poorer services, fewer diversification opportunities and in upland areas less productive soils. These communities have value in their own rights but also have huge potential to provide public benefits such as flood risk mitigation, carbon storage and cultural heritage. Due to the reduced economic opportunities of these areas it is important that the LMC gets the incentives right to support land managers to produce public benefits from land which cannot make a reasonable return from agricultural production.

In most areas the Universal LMC premium payment is designed to incentivise ambitious delivery of public benefits. In non-economic farming systems such as those in areas currently defined as Less Favoured Areas (LFA) those land managers who meet the threshold of delivery within the Universal LMC will receive the same level of premium as those in lowland areas. This level of support will require improvements in agricultural productivity and efficiency but will ensure motivated and skilled land managers will remain in these areas. This will provide an opportunity for land managers in those areas to continue to produce the food and public benefits that make these areas so valuable to England.

Heritage and archaeology


England’s historic environment is an important part of our national identity. Within the EU heritage was de-prioritised in rural development programmes despite the fact heritage and archaeological features such as stone walls, ancient monuments and historic farm buildings require ongoing management. The LMC will allow landowners with historic features to access funding to manage these unique, precious and vulnerable assets.

WHY POINTS?

Allocating points to each activity allows for the comparison of activities across different outcomes, such as water quality, animal health, carbon storage etc. For the Government, points are an efficient and effective way of incentivising the activities it wants to prioritise. For rural businesses points provide flexibility.

A land manager could choose to focus on a limited set of high point and high value activities such as woodland creation or pollinator strips, or they could look to make smaller changes across their whole farm.

Defining thresholds based on points also allows land managers to create a buffer of over-delivery to manage the risk of fines and penalties.



INTERNATIONAL EXAMPLES

Similar sustainable farming models exist around the world.



The Farm Environment Plan (FEP) in New Zealand helps businesses recognise on-farm environmental risks and sets out a programme to manage them¹. It is also used to self-audit and demonstrate how good management practice is being achieved. Each plan is specific to a given property and will vary according to the local climate and soils, the type of farming operation, and the goals and aspirations of the land manager.



The Republic of Ireland’s Origin Green is a Government backed initiative that brings together suppliers, producers and retailers to demonstrate the sustainability of Irish produce². Farmers become members of Origin Green by participating in Bord Bia’s (Irish Food Board) Sustainable Assurance Scheme. By becoming accredited farmers can demonstrate they are undertaking good practice and access new markets.

UNIVERSAL CAPITAL LMC

To support the Universal LMC and provide standalone improvements such as woodland creation, improved infrastructure to reduce pollution and improve animal health.

THE CAPITAL ELEMENTS OF THE UNIVERSAL LMC WILL:

- Improve the sustainability of farm businesses.
- Restore and recreate natural and heritage assets.
- Create new woodlands.
- Improve animal welfare and health.
- Lever in private sector funding.

The capital elements of the LMC will provide funding to support public good delivery such as changes to farm systems, gain accreditation, improve existing infrastructure and create new woodlands. Capital improvements that are intended to primarily improve business productivity will be managed in a separate process set out in the CLA's proposals for farm profitability³.

The Universal Capital will have/be:

- Open to all eligible land managers.
- Rolling application windows.
- Applicants can apply for this element alone but some capital options will complement elements of the Universal LMC.

→ Some capital options will require co-investment from non-Government sources.

Capital only elements of past and current environmental schemes have shown high levels of uptake and good value for money⁴. Achieving ambitious targets for environmental delivery through land use change and management will need on-going investment.

The Universal Capital LMC will make money available for one-off capital improvements to change land management practice across a whole range of public benefits.

What could be funded	Examples of related public benefits
Fences	Protect water courses and important environmental features.
Restoring historic farm buildings	Keep buildings of historic significance that contribute to landscape and local heritage.
Woody dams	Slow flood waters and help push water onto the floodplain during floods.
New ponds	Important habitat for insects and the animals that eat them.
Deer high seat	Necessary for the control of deer which can stop natural regeneration in woodlands.
New stiles and gates	Increase the accessibility of the countryside.
Manure storage	Improved animal health and cleaner air.
Enriched rearing systems	Animal welfare.

Co-investment

The Universal Capital LMC aims to provide public benefits. Accordingly, if the works being funded also provide an element of private benefit to the farmer the amount available through the LMC will be reduced to reflect that. Similarly,

if the works benefit some third party, such as water company benefitting from measures that have the effect of storing or cleaning water, there should be mechanisms to allow co-funding.

ENHANCED LMC

Those rural businesses that have, or wish to have, precious natural capital assets will be able to access targeted schemes to support their creation, management and enhancement.

Key features of the Enhanced LMC:

- Competitive but open to all land managers.
- Rolling application windows. Can be separate to, or linked with the Universal LMC as long as activities are not duplicated.

→ Aimed at enhancing natural features or maintaining features already enhanced and in good condition.

→ Adapted to local targets and circumstances.

→ Include incentives for landscape scale agreements and / or collaboration.

→ Include capital and multi-annual agreements. Management will generally be more complex than that offered in the Universal LMC and may require targeted advice.



A competitive scheme to make targeted, more complex improvements to land management which encourages collaboration.

THE ENHANCED LMC WILL:

- Focus on enhancing the natural environment.
- Incentivise collaboration across landscapes.
- Support complex environmental land management.
- Target local priorities and adapt to local circumstances.
- Contribute to diversified rural businesses.

GETTING BETTER OUTCOMES ACROSS ALL LMC DELIVERY

There should be a long-term aspiration that all activities within future schemes are result-based – where payments are linked to providing the outcomes sought. Natural England's ongoing Result-based Agri-environment Pilot Schemes have demonstrated that although environmental performance may increase, the administrative costs are very high and the evidence-base about how to achieve excellent outcomes is often lacking.

Within the LMC, it is proposed that where activities can be assessed in an outcome-based way⁵ land managers will be able to choose whether they are to be monitored on actions undertaken or on results achieved. Those who choose result-based activities will have the potential of higher payment rates subject to performance. Over time and as administrators and land managers

improve their knowledge it may be possible to make all appropriate activities result-based.

To improve the knowledge-base and to support improved outcomes as part of the available advice, land managers will be able to undertake ecological training to improve species identification and expertise. When accredited, land managers will be awarded additional points for providing frequent monitoring reports of their environmental activities.

This will increase land manager engagement in environmental delivery whilst providing cost effective monitoring. Ultimately this will improve the evidence around land management and allow a focus on what works.

These aspects will be included in the Universal and Enhanced LMC.

RESULT-BASED AGRI-ENVIRONMENT PILOT SCHEMES

Result-based payments are agri-environment schemes where farmers and land managers are paid for achieving a pre-defined environmental result or outcome. This differs from traditional action-based agri-environment schemes, as the farmer has greater flexibility in what management they undertake. Natural England are currently trialling result-based payments in two areas. The results of this trial are due in 2019.

LANDSCAPE DELIVERY SCALE

There is a substantial evidence-base that demonstrates that coordinating environmental activity across multiple holdings or single large holdings can deliver improved outcomes⁶. This is particularly true for wildlife which often relies on a diversity of habitats at different scales.

Ongoing examples such as the Game and Wildlife Conservation Trust cluster farms and Facilitation Funding provided in Countryside Stewardship show that empowering and incentivising land managers to come together delivers improved outcomes and allows for innovation.

Different parts of the LMC support landscape scale delivery through a number of mechanisms, such as:

- Creating local priorities and targets based on what specific landscapes need – Universal, Enhanced and Landscape Restoration
- Incentivising land managers to work together when locating activities – LMC Enhanced and Landscape Restoration.
- Bonus payments will be made available to those land managers who locate environmental activities adjacent to similar activities⁷.

These bonuses create an incentive for neighbours to collaborate along their borders to create contiguous areas of land managed for environmental outcomes, thereby increasing ecological connectivity between parcels of land. Since cooperation is limited to immediate neighbours, farmers are unable to choose who they cooperate with.

- Facilitating group working by making funds available for facilitators and group working – Enhanced LMC and Landscape Restoration.
- Joint applications, where multiple land managers – owners and tenants – submit a single application will be incentivised in the Enhanced LMC. This has the potential to reduce administrative costs for the Government and give landowners a greater say in how schemes are implemented.
- The Landscape Restoration LMC will fund projects that work across landscapes to create transformative environmental change.

LANDSCAPE RESTORATION LMC

Large scale, transformative projects have the potential to engage the public, deliver benefits to society and the economy and supplement diversified rural businesses.

Key features of the Landscape Restoration LMC:

- Competitive application process.
- Intended to support the restoration / creation of habitats across very large areas.
- Required to cover at least 5,000ha and include landowners.
- Add value to Universal and Enhanced LMCs.
- Fixed budget for each year with a maximum budget per project.
- Local areas will choose a small number of schemes to fund.
- Brings in funding from outside central Government.
- Funding will be made available to develop applications.
- Annual application window.

The Landscape Restoration LMC will be a rolling, project-based programme that will bring ambition and scale to restoring nature in England. Learning from the experiences of the Nature Improvement Areas (NIA) and other landscape scale initiatives, groups of landowners, farmers and civil society will come together to develop proposals for restoring degraded landscapes.

This aspect of the LMC will support the recently announced Nature Recovery Network.

Successful applications will be cross-sector, bring in funding from outside Government and be above a certain size. They will also be expected to deliver multiple benefits, restoring environmental and heritage features in a way that contribute to the economic and social wellbeing of the countryside.

Land managers in the relevant areas will be able to engage, or not, as per the circumstances of their rural businesses and it will be for those developing the applications to make attractive propositions to land managers.

Large scale, competitive scheme that will address major environmental challenges.

THE LANDSCAPE RESTORATION LMC WILL:

- Focus on restoring degraded ecosystems.
- Bring in funding from businesses and communities.
- Support Nature Recovery Areas and create new priority habitats.
- Allow supportive land managers to 'rewild'.
- Trial new ways of working such as reverse auctions.

“If land managers are incentivised to work together they can provide public benefits more efficiently and effectively.”



THE DESIGN PRINCIPLES OF THE LMC

CREATING A COMMERCIAL PROPOSAL FOR PROVIDING PUBLIC BENEFITS

The UK has been implementing agri-environment schemes for over 20 years and there is a substantial evidence-base of what limits and encourages land

manager engagement. In developing the LMC the CLA reviewed the evidence to create a proposal based on what works⁸.

What drives rural businesses to undertake environmental land management?	How is this designed into the LMC?
Payment rates An attractive financial incentive to undertake environmental land management is stressed in all the reviewed literature.	The LMC includes a more practical interpretation of income foregone and cost incurred and, in the Universal LMC, a premium payment when the level of delivery exceeds a defined threshold.
Fit within farm management Farmers are more willing to adopt positive land management which works within their farm business.	The LMC is a voluntary contract. Interested land managers will be able to build a LMC from a menu of activities. If a land manager wants to receive the premium payment some highly effective activities will be required but they will be able to decide how these work around the farm business.
Flexibility Flexible design and implementation is mentioned in all of the research reviewed. Whether it be the length of contracts, the prescriptiveness of options, or the ability to use a farmer's own local knowledge to decide how they will improve the environment.	LMCs will be multi-annual but individual businesses will be able to choose a contract length, as long as the agreement is longer than three years. By allowing local adaptation of the LMC through the Natural England and Environment Agency 14 Local Area, land managers and experts will be able to adjust the LMC.
Previous experience and peer perceptions Those who have engaged in environmental schemes in the past are more likely to participate again. The influence of advisers and other land managers is a crucial factor in participation.	Within the advice and training that will accompany the LMC it is expected that farmer advocates will be used to encourage others to engage. The Enhanced LMC will also incentivise facilitated agreements of multiple land managers working together.
Environmental knowledge and motivations Rural businesses with higher levels of environmental knowledge are more likely to participate in environmental land management.	Advice and training is an essential part of the LMC. As well as one-to-many support for interested rural business there will be targeted advice and training.

PAYMENT RATES THAT CREATE POSITIVE, LARGE SCALE IMPROVEMENTS

In a commercial farming sector the Land Management Contract will have to demonstrate it is a profitable proportion compared to agricultural land uses. This means the expected profit per hectare, accounting for costs, management effort and the impact on agricultural income, needs to be competitive.

It cannot be assumed that without the Basic Payment Scheme (BPS) land managers will automatically apply to any source of Government funding. How future schemes are designed, implemented and incentivised will determine whether land-based businesses will engage with them.

Current environmental schemes are hindered by unattractive payment rates, the need for professional fees to navigate the bureaucracy, high management costs and the risk of having to repay some or all of the money received for often opaque and relatively minor infringement. This must change if we are to see more interest in delivering public benefits.

How to incentivise positive land management

As the Government looks to create an agricultural sector that is not reliant on direct payment, it is likely that the level of remuneration will be the main factor land managers will consider when engaging in land management schemes.

Currently payments to land managers for a defined activity are exclusively based on income foregone and cost incurred. This concept emerged from initial development of Rural Development Programmes in the European Union and was ultimately adopted by the World Trade Organisation (WTO) in the Agreement on Agriculture. To date the EU has taken a literal and narrow interpretation of these rules and required the UK and other member states to do so too.

As English policy makers take the unprecedented step of reforming agricultural support to primarily provide public benefits it will become necessary to reimagine the incentivisation of positive land management.

KEY FACT

In 2016 **just 6% of CLA members** said investing in the environment provides “an attractive return on investment”. The same survey found that the single biggest barrier to all investment decisions is “not anticipating a sufficient return”. The absence of a return is a major impediment to environmental delivery.

What are the current problems with income foregone and cost incurred?

The evidence is clear that payments based on income foregone and cost incurred alone:

- Discourage more efficient farmers⁹ – as those farmers expect higher income from an area than the rate set by the Government which is based on a sectoral average¹⁰.
- Does not prioritise those activities that deliver multiple benefits¹¹ – as it is not possible to further incentivise activities that deliver many benefits.
- Insufficiently incentivises continued good management of existing features¹² – as the ‘income foregone’ of continuing management is effectively zero.
- Discourages permanent land use change – as it limits future potential ‘income foregone’.
- Creates perverse incentives – land managers can flip land between, for example, arable farming and ‘arable reversion’ options in agri-environment schemes. Arable reversion options have high payment rates as there is a large amount of income to forego when changing from an arable to livestock system.

→ Limits effective activities at scale¹³ – for most farms environmental land use is an economically marginal land use as the full cost of delivering is rarely met.

→ Does not support high nature upland farms¹⁴ – Farms in many upland systems have insufficient income to forego and therefore any payment based on that rate will be insufficient to support that business, causing the related public benefits to cease.

There is a need to use a practical and realistic basis for incentivising land managers to provide public benefits. Income foregone and cost incurred should be considered the floor for any payment rate. If the Government wants to meet its objectives of improving the environment it will have to provide a more attractive proposal than current schemes.

The World Trade Organisation (WTO) has created an international framework for domestic agricultural policies to ensure that they are not trade distorting. The related rules do not limit the Government’s ability to go beyond income foregone and cost incurred and implement the Land Management Contract. Further analysis is set out in Appendix B (P.32) of this report.



How is this achieved in the LMC?

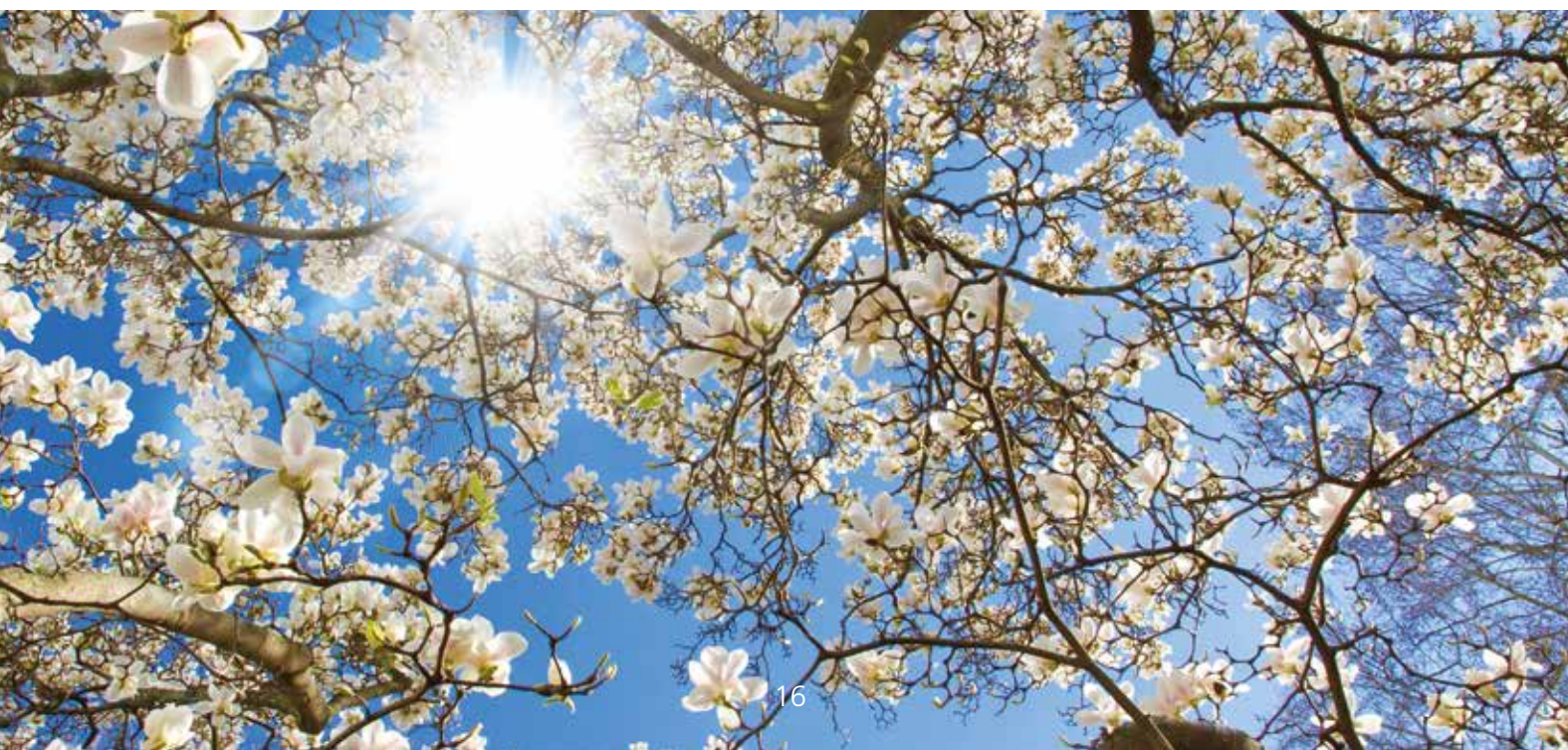
In the short term the priority should be to set payment rates to incentivise the desired level of delivery. Within the LMC this is achieved by:

→ Shifting the calculation of income foregone from the average farm (50th percentile) to a high performing farm (90th percentile). This will make undertaking positive land management a rational commercial decision on 90% rather than 50% of farms.

→ Incentivising certain activities within the LMC – activities which deliver large amounts of public benefits can be prioritised by increasing the point allocation within the Universal LMC.

→ A premium payment in the Universal LMC for those land managers who exceed a defined level of delivery – this payment rate will make undertaking ambitious land management a viable part of a rural business.

“...the priority should be to set payment rates to incentivise the desired level of delivery.”



CLA ANALYSIS

Concepts such as **natural capital** and **ecosystem services** can be used to provide a financial value for a defined environmental feature. These calculations use environmental economic valuation techniques to determine how much society ‘values’ specific management changes. By determining and annualising the Total Economic Value (TEV) of a specific land use change, a payment for providing ecosystem service could be set.

This should not be the basis for payment rates as these techniques are not able to provide the necessary level of farm specific detail, they are also highly subjective and undervalue many important benefits notably biodiversity.

THE PUBLIC BENEFITS WITHIN THE LMC

KEY FIGURES

- Evidence shows that widespread implementation of agri-environmental schemes can enhance populations of breeding farmland birds.^{16,17}
- Land management schemes support jobs and generate spending in the local economy. Research indicates that existing spend generates further annual spending in the economy of between **£178 million** and **£847 million** and sustains between **1,800** and **15,000 jobs**.^{18,19}
- Environmental schemes deliver **savings of 3.46 million tonnes of CO₂** equivalent per year, which is an **11% reduction in greenhouse gas emissions** for the agriculture, forestry and land use sectors.¹⁸
- To date agri-environment schemes have **removed 820 scheduled monuments from the Heritage at Risk Register** and ensured thousands more are not added.
- A conservative assessment places the total economic, environmental and recreational **value of UK woodlands at around £270bn**.²⁰
- UK Government figures show that getting 75% of England's rivers, lakes and wetlands healthy **would benefit the economy by £8.5 billion**.²¹

The LMC can make a major contribution to addressing the challenges of rural England, creating a more resilient, beautiful and sustainable countryside. This will be achieved through multi-annual contracts for the delivery of specified activities and outcomes alongside capital payments to improve infrastructure and practices for individual farms and collaborative working.

HOW MUCH WILL THE LMC COST?

Having committed to being the first Government to leave the environment in a better condition than it inherited it is incumbent upon the UK Government to put in place policies to achieve that goal. As recognised in the 25 Year Environment Plan it will not be possible to achieve the Government's objectives without an adequately resourced environmental land management system.

The CLA wants to see the level of investment in rural businesses remain stable. Within England this will require the Government continuing to invest at least £2.2bn/yr in the English countryside, in real terms for the next 25 years. As English agriculture transitions away from the CAP the Government must make available the tools and support so farmers can adapt their farm businesses. After that period, the vast majority of this budget should be allocated to the Land Management Contract.

IS IT WORTH IT?

Yes. The Government has rightly been praised for its recent environmental ambition. Citizens and businesses see the benefit of enhancing the environment. This investment also makes sense economically. Evidence collected over

recent years also demonstrates that this level of investment is a good use of public money and will contribute to enhancing the environment and creating vibrant resilient communities¹⁵.

WHAT WILL THE LMC PROVIDE?

Current agri-environment schemes are limited in scope by tight budgets and the policy competences of the EU. The result is a set of schemes which do not encourage change across the farm system, which treat farmed land and forestry as incompatible and which have ignored many of the public benefits that can be provided by positive land management. These policies have demonstrably failed to deliver the ambitions of Government or land managers.







As England moves beyond the CAP, land management policies should be more ambitious in scope and in their integration of land uses. The LMC will allow landowners to undertake activities prioritised in current schemes, such as enhancing wildlife and clean water, but will go further and achieve outcomes currently omitted or marginalised which are crucially important to a vibrant, sustainable countryside.

Examples include agro-forestry, adapting to climate change, managing heritage features, biosecurity and air quality.

There must be a clear regulatory baseline. The LMC will only apply to activities that go beyond legal requirements. It will not reward basic compliance with the law. If a farmer fails to comply with the law, they stand to be penalised by either criminal or civil sanctions.

The table on the following pages shows the breadth of public benefits that the LMC could provide, what sort of activities might be included, why those benefits matter to society and how the LMC will deliver it.

“The LMC will be more ambitious in its scope and scale than anything seen before.”

Public benefits provided by the LMC	What sort of activity is covered?		Why is it needed?	How will the LMC encourage it?
 Thriving wildlife	<ul style="list-style-type: none"> → Creating, restoring and managing wildlife habitats. → Providing food over winter for farmland birds. → Clearing invasive-non-native-species. 		<ul style="list-style-type: none"> → There is no market return and often significant costs to carrying out work for biodiversity. → Many wildlife metrics show continual decline. 	<ul style="list-style-type: none"> → Funding for capital and multi-annual work to benefit biodiversity. → Targeted habitat and species interventions. → Supporting organic systems.
 Reduced flood risk	<ul style="list-style-type: none"> → Smaller scale measures such as attenuation ponds, leaky dams and tree planting. → Measures which are intended to primarily reduce flood risk will remain part of the flood risk management planning processes. 		<ul style="list-style-type: none"> → If supported by advice, mapping and a consideration of liability issues, small scale intervention can reduce peak flows and reduce the severity and intensity of flood events.²² 	<ul style="list-style-type: none"> → Providing capital and multi-annual support across all aspects of the LMC. → Large-scale woodland creation. → Encouraging agro-forestry.
 Cleaner water	<ul style="list-style-type: none"> → Capital funding for more precise use of nutrients and pesticides. → Creating buffer strips which stop soil getting into water. 		<ul style="list-style-type: none"> → Investing in precision farming equipment and creating buffers by taking land out of production has a cost that is not met within the market. 	<ul style="list-style-type: none"> → Capital and multi-annual payments across all aspects of the LMC. → Enabling sustainable farming practices that reduce losses of nutrients, soil and pesticides.
 Improved health and wellbeing through public access	<ul style="list-style-type: none"> → Improving footpaths and bridleways. → More facilities, including for less able visitors. → Signage to reduce animal disturbance and improve health and safety. → Targeted linear and area based permissive access. 		<ul style="list-style-type: none"> → Although the UK has an extensive network of public rights of way it is not fully utilised. → Better infrastructure is key in encouraging all people to enjoy existing public access. → To assist in providing a more flexible and adaptable system which can be tailored to suit specific needs. 	<ul style="list-style-type: none"> → Capital payments to establish necessary infrastructure to improve ability to access nature and green spaces. → Multi-annual payments for improvements to access including targeted permissive access.
 Enhanced heritage and archaeological features	<ul style="list-style-type: none"> → Clearing scrub from archaeological features. → Restoring traditional farm buildings. → Protecting historic hedges and stone walls. 		<ul style="list-style-type: none"> → Heritage and archaeological features are irreplaceable but many are threatened or in a declining state. → Maintenance is expensive and not supported by the market. 	<ul style="list-style-type: none"> → By providing capital and multi-annual funding for restoring, enhancing and maintaining heritage and archaeological features.
 Educational visits	<ul style="list-style-type: none"> → School trips. → Green prescriptions where patients are encouraged to visit the countryside to improve their physical and mental health. 		<ul style="list-style-type: none"> → People are becoming disconnected from the food they eat and the natural world. → Hosting visits comes with high added costs and liabilities for providers. 	<ul style="list-style-type: none"> → Land managers will be able to access capital funding to be trained in educational visits. → Accredited land managers will be paid per visit.
 More carbon storage	<ul style="list-style-type: none"> → Protecting and creating wetland. → Planting trees. → Protecting permanent pasture. 		<ul style="list-style-type: none"> → Healthy carbon stocks are crucial in addressing climate change globally.²³ → Currently no or very limited market value can be derived from carbon storage. 	<ul style="list-style-type: none"> → By providing capital funding to create new carbon stores in soils and biomass, as well as protecting existing storage through multi-annual payments. → Relevant actions will be identified in sustainable farming plans.
 Improved animal health and welfare	<ul style="list-style-type: none"> → Supporting more efficient use of antibiotics. → Encouraging accreditation in higher welfare standards. → Modern infrastructure. 		<ul style="list-style-type: none"> → Society prefer high welfare standards but few pay the additional associated costs. → Increased anti-microbial resistance (AMR) poses risks beyond agriculture. 	<ul style="list-style-type: none"> → Capital payments for infrastructure improvements. → Incentivising sustainable farming practices such as biosecurity and welfare plans to reduce risks.
 Better soils	<ul style="list-style-type: none"> → Incentivising longer rotations. → Continuous soil cover. → Encouraging soil organic matter. → More under-sowing cereals and maize. 		<ul style="list-style-type: none"> → Good soil health underpins farming and food production but also is a rich source of biodiversity and plays key roles in managing water quality, availability and flooding risks. 	<ul style="list-style-type: none"> → Multi-annual funding for ongoing actions for and capital funding for one-off investments. → Incentivising sustainable farming practices, such as organic and agroforestry to improve soil health.
 Cleaner air quality	<ul style="list-style-type: none"> → Improved storage and management of manures and slurries. → More precise use of nutrients. → Covers for slurry stores. 		<ul style="list-style-type: none"> → Nutrients are key inputs for producing food but investments to keep up with best practice technology are costly and inhibit uptake. 	<ul style="list-style-type: none"> → Multi-annual payments for improved nutrient management plans. → Capital funding to encourage greater investment in technologies which reduce the impacts on human health and nuisances.
 Lower greenhouse gas emissions	<ul style="list-style-type: none"> → More efficient machinery. → Use of lower emission fertilisers. → Protecting wetlands and peatland to stop carbon 'leakage'. 		<ul style="list-style-type: none"> → Agricultural emissions will have to reduce if the UK is to meet its existing carbon budgets and commitments under the Paris Agreement. 	<ul style="list-style-type: none"> → Multi-annual payments for practices such as reduced tillage and abated fertiliser. → Targeted support for areas of high importance, such as peatlands.
 Thriving rural communities	<ul style="list-style-type: none"> → Land management expertise in remote areas. 		<ul style="list-style-type: none"> → Maintenance of services in rural areas where agricultural production alone is non-economic. 	<ul style="list-style-type: none"> → Multi-annual payments to supplement land management in areas of natural constraint and high landscape value.

LOCAL ADAPTATION AND ADMINISTRATION

GOVERNANCE, ENGAGEMENT AND ADMINISTRATION

KEY POINT

National policy makers should step back and focus on supporting those who are best placed to improve the environment and rural areas; those who live and work there.

Local prioritisation and adaptation

Farmers and land managers have a wealth of knowledge about their local environment. As we leave the EU, the local expertise of land managers, farmers and environmental authorities must come to the fore.

To achieve this there should be a presumption that it is the farmers, land managers, local experts and authorities who are best able to set their priorities and plans, not central Government.

This can be achieved by putting the emphasis of delivering the LMC to the 14 local areas recently created by the Environment Agency, Natural England

and Forestry Commission. Decentralising decision making to these areas will create opportunities for land managers to influence how the LMC is delivered in their local area.

To be effective and to ensure that applicants are not faced with a “postcode lottery” this prioritisation should be achieved transparently and within nationally monitored limits and rules.

The Government’s 25 Year Environment Plan states “at a local level we want environmental effort to be guided by the goals we have outlined [in the plan] but also to reflect local needs and priorities”.

CLA ANALYSIS: ENGLAND’S DIVERSE COUNTRYSIDE

The landscape, geology and cultures of England’s farmed environment is hugely diverse. It is a folly to create a single grazing regime for the rolling lowlands of east Devon, sandy soils of Cambridgeshire and the drumlins of Cumbria. Yet that is the reality of current schemes.

Empowering local areas and land managers

Within the 14 local areas it would be possible to adapt the LMC to reflect the needs of that specific area. Local areas could adapt the LMC by:

- Adapting the points allocated to a specific activity within the Universal LMC to encourage its uptake.
- Creating new activities.
- Adapting activities to reflect local circumstances.

Local land managers must be involved in these processes. Evidence from the Game and Wildlife Conservation Trust farm clusters, Moors for the Future, Nature Improvement Area (NIA) and multiple other initiatives suggests that working with farmers to implement what they want to see can be more cost effective than imposing requirements²⁴.

Local areas might wish to propose changes to existing or create new LMC activities where there is a demonstrable need. For instance, hay making seasons differ in different parts of the country

and related prescriptions could be adapted to account for this. Equally, farmers in a local area might wish to change elements of schemes to reflect their circumstances such as longer growing seasons in southern uplands meaning stocking numbers need to be higher than in northern areas.

There will need to be a process for managing changes to the scheme in local areas. This will ensure local adaptations are effective, transparent, fit within wide Government objectives and are based on robust evidence. This could involve some form of local and national committee structure with clear delegated authorities and process for change.

The national and local LMC committees would be managed via Defra and its agencies but have representatives from key stakeholder’s groups. The role and responsibilities of the national agencies and 14 local areas are set out in the following table on page 24.

KEY POINT

Competition and innovation

One of the benefits of decentralising the management of the LMC would be to create opportunities for innovation and competition. For instance, a league table of the 14 areas performance in terms of paying applicants, completing applications, environmental outcomes and co-investment would drive improvements in customer service and encourage new ways of working.

Summary of the role of national and local bodies in managing the LMC in England

What is their role over...	National	Local area
...what the budget is	→ Set at the national level in accordance with the UK framework.	→ No role.
...who gets a contract	→ Sets rules for how contracts are awarded (point threshold / scoring process). → Audits local areas to ensure adherence to the rules. → Signs off proposed changes.	→ Manages process and awards contracts. → Able to change some elements of contract award such as points and scoring thresholds – with national oversight.
...how the contract is managed	→ Set rules for managing the contract. → Allocates budget to local area. → Resolves disputes. → Audits local areas and produces public reports on a) time taken to pay payments b) time from agreement application to agreement starting.	→ Manages contracts. → Asks national body to resolve disputes where necessary. → Reports on how long it takes that area to a) pay a payments b) issues an agreement.
...what activities can be undertaken	→ Defines a national set of activities that can deliver specific outcomes. → Define standards for specific activities. → Via the National LMC Committee signs off local adaptations / proposed activities.	→ Able to adapt and propose new activities.
...which activities and outcomes are prioritised	→ Sets rules for minimum spend against specific outcomes (e.g. water quality). → Sets rules for maximum / minimum point allocation against certain activity.	→ Able to adapt scoring / points to incentivise preferred outcomes.

KEY FIGURE

In a recent CLA survey **48%** of respondents felt that they didn't have sufficient environmental skills in their business

Advice, facilitation and training

Evidence from past land management schemes show that providing advice improves outcomes in the short and long term²⁵. Within the farming community, the levels of skill and experience in providing environmental and other public benefits available vary substantially

If the Government wants the provision of land based public benefits to increase, land managers must have access to appropriate advice and training so that they can meet these increased expectations across all parts of the LMC.

Within the LMC it is proposed that each local area in England (NE/EA/FC areas) is allocated a budget for training and advice and that they allocate according to local need. Advice should include a combination of one-to-many training and support for the Universal aspects of the LMC and more targeted advice to land managers interested in accessing the Enhanced LMC and benchmarking.

The contract

Being a contract, the LMC will also need to contain standard boilerplate clauses relating to matters such as pre-contract representations, severance and third-party rights.

Simple and effective administration

How future land management schemes such as the LMC are administered should not be an afterthought. The experience of the current agri-environment scheme – Countryside Stewardship – shows that poor customer experiences will put off rural businesses. The key principles to achieve success are:

→ **Engaging in the LMC:**
Using technology to enable simple filters for relevant options based on location and land use.

Interested land managers should be able to provide basic information and then be presented with a menu of activities that are applicable to their farm and that meet local priorities.

→ **Application dates:**
Rolling application windows and start dates will provide flexibility for applicants and more even administration for Government.

→ **Payment obligations:**
As with any standard contract, payment terms must be met or the party missing their obligations, in this instance the Government will incur interest payments.

Predictability of payment is crucial for rural businesses managing cash flow and quarterly tax reporting. The Government intends to create a commercial farming sector in England. If they wish to work with such a sector they must be a reliable partner.

→ **Payment agreements:**
Payments should be made on a quarterly basis assuming the land manager meets their obligations with regard to evidence and public benefit delivery. Land managers will be expected to submit two evidence claims each year. The first on month six and the second on month twelve across their contracted period.

→ **Penalties:**
Any farmer who fails to comply with an obligation under their LMC will be required to repay an amount equivalent to the amount payable for that obligation deducted or have the amount deducted from the next payment, plus interest at the standard rate.

→ **Inspections:**
The inspection regime can be managed to provide appropriate assurances of delivery quality and audit trail. This will include targeted inspections based on earned recognition.

“How future land management schemes such as the LMC are administered should not be an afterthought. The experience of the current agri-environment scheme – Countryside Stewardship – shows that poor customer experiences will put off rural businesses.”

THE CURRENT APPROACH TO INSPECTIONS

For cross-compliance, on-farm inspections are required on a minimum of **1%** of farms for most measures, while certain high-risk measures – such as livestock identification – are set at **3%**.²⁶

For AES, **5%** of agreements within their first five years are inspected, reducing to **2.5%** of agreements which have run for longer.²⁷

One-quarter of these are selected randomly and the remainder are selected based on a regularly-reviewed analysis of risk which selects agreements which are statistically most likely to be in breach.

CONCLUSION AND NEXT STEPS

As the UK leaves the EU, alongside changes to trading, regulation and labour the Government wants to fundamentally reform agricultural policy. At the heart of these reforms is a move to a “payment for public benefits” model.

Such a model is a good use of public money with huge opportunities for land managers, the environment and the rural economy. But, realising these opportunities should not be taken for granted. If designed and delivered poorly there is a real risk that land managers will not engage in the scheme and a golden opportunity will have been missed. Ensuring that the future land management schemes incentivise the majority of land managers to engage in the scheme is fundamental to delivering the vision set out in the Government’s 25 Year Environment Plan.

MORE THAN ENVIRONMENTAL LAND MANAGEMENT

Future policy must look beyond the scope of the CAP and empower rural businesses to deliver their full potential of public benefits. This means, as well as promoting environmental delivery such as biodiversity and water protection, land managers should be incentivised to adopt farming practices and woodland management that improve soil, water and air quality, reduce greenhouse gas emission, protect heritage assets and improve animal welfare. All of these activities are demonstrable public benefits and investing in them has a positive return for the Government. The LMC has set out how this should be achieved.

Alongside future environmental land management, it is imperative that Government bring forward policies to encourage and assist farmers to become more productive and profitable whilst also allowing greater diversification. Providing public benefits through the LMC or other schemes will be an important part of land-based businesses in the future, but in most instances viability and success will be dependent on whether they can make a profit from producing crops and livestock and developing other commercial opportunities on the land.

THE FOUNDATION OF A SUCCESSFUL PUBLIC BENEFITS SCHEME

If England’s countryside and rural businesses are to both thrive there are four foundations future schemes must build from:

1. A sufficient budget with long term security

The countryside faces a set of major challenges which require long term funding to address. The Government must commit to maintaining at least the current spend in real terms. In England current spend is £2.2bn/year.

2. Getting the incentives right

Moving beyond income foregone / cost-incurred and using premium payments so that commercial land managers are incentivised to provide substantial public benefits.

3. Competent administration

Locally adaptable schemes with streamlined administration and mechanisms to ensure both parties meet their contractual obligations. This means Government paying on time, and land managers achieving the targets they set themselves.

4. Flexibility

Contracts must be able to adjust to the reality of England’s diverse land ownership and geography. The coming years will likely also see substantial change in farming. Future schemes must adapt with, not work against these changes.

With the LMC the CLA has provided a model for future environmental land management schemes that meet these foundational requirements.

The LMC would, if taken forward, provide a significant amount of public benefits through a high level of land manager engagement. Ambitious delivery will only be achieved through a system that makes ambitious environmental, animal welfare, heritage and other public benefit delivery a financially sensible proposition. This is the mark that the CLA and its’ members will assess future Government proposals against.

KEY POINT

If implemented, the LMC would make a substantial contribution to achieving the Government’s goals as set out in the 25 Year Plan for the Environment whilst enhancing England’s rural economy.

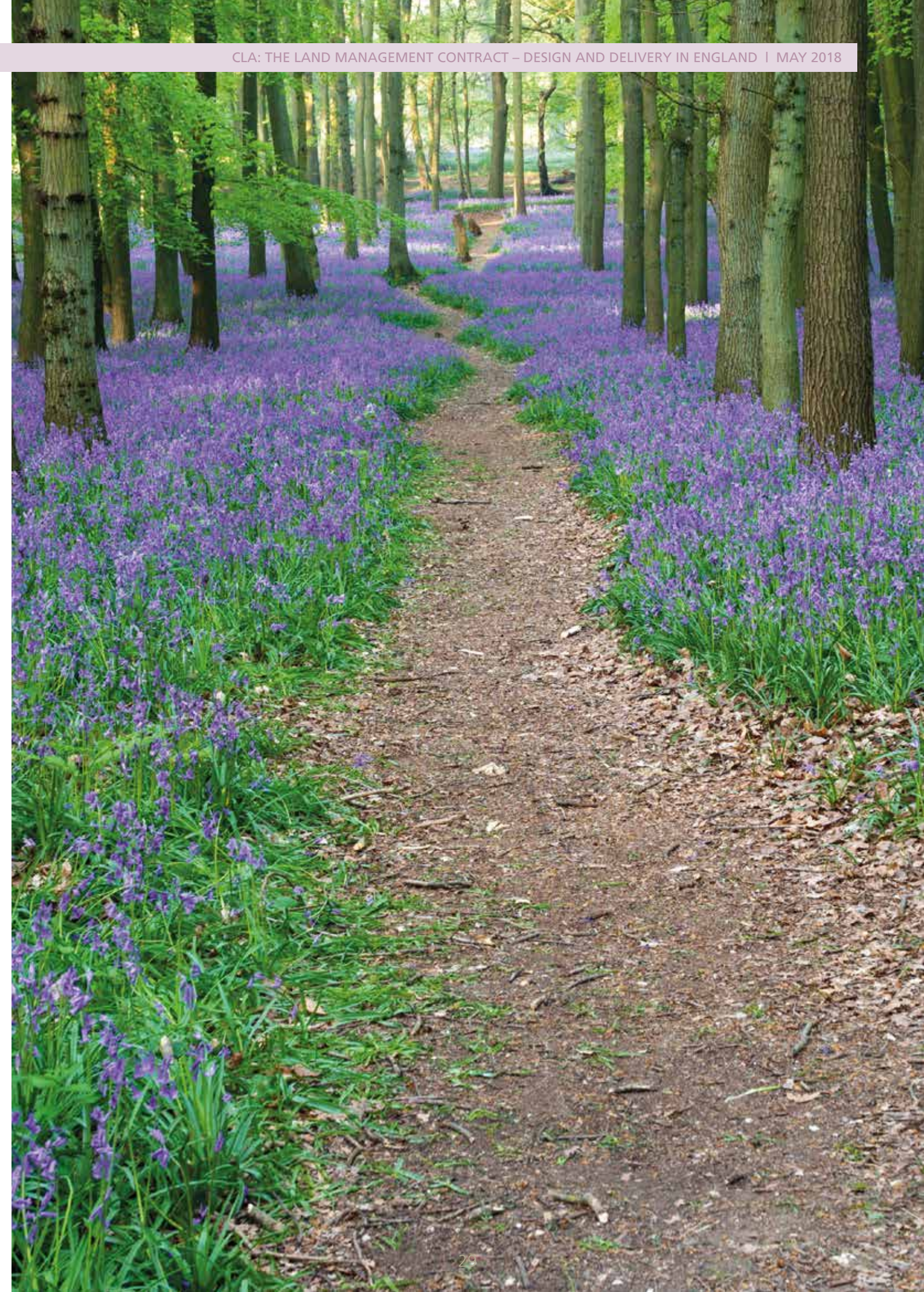
NEXT STEPS

The CLA will continue to work with Government and its members to minimise the risks presented by the Government's proposals and make the most of the opportunities in relation to trade, regulation, labour and future agricultural policy.

With regard to future agricultural policy, the CLA will be setting out the policies the land-based sector needs to become more profitable and productive and how the potential of the broader rural economy can be realised.

Future work related to the LMC will include farm level economic modelling to quantify the impact on rural businesses on the LMC. These models will also be used to test emerging Government proposals to test whether future schemes are financially attractive for rural businesses.

“... CLA will be setting out the policies the land-based sector need to become more profitable and productive.”



APPENDIX A

DO THE WORLD TRADE ORGANISATION RULES LIMIT THE GOVERNMENT'S ABILITY TO IMPLEMENT THE LMC?

The WTO has an important influence on agriculture policy. It seeks to reduce trade distortions and manage trade disputes across the international community. The WTO, via the Agreement on Agriculture define 'trade distorting' and 'non-trade distorting' agricultural subsidies. The WTO and its members have agreed limits on the total amount of 'trade distorting' support with the intention of reducing them over time. Non-trade distorting subsidies are not limited but must meet defined criteria and members must publish annually how much money they are spending and whether or not it is trade distorting. Other WTO members can challenge these notifications.

The WTO is a political forum and members will only challenge other members where there is a strategic benefit to doing so.

The Agreement on Agriculture does not include detailed definitions of how the various criteria should be assessed. Currently the EU takes a narrow and limited interpretation of these criteria. Post EU-exit, English policy makers will be able to use a reasonable but more practical assessment of these costs within their calculation of payment rates.

The Agreement on Agriculture also includes a number of different programmes that a country can notify against. These programmes include allowable levels of trade distorting support via de *minimis* payments or the Aggregate Measure of Support. Within a fixed budget there are no limits on how this money is spent. England is likely to have around £1bn/year to spend under de *minimis* and a share of the EU's €72bn available Aggregate Measure of Support.²⁸

There are also defined Blue Box – trade distorting but with conditions – and Green Box – not trade distorting – programmes. Each of these different elements can be combined and this creates substantial flexibility. Most countries notify multiple programmes such as:

- **Resource retirement** – where land is removed from production for at least five years.
- **Decoupled area-based payments** – like the Basic Payment Scheme.
- **Environmental programmes** – such as agri-environment schemes.
- **Regional assistance programmes** – such as payments for areas of natural constraint.

In combination a suite of programmes based on different elements of the Agreement on Agriculture could be consistent with the WTO, limit trade distortion whilst meeting domestic policy goals. The LMC, for instance, could be notified under the four Green Box programmes set out above.

The CLA view shared by others²⁹ is that, assuming a genuine desire to deliver public goods, WTO rules should be considered something to check future proposed UK domestic support against, but they do not constrain the ability of the UK to create effective land use policy.

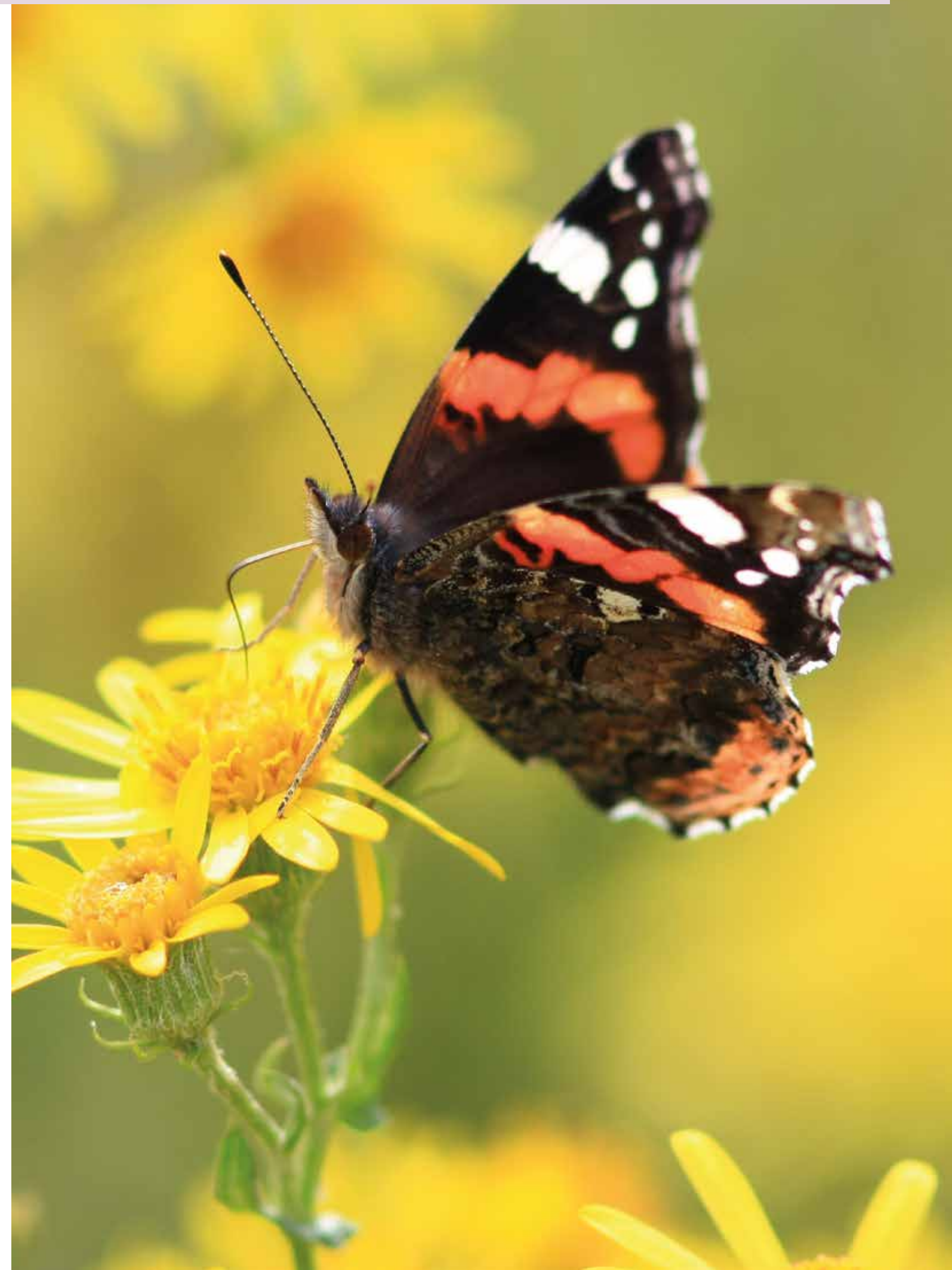


APPENDIX B

REFERENCES

1. Various Farm Environment Plan templates exist depending on the sector and typical farming operations. More information can be found here: <http://www.canterburywater.farm/fep>
2. More information is available at <https://www.origingreen.ie/>
3. CLA, 2017. How To improve the profitability of farming and forestry. *New Opportunities*, (Issue 3, November 2017). <http://www.cla.org.uk/sites/default/files/CLA%20New%20Opps%20How%20To%20INVESTMENT%20Doc%203%20D5%20V2%2002.11.17%20AW%20SPREADS.pdf>
4. Natural England, 2009. Agri-environment schemes in England 2009. *A review of results and effectiveness*. http://www.naturalengland.org.uk/Images/AE-schemes09_tcm6-14969.pdf.
5. Outcome-based payments are possible when suitable success criteria can be met. More information is available in this CLA explainer: <https://www.cla.org.uk/sites/default/files/RBPs%20Explainer.pdf>
6. Living With Environmental Change Partnership, 2016. Spatial targeting brings new opportunities for agri-environment schemes. *Policy and practice notes*, (28). <http://www.nerc.ac.uk/research/partnerships/ride/lwec/ppn/ppn28/>
7. Evidence on agglomeration bonuses is available here:
 - Drechsler, M. et al., 2007. *An agglomeration payment for cost-effective biodiversity conservation in spatially structured landscapes*, Leipzig. <https://www.econstor.eu/bitstream/10419/45226/1/531928713.pdf>
 - Kuhfuss, L. et al., 2017. Spatial coordination in Payment for Ecosystem Service schemes: can we nudge the agglomeration bonus to enhance its effectiveness?, (May), pp.1–18. http://www.bioecon-network.org/pages/19th_2017/Kuhfuss.pdf
 - Prager, K., 2015. Agri-environmental collaboratives for landscape management in Europe. *Current Opinion in Environmental Sustainability*, 12, pp.59–66. <http://www.sciencedirect.com/science/article/pii/S1877343514000815>
 - Wätzold, F. & Drechsler, M., 2014. Agglomeration payment, agglomeration bonus or homogeneous payment? *Resource and Energy Economics*, 37, pp.85–101. <http://www.sciencedirect.com/science/article/pii/S0928765513000869>
8. References reviewed include:
 - Lastro-Bravo, X. et al., 2016. What drives farmers' participation in EU agri-environmental schemes? Results from a qualitative meta-analysis. *Environmental Science & Policy*, 54 (June), pp.1–9. http://eprint.ncl.ac.uk/file_store/production/214035/670B95C8-8F5A-4CBA-81A0-5231CD54483C.pdf
 - Ruto, E. & Garrod, G., 2009. Investigating farmers' preferences for the design of agri-environment schemes: a choice experiment approach. *Journal of Environmental Planning and Management*, 52(5), pp.631–647. <http://www.tandfonline.com/doi/abs/10.1080/09640560902958172>
 - Espinosa, M., Barreiro-Hurle, J. & Ruto, E., 2010. What do farmers want from agri-environmental scheme design? A choice experiment approach. *Journal of Agricultural Economics*, 61, pp.259–273. <http://eprints.lincoln.ac.uk/12581/>
 - Wilson, G.A. & Hart, K., 2000. Financial imperative or conservation concern? EU farmers' motivations for participation in voluntary agri-environmental schemes. *Environment and Planning A*, 32, pp.2161–2185. <http://journals.sagepub.com/doi/abs/10.1068/a3311>
 - Ingram, J. et al., 2013. Incorporating agri-environment schemes into farm development pathways: A temporal analysis of farmer motivations. *Land Use Policy*, 31, pp.267–279. <https://www.sciencedirect.com/science/article/pii/S0264837712001317?via%3Dihub>
 - Kuhmonen, I., 2017. Adoption of the agri-environmental measures: The role of motivations and perceived effectiveness. *The international congress of European Association of Agricultural Economists*, (August), pp.1–13. <http://ageconsearch.umn.edu/record/261108?ln=en>
 - Triste, L. et al., 2018. Exploring participation in a sustainable farming initiative with self-determination theory. *International Journal of Agricultural Sustainability*, 16 (1), pp.106–123. <https://www.tandfonline.com/doi/abs/10.1080/14735903.2018.1424305>
 - de Krom, M.P.M.M., 2017. Farmer participation in agri-environmental schemes: Regionalisation and the role of bridging social capital. *Land Use Policy*, 60, pp.352–361. <https://www.sciencedirect.com/science/article/pii/S0264837716302885>
9. Emmanuelle, Q., Rob, F. & Iain, F., 2011. Farmer compensation and its consequences for environmental benefit provision in the Higher Level Stewardship scheme. *Journal of Agricultural Economics*, 62(2), pp.330–339. <http://onlinelibrary.wiley.com/doi/10.1111/j.1477-9552.2011.00291.x/abstract>
- and Dobbs, T.L. & Pretty, J., 2008. Case study of agri-environmental payments: The United Kingdom. *Ecological Economics*, 65(4), pp.765–775. <https://www.sciencedirect.com/science/article/pii/S0921800907004260>
10. Rob, F., 2009. Land heterogeneity, agricultural income forgone and environmental benefit: An assessment of incentive compatibility problems in environmental stewardship schemes. *Journal of Agricultural Economics*, 60(1), pp.190–201. <http://onlinelibrary.wiley.com/doi/10.1111/j.1477-9552.2008.00183.x/full>
11. Reed, M.S. et al., 2014. Improving the link between payments and the provision of ecosystem services in agri-environment schemes. *Ecosystem Services*, 9, pp.44–53. <http://nora.nerc.ac.uk/id/eprint/508943/1/N508943PP.pdf>
12. Dobbs, T.L. & Pretty, J., 2008. Case study of agri-environmental payments: The United Kingdom. *Ecological Economics*, 65(4), pp.765–775. <https://www.sciencedirect.com/science/article/pii/S0921800907004260>
13. Falconer, K., 2000. Farm-level constraints on agri-environmental scheme participation: a transactional perspective. *Journal of Rural Studies*, 16(3), pp.379–394. <https://www.sciencedirect.com/science/article/pii/S0743016799000662>
14. Barnes, A.P. et al., 2011. *Alternative payment approaches for non-economic farming systems delivering environmental public goods*. https://www.sruc.ac.uk/info/120560/cap_reform/1262/greening_the_cap/4
15. Christie, M. et al., 2011. Economic valuation of the benefits of ecosystem services delivered by the UK Biodiversity Action Plan. *Final report to Defra*. <http://sciencesearch.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=17293>
16. Colhoun, K. et al., 2017. Agri-environment scheme enhances breeding populations of some priority farmland birds in Northern Ireland. *Bird Study*, 64(4), pp.545–556. <https://www.tandfonline.com/eprint/XKEvNXk2iqangDCkxZkI/full>
17. Kay, A., 2018. Agri-environment schemes more than double farmland bird numbers. *Farmer's Guardian*. <https://www.fginsight.com/news/news/agri-environment-schemes-more-than-double-farmland-bird-numbers-48275>
18. Natural England, 2009. Agri-environment schemes in England 2009. *A review of results and effectiveness*. http://www.naturalengland.org.uk/Images/AE-schemes09_tcm6-14969.pdf.
19. Countryside and Community Research Institute, 2010. Estimating the incidental socio-economic benefits of environmental stewardship schemes. (March). <http://www.ccri.ac.uk/wp-content/uploads/2013/04/IncidentalSocioEconomic-ImpactsEnvironmental-Stewardship.pdf>
20. Woodland Trust (2016) Economic Benefits of Woodland Available from: <https://www.woodlandtrust.org.uk/mediafile/100523043/RR-WT-060315-economic-benefits-woodland.pdf>

21. Environment Agency (2014) A Consultation on the Draft Update to the River Basin Management Plan, Part 3: Economic Analysis.
22. Dadson, S. et al., 2017. A restatement of the natural science evidence concerning catchment-based “natural” flood management in the UK. *Proceedings of the Royal Society*, 473, pp.1–34. https://www.oxfordmartin.ox.ac.uk/downloads/academic/Oxford_Martin_Restatement4_Natural_Flood_Management.pdf
23. IPCC, 2014. *Climate Change 2014 Synthesis Report*, http://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf
 → GHK Consulting, 2010. Costs of the UK Biodiversity Action Plan – Update. <http://sciencesearch.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=17218>
 → Natural Capital Committee, 2015. The state of natural capital: protecting and improving natural capital for prosperity and wellbeing. *Third Annual Report*. <https://www.gov.uk/government/publications/natural-capital-committees-third-state-of-natural-capital-report>
24. Hill, C. & Kingsley-Rowe, D., 2015. Monitoring and Evaluation of Nature Improvement Areas: Final Report (2012-15). *Collingwood Environmental Planning*. <http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18555>
 → Moors for the Future Partnership. <http://www.moorsforthefuture.org.uk/>
 → Game and Wildlife Conservation Trust, Farmer Clusters. <https://www.gwct.org.uk/farming/advice/farmer-clusters/>
25. References include:
 → Boatman N, et al., 2010. Estimating the Wildlife and Landscape Benefits of Environmental Stewardship.
 → Dwyer J and Blackstock K, 2007. Understanding and influencing positive behaviour change in farmers and land managers. http://randd.defra.gov.uk/Document.aspx?Document=WU0104_6750_FRP.doc
 → Environment Agency, 2014. Catchment Sensitive Farming Evaluation Report – Phases 1 to 3 (2006 - 2014). <http://publications.naturalengland.org.uk/publication/6510716011937792>
 → Jones G, et al., 2013. Entry Level Stewardship Training and Information Programme(ETIP) Value for Money Analysis: Final report. <http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=18537&FromSearch=Y&Publisher=1&SearchText=etip&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description>
 → Jones N, et al., 2015. Environmental Stewardship quality assurance programme, 2013/14. *Assessing the role of advice and support on the establishment of HLS agreements*. <http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=19197&FromSearch=Y&Publisher=1&SearchText=LM0432&SortString=ProjectCode&SortOrder=Asc&Paging=10>
26. National Audit Office, 2012. Streamlining farm oversight. <https://www.nao.org.uk/wp-content/uploads/2012/12/1213797.pdf>
27. Defra, 2014. Guidance – Environmental Stewardship: site inspection and what impact it has on your agreement. *Gov.uk* <https://www.gov.uk/guidance/environmental-stewardship-site-inspection-and-what-impact-it-has-on-your-agreement>
28. Swinbank, A., 2017. World trade rules and the policy options for British agriculture post-Brexit. *UK Trade Policy Observatory*. <http://blogs.sussex.ac.uk/uktpo/files/2017/01/Briefing-paper-7.pdf> and Brink, L., 2016. UK Brexit and WTO farm support limits. *CAP Reform.eu*, (13 July). <http://capreform.eu/uk-brexit-and-wto-farm-support-limits/>
29. Bureau, J.-C., 2017. Does the WTO discipline really constrain the design of CAP payments? *CAP reform.eu*, (23 October). <http://capreform.eu/does-the-wto-discipline-really-constrain-the-design-of-cap-payments/>



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