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National Landscapes Association

PASTURE FOR LIFE

Floodplain Meadows Partnership

Realising Grassland Potential: An Ecosystem Services Toolkit for Farmers

July 2025

Image: Species-rich meadow, Source: Plantlife

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Table of Contents

Grassland Toolkit Overview

The Grassland Toolkit aims to facilitate the assessment of funding opportunities for grassland creation, restoration, enhancement and management.

1. Grassland Types

Classed by species diversity and phosphate levels.

2. Interventions

Creation, restoration, enhancement and/or sustainable management of grasslands.

3. Benefits

Key ecosystem service benefits from grassland interventions.

4. Funding

Identification of the most suitable funding opportunity(ies) to support grassland interventions.

5. Project Development

Next steps for project development and accessing suitable funding opportunity(ies).

1. Grassland Types

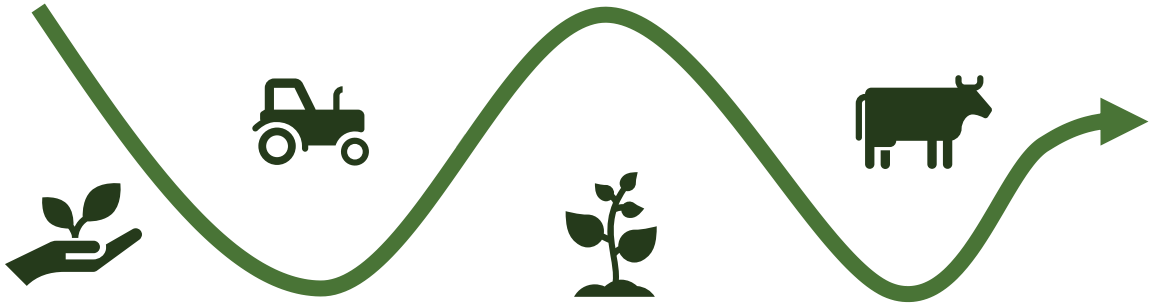
Image: Species-rich meadow, Source: Mike Dodd, https://www.amanita-photolibrary.co.uk/

Grassland Types

Key:
= Different grassland starting conditions
= Grassland target condition
= UKHab Priority Habitat grassland types(1)

Arable → **Agriculturally improved grassland** → **Poor quality semi-improved** → **Good quality semi-improved** → **Grassland Priority Habitats(2)**

Interventions



- Upland Acid Grassland
- Upland Calcareous Grassland
- Upland Hay Meadows
- Floodplain Meadows
- Lowland Dry Acid Grassland
- Purple Moor Grass and Rush Pasture
- Lowland Meadows
- Lowland Calcareous Grassland

Species Diversity
Number of species per m^2
Ratio of herbs-grasses

Very Low — *Low* — *High* — *Very High*

Phosphate Levels
% rye grass & white clover

Very High — *High* — *Low* — *Very Low*

(1) UKHab Priority Habitat grassland types are those identified as being most threatened and requiring conservation action.
(2) Priority habitat grassland types are presented in "good" condition. Each grassland type can be further left or right depending on species diversity and phosphate levels.

2. Grassland Interventions and Cost Estimates

Image: Brush harvesting, Source: Plantlife

Overview of Grassland Interventions

Intervention	Grassland starting condition	Grassland target condition
Arable reversion	Arable; Agriculturally improved grassland	Grassland Priority Habitat
Grassland restoration	Poor quality semi-improved	Grassland Priority Habitat
Grassland enhancement	Good quality semi-improved	Grassland Priority Habitat

Image source: Plantlife

With a high level of species-richness

Please note

Intervention-related information is indicative and non-exhaustive. Further resources should be consulted.

- The grassland interventions, management techniques and associated costs described on the following slides are intended to provide an introductory, high-level overview of what could be required for: **arable reversion, grassland restoration, grassland enhancement and grassland management**.
- In practice, expert ecological advice would be required to design appropriate interventions tailored to the specific characteristics of the land and adjusted on an ongoing basis to account for changing variables such as weather, soil nutrient levels, grazing pressure and vegetation structure.
- Costs are highly variable and dependent on the grassland in question.
- *More detailed guidance on grassland creation, restoration, enhancement and management techniques can be accessed by referring to resources published by Plantlife, National Landscapes Association, Pasture for Life, Floodplain Meadows Partnership, the UK Centre for Ecology & Hydrology, Natural England, the Nature Friendly Farming Network and the Soil Association. Additionally, Local Wildlife Trusts and The Farming and Wildlife Advisory Group are examples of other organisations that can provide support on grassland projects.*

Arable Reversion

Grassland creation from arable or agriculturally improved grassland.

- **5-10 years** to turn arable land into species-rich grassland.
- The adding of appropriate seed mixes into grasslands with low soil fertility accelerates progress.
- Although full restoration may continue beyond 10 years, a functional and visibly diverse sward is often achieved well within this timeframe.
- Maintaining target condition can be challenging and requires ongoing management.

Starting conditions

- High phosphorus (P) and potassium (K), low carbon (C), and depleted soil life.
- Clean seedbed required.
- Ensure equipment available for sward establishment.
- Ensure livestock availability, fencing, and water.

Interventions

- If P index(1) > 3, continue arable cropping (e.g. barley, potatoes) for 2–5 years to lower P index.
- Prepare seedbed and sow native grass/wildflower seeds suited to soil conditions.
- Use species that tolerate high P index if needed.
- Roll soil to improve seed contact.
- Manage with cutting and grazing, allowing summer recovery.
- Control invasive weeds.
- Assess need for ditch maintenance and grip restoration

Target features and benefits

Target features

- Species-rich grassland with minimal bare ground (typically <5%).
- Meets UK Priority Habitat criteria.
- Varied plant heights and deep root structures.
- Diverse mix of native grasses and wildflowers, suited to soil conditions.
- Stable and resilient sward, often visible within 2–5 years.(2)
- Reduced soil fertility (particularly phosphorus) to support desired plant communities.

Benefits

- Increased biodiversity.(3)
- Improved soil health and microbial activity.
- Cleaner water through reduced nutrient runoff.
- Reduced flood risk via better water infiltration and storage.
- Greater carbon storage in soils and vegetation.
- Lower input costs, with reduced reliance on fertilisers and pesticides.

(1) The P Index (Phosphorus Index) is a measure of plant-available phosphorus in soil. Index 0–1 indicates low fertility (suitable for meadow creation); Index 2–3 indicates moderate fertility; Index >3 indicates that soil is generally unsuitable for meadow creation without nutrient reduction.
(2) Depending on the intervention.
(3) Including support for a broader range of wildflowers and pollinators.

Grassland Restoration

To improve quality beyond poor quality semi-improved grassland.

- **3-10 years** for restoration from semi-improved grassland to species-rich grassland.
- Fields with some remaining diversity may respond quickly to changed management (e.g. removing fertiliser, hay cutting, grazing).
- Introducing seed via green hay or direct sowing can lead to significant gains in 3 – 5 years, with strong species richness in 8 – 10 years.
- Maintaining target condition can be challenging and requires ongoing management.

Starting conditions

- Soil P index may be <2 or very high if in floodplain and only grazed.
- Low tillage history.
- Some ryegrass & white clover, but few wildflowers.
- Used for grazing or forage crops.
- Ensure equipment available for sward establishment.
- Ensure livestock availability, fencing, and water.

Interventions(1)

- Prepare seedbed and sow grass / wildflower seeds suited to soil conditions.
- Stop inorganic fertiliser & limit Farmyard Manure applications (FYM).
- Control weeds.
- Assess need for ditch maintenance and grip restoration.
- Adjust grazing & cutting:
  - **Meadows:** Hay cut after seed set, allow drying before collection.
  - **Pastures:** Exclude livestock in spring & early summer to allow flowering.
  - **Floodplain meadows:** Hay cut before seed is set, from mid-June onwards.
  - If very high soil P index, multiple hay cuts per year over 3 years should reduce soil P levels.

Target features and benefits

Target features

- Species-rich grassland with minimal bare ground (typically <5%).
- Meets UK Priority Habitat criteria.
- Varied plant heights and deep root structures.
- Diverse mix of native grasses and wildflowers, suited to soil conditions.
- Stable and resilient sward, often visible within 2–5 years.(2)
- Reduced soil fertility (particularly phosphorus) to support desired plant communities.

Benefits

- Increased biodiversity. (3)
- Improved soil health and microbial activity.
- Cleaner water through reduced nutrient runoff.
- Reduced flood risk via better water infiltration and storage.
- Greater carbon storage in soils and vegetation.
- Lower input costs, with reduced reliance on fertilisers and pesticides.

(1) Guidance regarding timing of grazing and cutting is available in the Lowland Grassland Management Handbook and Floodplain Meadow Technical Handbook.
(2) Depending on the intervention.
(3) Including support for a broader range of wildflowers and pollinators.

Grassland Enhancement

From good quality semi-improved grassland to species rich grassland.

- **2-5 years** for enhancement with yellow rattle.(1) Using yellow rattle to suppress dominant grasses allows other wildflowers to establish.
- With correct management, visual and botanical improvement often appears within 2 - 3 years, and a well-diversified sward typically develops with 5 - 8 years.
- Maintaining target condition can be challenging and requires ongoing management.

Starting conditions

- Soil P index <2.
- Already species-rich but missing key wildflowers.
- Managed for grazing or hay production.
- Ensure equipment available for addition of propagules.
- Ensure livestock availability, fencing, and water.

Interventions

- Identify missing species & add them via seed or plugs.
- Stop inorganic fertilisers & limit FYM application.
- Adjust management (e.g. later cutting or free-flowering periods).
- For floodplain meadows, the hay-cut may need to be earlier to ensure maximum nutrient removals.
- Control invasive weeds.
- Assess need for ditch maintenance and grip restoration.

Target features and benefits

Target features

- Species-rich grassland with minimal bare ground (typically <5%).
- Meets UK Priority Habitat criteria.
- Varied plant heights and deep root structures.
- Diverse mix of native grasses and wildflowers, suited to soil conditions.
- Stable and resilient sward, often visible within 2–5 years.(2)
- Reduced soil fertility (particularly phosphorus) to support desired plant communities.

Benefits

- Increased biodiversity. (3)
- Improved soil health and microbial activity.
- Cleaner water through reduced nutrient runoff.
- Reduced flood risk via better water infiltration and storage.
- Greater carbon storage in soils and vegetation.
- Lower input costs, with reduced reliance on fertilisers and pesticides.

(1) Yellow rattle helps wildflowers by suppressing grasses, but on low-P soils it may reduce growth – use with care when balancing biodiversity and productivity.
(2) Depending on the intervention.
(3) Including support for a broader range of wildflowers and pollinators.

Species-rich Grassland Management

Timing for management practices is flexible and dependent on site-specifics and weather.

Key Practices

- **Annual hay cut (mid June – early August, or later for floodplain meadows):** followed by aftermath grazing.
- **Low-intensity grazing (spring and/or autumn):** avoiding poaching.
- **No inputs:** including fertiliser or lime. Farmyard manure is acceptable at a low level for floodplain meadows, provided there hasn't been a flood in 2/3 years.
- **Scrub control:** spot removal or light browsing if needed.
- **Occasional gap creation(1) or plug planting(2):** optional to boost diversity.
- **For floodplain meadows**, assess need for ditch maintenance and grip restoration.

Image source: Plantlife

(1) **Gap creation:** process of opening up small areas of bare ground within grassland to reduce competition and provide space for wildflower seeds or plugs to establish successfully.
(2) **Plug planting:** involves transplanting young wildflowers or grasses grown in small cells into grassland, offering a way to establish species that are hard to introduce by seed or other methods.

Intervention Costs

Costs are highly variable and project-specific. The figures provided are estimates based on grassland project costs observed by Plantlife from 2023 – 2025.

Cost Category	Seed Type (£/ha)[1]		
	Green Hay	Brush-Harvested Seed	Commercial Seed[2] (2g/m²)
Site Preparation Soil testing, weed control, power harrowing, optional flail mowing	450 - 550		
Seed Cost Purchase or harvesting of seed or green hay	280 - 345	800 - 975	4,970 - 6,070
Sowing Labour and equipment for spreading and rolling	130 - 160		
Year 1 Management A single autumn cut and removal to reduce fertility and support establishment	190 - 230		
Total	**1,050 - 1,290**	**1,570 - 1,920**	**5,740 - 7,015**

	Item	Estimated Cost (£)	Notes
Optional Add-ons	Fencing (400m)	3,720 – 4,550	One-off capital cost
	Water supply (100m pipe)	1,410 – 1,720	For grazing infrastructure
	Maintenance of ditches, gutters and surface drains[3]	40 / ha	200m ha^{-1} of ditch/grip, cleared every two years
	Advisory support	1,240 – 1,515	Project setup and guidance

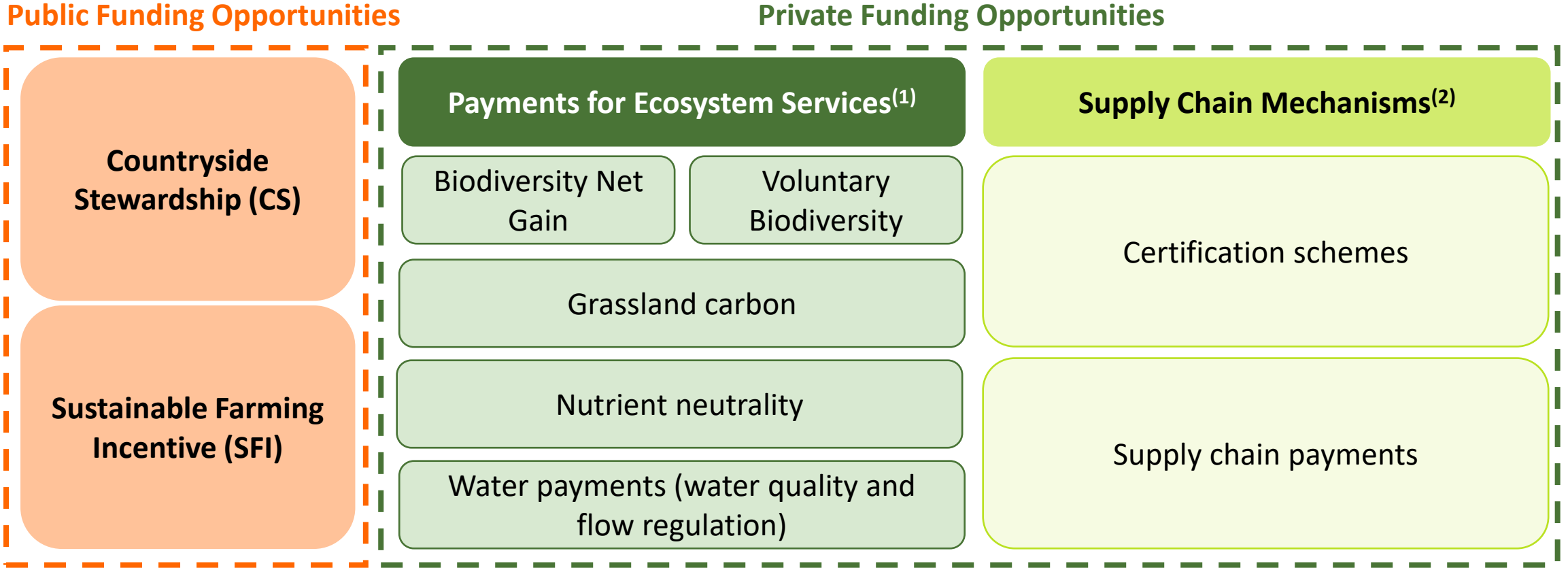
(1) Specialist advice is recommended to determine the most appropriate seed restoration method.
(2) Figures are inflation-adjusted commercial seed costs based on current market quote (20kg at 2g/m²).
(3) Floodplain Meadows Partnership Cost estimate from 2021.

3. Overview of Grassland Funding Opportunities

Image: Balbirnie Home Farms, Source: Graeme Mowat at Cinecosse

Overview of Grassland Funding Opportunities

The Toolkit explores each of the following grassland funding opportunities.



***Grant funding from philanthropic, government, or non-profit organisations such as the Heritage Lottery Fund could also be available for grassland creation or restoration projects on an ad-hoc basis. Grant funding opportunities, apart from CS and SFI, are not explored in this Toolkit.**

(1) **Payments for Ecosystem Services:** Incentive payments from a beneficiary/user of an ecosystem service to the provider of that service (in particular, those who preserve or maintain the ecosystem). **Ecosystem Services:** The benefits that can be obtained from ecosystems, including provisioning, regulating, cultural and supporting services.

(2) **Supply Chain Mechanisms:** mechanisms through which value is assigned to the implementation of more sustainable practices within supply chains.

4. Public Funding Opportunities

Image: Yellow rattle in hay meadow, Source: Lucia Chmurova

Countryside Stewardship (CS)

***Applications for the next round of CS (Countryside Stewardship Higher Tier) are being rolled out later in 2025, by invitation[1]**

Payments for targeted actions and land management practices that create, restore, and enhance the natural environment, protect biodiversity, improve water quality, and support climate change resilience.

Key Eligibility Requirements[1]

- Applicant is a farmer, forester or land manager with management control of land for full 5- to 20-year agreement period.
- Applicant is not paid twice for the same activity included in other agreements.
- Applicant must get advice from Natural England or the Forestry Commission before applying for Countryside Stewardship Higher Tier (CSHT).
- Further eligibility requirements apply depending on selected action.

	Action (non-exhaustive list)[2]	£/ha
CSHT Grassland Management Payments	CGS18: Manage species-rich floodplain meadows	1,070
	CGS20: Manage wet grassland for breeding wader	676
	CGS22: Manage priority habitat species-rich grassland	646
	CSW16: Flood mitigation on permanent grassland	330
	CGS24: Haymaking supplement (late cut)[3]	187
	CGS26: Manage grassland with very low inputs	151
	CSP6: Cattle grazing supplement (non-moorland)	59
CSHT Grassland Creation or Restoration Payments	CSW15: Flood mitigation on arable reversion to grassland	740
	CSW7: Arable reversion to grassland with low fertiliser input	489

Examples of Capital Grants Available[2]

- Creation or restoration of grassland habitat (GR1, £186.02/ha).
- Fencing (FG1, £6.34/m)
- Hard bases for livestock drinkers and feeders (LV3, £179.15/base)
- Standard seed mix for grassland habitat (GR2, £203/ha)

Key Features

- Annual payments for 5- to 20-year agreements with the farmer.
- Must follow prescribed management requirements.

(1) First applications will be by invitation only from the Rural Payments Agency and will include those with existing, expiring CSHT agreements and those with existing approved plans (e.g. implementation plans

(2) Countryside Stewardship: get funding to protect and improve the land you manage and Countryside Stewardship Higher Tier: preview guidance.

(3) Haymaking supplement cannot be stacked with the Floodplain Meadows option (CGS18), as it is already priced in.

Sustainable Farming Incentive (SFI)

***Currently closed to new applicants[1]. Details of the revised SFI scheme expected to be announced later in 2025[2].**

Payments for specific actions that take up or maintain sustainable farming and land management practices that protect and benefit the environment, support food production and improve productivity.

Key Eligibility Requirements[2]

- Applicant is a farmer or land manager.
- Applicant has management control of the land.

	Example actions under the temporarily closed SFI scheme (non-exhaustive list)[3]	£/ha
SFI Grassland Management Actions and Payment Rates	GRH6: Manage priority habitat species-rich grassland	646
	GRH8: Supplement: Haymaking (late cut)	187
	GRH7: Supplement: Haymaking	157
	CLIG3: Manage grassland with very low nutrient inputs	151
	GRH1: Manage rough grazing for birds	121
	GRH11: Supplement: Cattle grazing (non moorland)	59
	OFM2: Organic land management – unimproved permanent grassland	41
	GRH10: Supplement: Lenient grazing	28

Key Features

- Annual payments for 3- to 5- year agreements entered by the farmer.
- Can run alongside Countryside Stewardship for the same land, but not for the same activity.
- "Endorsed" SFI actions are targeted at certain priority habitats or species and heritage features and require written approval to confirm the land is suitable for the actions before the action can be included in a SFI agreement.

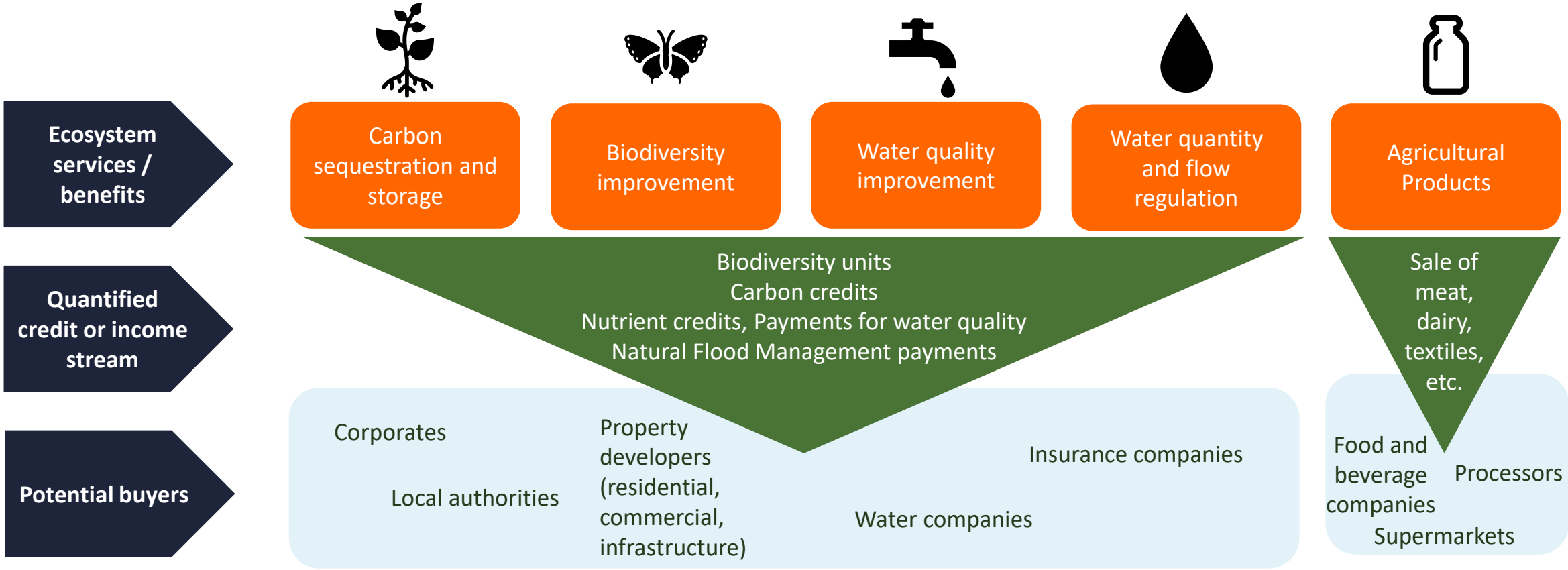
(1) As of 7 July 2025, the SFI 2024 Scheme reopened to certain eligible applicants.
(2) An update on the Sustainable Farming Incentive.
(3) SFI Scheme information: expanded offer for 2024 (generally closed to new applicants, save for certain exceptions).

5. Private Funding Opportunities: Payments for Ecosystem Services

Image: Pasture for Life Tour, Source: Clem Sandison

Introduction to Private Funding Opportunities

A nature market exists where there is an opportunity to quantify an ecosystem service or sell a nature-based product from the land. This requires the presence of a buyer willing to pay for that service/product.



Funding Opportunities - Readiness Scoring Criteria

Each criteria is scored from 1 to 3, with the total across each criteria adding up to the Overall Market Readiness Score (details of the scoring for each criteria are provided in the Appendix).

1 = Early stage

2 = Developing

3 = Advanced

Market Structure	+	Buyer Demand	+	Implementation Ease	=	Overall Market Readiness Score
• Legal and regulatory framework • Robustness of methodology to measure benefits • Underlying data quality • Clarity of pricing mechanisms and trading processes		• Availability of buyers • Scale and stability of demand • Pricing competitiveness		• Availability of clear guidance • Access to technical support • Reasonableness of development costs • Financial viability		

Funding Opportunities – Market Readiness Assessment

Key markets corresponding to each ecosystem service generated by grassland creation, restoration and enhancement (details of the assessment are provided in the Appendix).

Ecosystem service	Nature Market	Market Structure	Buyer/funder demand	Implementation Ease	Overall Market Readiness Score
Biodiversity improvement	Biodiversity Net Gain (BNG)	3	2	3	Advanced (8/9)
Water quality improvement	Nutrient Neutrality	2	1	2	Developing (5/9)
Carbon sequestration	Grassland Carbon	1	2	2	Developing (5/9)
Sustainable products	Certification Schemes and Supply Chain Payments	1	2	2	Developing (5/9)
Water quality and flow regulation(1)	Water Payments	1	2	1	Early Stage (4/9)
Biodiversity improvement	Voluntary biodiversity	1	1	1	Early Stage (3/9)

(1) Natural Flood Management

Funding Opportunities Applicability Summary

Applicability of each funding opportunity for the different grassland interventions.

Grassland interventions	Public Funding		Private Funding – Payments for Ecosystem Services					Private Funding – Supply Chain Mechanisms	
	SFI[1]	CS	BNG	Nutrient Neutrality	Grassland Carbon[2]	Water Payments[2]	Voluntary biodiversity	Certification schemes	Supply chain payments[2]
Arable Reversion	✓	✓	✓	✓	✓	✓	✓	✗	✓
Grassland restoration	✓	✓	✓	✗	✓	✓	✓	✗	✓
Grassland enhancement	✓	✓	✓	✗	✓	✓	✓	✗	✓
Grassland management	✓	✓	✗	✗	✓	✓	✗	✓	✓

(1) Arable reversion, grassland restoration, grassland enhancement and grassland management all qualified for payments under the now-closed 2024 SFI scheme. The 2025 SFI scheme is expected to be published later in 2025.

(2) Variable depending on the grassland carbon, water payment or supply chain payment scheme.

Biodiversity Net Gain (BNG)

Nature Market Readiness Score* = **8/9** **Advanced**

Indicates a well-developed market that most grassland farmers can consider as a potential source of funding.

*Please refer to the Appendix for a complete breakdown of the Nature Market Readiness Score.

Image: Sanguisorba officinalis, Source: Mike Dodd, https://www.amanita-photolibrary.co.uk/

Biodiversity Net Gain (BNG) - Overview

BNG is a compliance market backed by government legislation requiring developments to enhance biodiversity by 10%.

- **10% BNG has been mandatory for all developments in England** under the Town and Country Planning Act since 12th February 2024.
- Developers that cannot deliver BNG on-site as part of the project design must purchase BNG units from third-party providers.
- Farmers can generate and sell units from biodiversity uplift resulting from grassland creation, restoration or enhancement.

How the offsite BNG market works

Payment for BNG units

Sellers of offsite BNG units

- Farmers create, restore or enhance grassland.
- Units generated from the biodiversity uplift are calculated using the **Defra Statutory Biodiversity Metric(1).**
- Farmers can sell units to developers that need offsite units to meet 10% net gain requirement.
- The land must have a **legal agreement for a minimum of 30 years**, which includes a **Habitat Management and Monitoring Plan (HMMP)(2)** outlining how the land will be managed.

Buyers of offsite BNG units

- Housing and infrastructure developers can buy BNG units from third parties (farmers / landowners) if they cannot mitigate or deliver BNG on the development site.
- BNG units may be bought directly from farmers, or through intermediaries such as brokers, advisors or trading platforms.

Sale of BNG units

Binding legal agreements through a s. 106 Agreement or Conservation Covenant(3).

Units registered on the BNG registry.

Local Planning Authorities (LPAs) approve planning applications & may monitor BNG projects.

(1) **Defra Statutory Biodiversity Metric:** A tool developed by Natural England in collaboration with Defra to calculate and measure biodiversity value for the BNG regime.
(2) **HMMP:** a detailed plan that outlines how designated land will be managed over at least 30 years to: create and enhance habitats for BNG; and manage and monitor the BNG.
(3) **S. 106 Agreement / Conservation Covenant: A**greement holding a project developer legally liable for the delivery and maintenance of a BNG project, where monitoring and enforcement is carried out by the Local Planning Authority / a designated Responsible Body (respectively).

BNG – Suitability Considerations

Grassland interventions

- **Qualifying interventions**: Arable reversion, restoration and enhancement (most unit generation potential from arable reversion)(1).
- **Productive grassland:** The Habitat Management and Monitoring Plan (HMMP), created with ecologist input, may contain restrictions on management practices (e.g. grazing livestock species, stock density, timing of hay cutting and grazing periods).

Location

- **Local Nature Recovery Strategy (LNRS)** (2)**:** Higher unit generation potential and higher demand potential if site is identified in the LNRS.
- **Proximity to planned developments:** Higher demand potential where there is planned development in the Local Planning Authority (LPA) and National Character Area (NCA)(3).
- **Demand**: Consider the demand for the target grassland type in the LPA and NCA based on development impact. Where the target grassland units are in high supply in the LPA and NCA, this may negatively impact pricing.

Time commitment

- **30 years**: Minimum length of time the target grassland habitat and condition must be maintained.

Site size

- Projects have fixed project design and transaction costs (e.g. HMMP, legal documents, identification of buyers, etc.) that limit the viability of smaller sites.
- Sites may be best suited >10ha.

(1) Please refer to the Appendix for estimated Biodiversity Unit generation per hectare across grassland types.

(2) LNRS: Local Nature Recovery Strategy(ies), a system of spatial strategies for nature, introduced in the Environment Act 2021. LNRS help map out the action needed to restore nature, working closely with local stakeholders including farmers and land mangers, with a view to meeting the Government's England-wide nature targets.

(3) National Character Area: National Character Areas, that divide England into 159 distinct areas defined by a unique combination of landscape, biodiversity, geodiversity, history and cultural and economic activity. NCA boundaries follow natural lines in the landscapes, not country or district boundaries.

BNG – Income Considerations

Income potential*

North of England / South of England[1]

- £25,913 / £25,772 per BNG unit for Other Neutral Grassland (high level of supply may lead to lower prices)
- £34,814 / £36,114 per BNG unit for Lowland Meadow.
- £60,930 / £59,303 per BNG unit for Floodplain Wetland Mosaic.

Factors influencing income

Timing of sales

- **Before grassland intervention (Year 1):** yields less units due to risk of failure and complexity of delivery.
- **After grassland intervention (Year 2 onwards)[2]:** yields more units.

Location

- +15% more units generated if site identified in Local Nature Recovery Strategy.
- Areas with less buyer demand may attract lower prices for units.
- Purchasers need units that are "like for like" or "better" than the habitat loss being compensated for.

Grassland type

Unit prices tend to increase with habitat distinctiveness

Price per unit

Distinctiveness[3]

Low	Medium	High	Very High
Modified grassland	Other Neutral grassland Upland/lowland acid grassland	Calcareous grassland Floodplain Wetland Mosaic and CFGM[4]	Upland hay meadows Lowland meadows

More distinctive grasslands tend to be more difficult to create / enhance

***Prices are as of February 2025, indicative only, and subject to change**

(1) Pricing data source: Biodiversity Units UK February 2025 BNG Pricing Report.
(2) Please refer to the Appendix for the standard time to reach the target grassland condition, by grassland type
(3) Grassland types for each distinctiveness category are based on the "UK Hab" classifications used by the BNG Metric, are provided by way of example and are not exhaustive.
(4) CFGM: Coastal floodplain grazing marshes.

BNG – Cost Considerations

BNG costs vary significantly based on project size, location, complexity and the contracting structure (s. 106 Agreement or Conservation Covenant). The costs provided below are estimates.

Cost considerations

Development costs
Year 1

Restoration Costs
Years 2 – 3

Maintenance Costs
Years 3 – 30+

Unit sales can occur from this point onwards, following registration on the Biodiversity Gain Site Register

Cost	Estimate
Baseline survey (i.e. ecologist)	£2,500 – £5,000+(1)
HMMP	£3,500 – £5,000+(1)
Legal (s.106 or conservation covenant and project lawyer fees)	£20,000+(1)
BNG Registration	£639(2)

- Costs of interventions for **grassland creation, restoration or enhancement** (refer to slide 14).

- Costs of managing and maintaining target grassland condition (refer to slide 14).
- **Monitoring costs**(3)**:** Highly variable based on-site size, complexity and contracting structure (s. 106 or conservation covenant)
- **Transaction costs:** a percentage of the sale price with a transaction. Amount is dependent on the route to market (i.e. direct or through a broker) but may be 3-5%.

(1) Finance Earth estimate based on 2024/2025 project data.
(2) The Biodiversity Gain Site Register (Financial Penalties and Fees) Regulations 2024.
(3) Monitoring costs: Fees charged by Local Planning Authorities or Responsible Bodies to cover the costs of ensuring project developers meet the 10% biodiversity net gain requirement.

Grassland Carbon

Nature Market Readiness Score* = **5/9** **Developing**

Indicates an emerging market that might be suitable for the needs of some farmers.

*Please refer to the Appendix for a complete breakdown of the Nature Market Readiness Score.

Image: Species-rich meadow, Source: Mike Dodd, https://www.amanita-photolibrary.co.uk/

Grassland Carbon – Overview

Carbon credits can be generated and sold on the voluntary carbon market based on carbon sequestered from grassland restoration and regenerative agriculture practices.

What is it?

- Additional way for farmers/landowners to earn money from **carbon sequestered by grassland as it grows and stored in soils.**
- Soil carbon credits can be purchased by companies to **offset**(1) or **inset**(2) their emissions.

How does it work?

- Farmers **create new grassland from arable land**(3) **or implement regenerative agriculture practices** on existing grassland (e.g. increased species richness, rotational grazing, changes to stocking management, etc.).
- **Carbon stored in grassland soil** is measured against a baseline through soil sampling and other techniques (e.g. remote sensing), generating 1 carbon credit per tonne CO_2equivalent sequestered.

Examples of available schemes

- Available soil carbon schemes applicable to grasslands include **Regenerate Outcomes** and **Trinity NCM.** Other schemes like **Agreena** currently only apply to arable land.
- Additionally, the **Wilder Carbon Standard** provides for the quantification and sale of carbon from a range of habitats including grassland.

What is it?

- Soil carbon should be considered with a degree of caution due to the uncertainty around the sequestration potential of grassland and whether soil carbon credits satisfy both additionality and permanence requirements.
- **The income potential from participation in soil carbon schemes is highly dependent on buyer demand, which remains uncertain.**

(1) **Offsetting**: An organisation purchases carbon credits from **outside its value chain** to compensate for its emissions.
(2) **Insetting:** An organisation purchases carbon credits from **within its value chain** to compensate for its emissions.
(3) Currently, the only carbon scheme applicable specifically to grassland creation is Wilder Carbon (the other schemes focus on generating carbon from regenerative agriculture practices on existing grasslands).

Available Schemes (1) – Regenerate Outcomes

Offering

- **Mentoring** for improvement of soil health
- **Baselining and re-measurement** every 5 years for generation of soil carbon credits from soil health improvements
- **Buyer engagement** for sale of credits
- Predominantly focused on carbon removals(1)

Eligible Interventions

- **Arable reversion to grassland**
- **Grassland restoration, enhancement or management**, provided there is a change to management practices (e.g. rotational grazing rather than set stocking, increased sward diversity, reduced fertiliser use)
- Focused on soil health principles rather than prescriptive practices

Standard and Methodology

Standard:
- Verra Verified Carbon Standard

Methodology:
- VM0042 - quantifies greenhouse gas emission reductions and soil carbon removals on agricultural land

Time and Minimum Size

Time Commitment:
- 40-years with a 10-year break clause however, farmer can leave at any time without liability

Minimum Size:
- 100 hectares

Income Potential

Sequestration rate:
- c. 1 – 3 carbon credits (tonne $CO2_e$) per ha/year

Target price:
- £60 - £80 per credit

Revenue split:
- 67% for farmer, subject to minimum soil carbon increase

Income timing:
- 2-3 years after enrolment and implementation of changes

Sales to date:
- First transaction planned for autumn 2025

Cost Considerations

- **Upfront costs:** None (Regenerate recovers its costs through carbon credit revenue split)
- **Ongoing costs:** Carbon measurement, mentoring, costs of verification and carbon credit buyer engagement (covered by ongoing revenue split between Regenerate and farmer)

(1) Carbon reductions (e.g. from reduced fuel and fertiliser use) are secondary under the scheme.

Available Schemes (2) – Trinity AgTech[(1)] and Trinity NCM[(2)]

Offering

- **Natural capital navigator (Sandy)** to which farm data is uploaded. Facilitates baselining and uses predictive AI to quantify carbon credits from regenerative agriculture practices. Independent study from Defra available here with Trinity summary of the study here.
- **Methodology** to measure and monitor carbon credit generation in line with Verra's VM 0042 (report available here)
- **Trinity NCM blockchain-based registry** available here
- Covers carbon reductions, removals and retention

Income Potential*

Sequestration rate:
- Depends on the location, soil, climate, practices, etc.

Target price:
- None – farmer discretion

Revenue split:
- 95% of proceeds of carbon credit sales go to the project developer

Income timing:
- Depends on project developer (Trinity NCM is not a broker)

UK Sales to date:
- Not publicly available

Eligible Interventions

Trinity NCM is not prescriptive. Examples of eligible interventions are as follows:
- Arable reversion to grassland
- Grassland restoration, enhancement or management, provided there is additionality[(3)]

Cost Considerations

- **Upfront costs:** Depends on the location, soil, climate, practices, audit costs, size of the farm, etc.
- **Ongoing costs:** Depends on the location, soil, climate, practices, audit costs, size of the farm, etc.

Standard and Methodology

Standard:
- Certified to ISO 14067 and ISO 14064 standards

Methodology:
- Proprietary methodology compliant with the latest IPCC Soil Carbon methodology (2019) using tier 2 and 3 models

Time and Minimum Size

Time Commitment:
- Variable depending on interventions: 1-30 years

Minimum Size:
- None; Trinity NCM has a policy of not leaving anyone behind

(1) Trinity AgTech - Carbon Tokens & Credits.
(2) Trinity NCM - Carbon Credits.
(3) Additionality: a carbon project is additional if the emissions reductions or removals would not have occurred without the expected revenue from the sale of carbon credits.

Available Schemes (3) – Wilder Carbon Standard

The Wilder Carbon Standard certifies high-integrity, nature-based carbon projects focused on restoring native ecosystems, enhancing biodiversity, and delivering long-term carbon sequestration. Projects involving arable reversion to grassland are eligible for certification by Wilder Carbon as standard projects that produce Estimated Issuance Units (EIUs) for sale.

Offering	• **Standard** which can be used to certify projects realising carbon removals from grassland creation, generating EIUs and verified Wilder Carbon Units(1). • **Grassland creation from arable baselines produces EIUs.** This is currently classified as 'medium confidence' data and so subject to a 40% buffer. • Due to lack of reliable estimate of carbon potential, any grassland creation from baselines other than arable are only feasible for certification as **Research & Development projects** at this stage, where credits are sold on a post-verification basis.
Income Potential	• **Sequestration rate:** dependent on grassland being created. • **Target price:** £100 + VAT per Wilder Carbon Unit. • **Revenue split:** Full carbon credit price going to the landowner (minus 5% fee to Wilder Carbon invoiced after sale). • **Income timing:** Revenue generation potential upon validation with up to 50% of post buffer EIU quantum available for immediate sale. • **Sales to date:** 10,400+ EIUs sold to date, some of which have come from grassland creation from arable.
Standard and Methodology	**Standard:** • Wilder Carbon Standard. **Methodology:** • Proprietary Wilder Carbon methodology(2).
Cost Considerations	• **Upfront costs:** No standard-related upfront costs. • **Ongoing costs:** For validation, verification, monitoring and reporting.
Eligible Interventions	• Arable reversion to grassland.
Time and Minimum Size	**Time Commitment:** • 50 years minimum. **Minimum Size:** • None.

(1) EIUs are available for sale pre-verification and represent a promise to deliver the project's projected carbon removals (1 tonne CO2e per EIU). Wilder Carbon Units are available for sale after a project's carbon removals have been verified, and each represent 1 tonne of $CO2_e$ that has been removed from the atmosphere.

(2) Wilder Carbon - Methodologies Data and MRV Approach.

Nutrient Neutrality

Nature Market Readiness Score* = **5/9** **Developing**

Indicates an emerging market that might be suitable for the needs of some farmers.

*Please refer to the Appendix for a complete breakdown of the Nature Market Readiness Score.

Image: Brush harvesting, Source: Plantlife

Nutrient Neutrality – Overview

The nutrient neutrality market enables the sale of nutrient credits resulting from land use change and other measures that reduce nitrogen and phosphorus runoff, helping developers meet environmental regulations(1).

- **Legal requirement** for developers in **27 river catchments in 74 LPAs designated by Natural England** to **offset nitrogen and/or phosphorus run-off** into nearby waterways caused by new developments
- Developers that cannot offset nutrient impacts on-site as part of the project design must purchase "**nutrient credits**"

How the Nutrient Neutrality market works

Payment for nutrient credits

Sellers of nutrient credits

- Farmers **create grassland from arable land**, reducing nutrient run-off through the cessation of fertiliser use.
- Nutrient reduction benefits are quantified in nutrient credits:
  - 1 phosphate nutrient credit = 1 kg Total Phosphorus reduction
  - 1 nitrogen nutrient credit = 1 kg Total Nitrogen reduction
- **Farmers can sell nutrient credits to developers** needing to offset the nutrient load from planned building projects in the **same catchment**
- The **land use delivering nutrient mitigation** must be secured through a **binding legal agreement** for 80 – 125 years

Buyers of nutrient credits

- Housing and infrastructure developers buy credits generated by grassland creation in the same catchment
- Credits may also be bought through intermediaries such as brokers, advisors or trading platforms

Sale of nutrient credits

Binding legal agreements through a s. 106 agreement or conservation covenant

Nutrient units calculated using a Natural England nutrient calculator for the specific catchment

LPAs approve developers' planning applications and nutrient credit purchase plans & may monitor nutrient neutrality projects

(1) The future of nutrient neutrality is uncertain, with ongoing debate and potential changes to the way it's implemented.

Nutrient Neutrality Catchments

Nutrient mitigation is required across 27 river catchments in 74 LPAs designated by Natural England.

Image source: Natural England – Nutrient Neutrality Catchments

- LPAs are responsible for enforcing the nutrient mitigation requirements for new developments in nutrient neutrality catchments(1).
- Whether nitrogen and/or phosphorus mitigation is required depends on the specific catchment and the condition of its waterways.

(1) Interactive map of Nutrient Neutrality Catchments (England) available here, and list of eligible catchments here.

Suitability and Other Considerations

Grassland interventions

- **Qualifying interventions:** arable reversion.
- **Productive grassland**: Possible subject to restrictions including cessation of fertiliser use, maximum stocking density(1) and no supplementary feeding. Grazing generally permitted and encouraged at conservation stocking level.

Location

- **Location:** must be located in designated nutrient neutrality catchment.
- **Developer demand:** variable based on catchment. Certain catchments only have demand for either nitrogen or phosphorus credits.

Time commitment

- **80-125 years:** Length of time the target grassland habitat and condition must be maintained and secured through a binding legal agreement.

Income

- **Timeframe for payments:** payment received upfront once purchase agreed with developer.
- **Pricing:** prices vary significantly by catchment:
- **Indicative N credit price:** £2,500- £3,000 per kg N(2)
- **Indicative P credit price:** £14,000 - £75,000 per kg P(3)

Site size

- **No minimum:** but fixed project design costs (e.g. legals) may limit the financial viability of small sites.

Policy changes

- **The Planning and Infrastructure Bill:** announced a Nature Restoration Fund that developers will contribute to, to mitigate nutrient impacts(4).
- It is not yet clear how this will impact private nutrient credit transactions and schemes.

(1) Maximum stocking density of 0.25LU/ha/year unless otherwise agreed with Natural England.
(2) Savills.
(3) Townsend Chartered Surveyors.
(4) Guide to the Planning and Infrastructure Bill.

Water Payments

Nature Market Readiness Score* = **4/9** **Early stage**

Indicates a nascent market that might only be suitable for farmers interested in innovative sources of funding which are more complex to access and carry higher risk.

*Please refer to the Appendix for a complete breakdown of the Nature Market Readiness Score.

Image: Balbirnie Home Farms, Source: Graeme Mowat at Cinecosse

Water Payments – Overview

Certain water companies offer payments for actions with water-related benefits through bespoke schemes.

What are they?

- Schemes offered by water companies as part of their business operations to fund grassland creation and the implementation of grassland management practices that will support water quality and/or flood management improvements in their supply area.
- More schemes are focused on water quality than flood management.

How do they work?

- Farmers apply for funding to implement land use changes and/or sustainable practices from a private scheme, if they meet the eligibility requirements.
- Payments are made upfront or for a contracted period, depending on the scheme.

Difference with Nutrient Neutrality

- Not mandatory and no legal framework.
- There is no quantification of benefits through tradeable credits or units.
- Ad-hoc, voluntary schemes rather than a developed nature market where measurable benefits can be bought and sold.

Examples of Water Payment Schemes

Several water company-operated payment schemes offer funding for grasslands.

Scheme	Eligibility Requirements and application	Qualifying Grassland Interventions	Potential Payment Rates[1]
Wessex Water River Stour Phosphorus Reduction Scheme[2]	• Farm must be in a sub-catchment of the River Stour and within an area eligible for funding. • Measure-specific eligibility requirements must be met. • An application must be submitted.	• **Arable reversion to zero-input grass:** No grazing except light grazing by sheep over winter is permitted	• £720/ha/year for a 2½ to 3½ year agreement.
		• **Arable reversion to low/medium input grass:** No grazing except light grazing by sheep over winter is permitted.	• £600/ha/year for a 2½ to 3½ year agreement.
		• **Grassland subsoiling to loosen compacted soil.**	• £75/ha as a one-off payment.
Cambridge Water PEBBLE Fund[3]	• Land must be located within the Cambridge Water supply area. • Project must be to improve, restore or create habitat. • Work cannot have already taken place. • Projects that have a community benefit or a particular focus on the management of invasive, non-native species are encouraged. • Application must be submitted by 29 September 2025.	• No prescriptive list but focused on projects that directly improve biodiversity and have a community benefit. • **Example:** in 2020, the Wildlife Trust for Beds, Cambs and Northants was awarded a grant of £2,000 to improve the chalk grassland habitat at Cherry Hinto Chalk Pit nature reserve[4].	• Up to £10,000 per project.

(1) As at June 2025.
(2) Wessex Water River Stour Phosphorus Reduction Scheme details.
(3) Cambridge Water PEBBLE Fund.
(4) Cambridge Water - Chalk it up for Wildlife.

Voluntary Biodiversity

Nature Market Readiness Score* = **3/9** **Early stage**

Indicates a nascent market that might only be suitable for farmers interested in innovative sources of funding which are more complex to access and carry higher risk.

*Please refer to the Appendix for a complete breakdown of the Nature Market Readiness Score.

Image: Yellow rattle in hay meadow, Source: Lucia Chmurova

Voluntary Biodiversity – Overview

A voluntary biodiversity credit market is beginning to emerge, as companies seek to fund measurable improvements in biodiversity on a voluntary basis, yet it remains early stage.

What is it?

- Voluntary schemes through which organisations and individuals can finance measurable biodiversity outcomes resulting from grassland creation, restoration and enhancement.
- Under some schemes, grassland management and protection can generate “avoided loss” credits.

How does it work?

- The benefits from grassland interventions or protection of high-quality, sustainably managed grasslands are measured and quantified as a ‘biodiversity credit’ using the methodology associated with a chosen voluntary biodiversity credit scheme.
- Buyers purchase credits on a voluntary basis.

How does it differ from BNG?

- Not mandatory and no legal framework.
- Does not just apply to developers; anyone can purchase credits.
- Several preliminary methodologies exist but there is no standardised, widely accepted methodology.

Voluntary Biodiversity Credit Schemes and Methodologies

Several voluntary biodiversity credit schemes and methodologies are at a preliminary stage in the UK.

Scheme / Issuer	Methodology	Description
rePLANET	**Wallacea Trust Methodology**	• One credit is defined as a 1% improvement in biodiversity per hectare. • "Basket of metrics" approach: biodiversity improvement is measured using a selection of 5+ measurable metrics reflecting the biodiversity targets for the habitat. • Measures **uplift** or **avoided loss**(1).
Verra	**SD VISta Nature Framework**	• One credit represents 1% of net biodiversity outcomes generated during a monitoring period as a result of the project intervention. • Quality is measured using a selection of condition indicators for the ecosystem in question • Measures **uplift**(2).
CreditNature	**NARIA framework**	• A standardised approach to monitoring improvements in ecosystem condition and biodiversity resulting from interventions. • Monitors four constituent metrics: bird trait diversity, landscape connectivity, trophic function and vegetation spatial diversity. • Measures **uplift**(3).
Plan Vivo	**PV Nature Methodology**	• Measures biodiversity **uplift** or **avoided loss** across 5 pillar metrics: species richness, species diversity, taxonomic dissimilarity, habitat health and habitat spatial structure(4).
Earthly	**Defra Biodiversity Metric**	• Divides Biodiversity Units calculated using Defra's Biodiversity Metric into smaller, lower-cost 3x3m squares(5).

(1) Operation Wallacea - Biodiversity Credits and Wallacea Trust - Methodology for Quantifying Units of Biodiversity Gain.
(2) Verra - Sustainable Development Verified Impact Standard.
(3) Credit Nature - Solutions - NARIA and Accounting for Nature - NARIA Framework.
(4) Plan Vivo - Nature Methodology and Data Protocols.
(5) Earthly - How all business can help biodiversity.

6. Private Funding Opportunities: Supply Chain Mechanisms

Image: Sanguisorba officinalis, Source: Mike Dodd, https://www.amanita-photolibrary.co.uk/

Certification Schemes

Nature Market Readiness Score* = **5/9** **Developing**

Indicates an emerging market that might be suitable for the needs of some farmers.

*Please refer to the Appendix for a complete breakdown of the Nature Market Readiness Score.

Image: Species-rich meadow, Source: Mike Dodd, https://www.amanita-photolibrary.co.uk/

Certification Schemes (1)

What are they	How they work
• Third party certification for agricultural products, providing assurance that they meet certain sustainability and quality standards. • The schemes presented below are those that are specifically applicable to grasslands and related products.	• Farmers generally pay to enrol in a scheme and in exchange are offered support / mentoring. • Price premiums may be obtained for certified products.

Scheme	Scope and Requirements	Cost / yr	Ongoing Requirements	Benefits
Pasture for Life	• Applies to ruminant livestock products. • Compliance with the Pasture for Life Certification Standards(1) (100% pasture-fed livestock and related requirements).	• £224 - £825 + VAT(2) • Levy fee upon sale of products (e.g. £5 per animal for cattle)(3).	• Continued compliance with Certification Standards. • Verified through annual inspection and audit.	• Potential to attract consumers and benefit from price premium. • Network, support and resources. • Access to joint marketing initiatives and promotional schemes.

(1) See the Pasture for Life Certification Standards for Ruminant Livestock and Products from Ruminant Livestock Version 5.1.

(2) Includes £100 annual membership fee and the variable and Inspection and Certification Fee.

(3) Payable by farms with a certified enterprise at the point the animal leaves the farm for slaughter.

Certification Schemes (2)

Scheme	Scope and Requirements	Annual Cost	Ongoing Requirements	Benefits
Soil Association Organic Certification	• Applies to all grassland-derived products. • Compliance with the Soil Association Organic Standards for Great Britain(1), following an "organic conversion period", where land and animals are transitioned to organic management standards (c. 2 years). • Includes requirements around inputs, grazing and livestock management.	• One-off application and conversion fee: £520/£499(2) (for small-scale farmers(3)) + VAT. • Annual certification fee: £499 – £1,418 + VAT[2], based on size.	• Continued compliance with Soil Association Organic Standards for Great Britain. • Annual inspection.	• Potential to attract consumers and benefit from price premium. • Network, support and resources. • Use of the "Organic Marketplace" to access supply chain opportunities and buy/sell products from other organic producers(4). • Joint inspections with other schemes (e.g. Pasture for Life).
Regenified	• Applies at farm level and to products. • Compliance with the Regenified 6-3-4 Verification Standard (Five Tiers)(5) relating to regenerative agriculture practices (e.g. minimising soil disturbance, building biodiversity and integrating livestock) (5). • Includes specific requirements for grassland and grazing livestock.	• Not publicly available.	• Continued compliance with the Verification Standard. • Annual in-field evaluation. • Implementation of a "Farm Plan". • Soil Testing.	• Potential to attract consumers and benefit from price premium. • Network, support and resources.

(1) Soil Association Organic Standards for Great Britain.
(2) Certification fees for farming & growing to Soil Association standards or organic regulations.
(3) Small-scale farmers are those with between 0.01 and 5 ha of organic land.
(4) Why choose organic certification?.
(5) Regenified - Media Kit.

Supply Chain Payments

Nature Market Readiness Score* = **5/9** **Developing**

Indicates an emerging market that might be suitable for the needs of some farmers.

*Please refer to the Appendix for a complete breakdown of the Nature Market Readiness Score.

Image: Brush harvesting, Source: Plantlife

Supply Chain Payments

What are they?

- Voluntary investment / payments by companies in projects (e.g. grassland creation or restoration) with environmental benefits to mitigate the environmental impacts of their supply chain, meet wider sustainability goals and/or enhance reputation.

How do they work?

- Companies make direct investment into projects (e.g. arable reversion to grassland) or pay for specific interventions (e.g. shift to rotational grazing) which are expected to achieve environmental outcomes.
- Environmental outcomes targeted can vary (e.g. carbon sequestration, water quality improvement, biodiversity improvement)
- Variable and highly dependent on the corporate funder in question.

Example

- **Arla FarmAhead™ Incentive Model**(1) provides points to farmers for implementing farming practices (e.g. optimising milk per feed ratios, manure handling, management of permanent grasslands)(2) focused on carbon emissions reduction and meeting related criteria.
- **Points translate to a higher milk price per kilo**: each point triggers an additional 0.03 eurocent per kilo of milk sold to Arla, with farms being able to obtain a maximum of 3 additional eurocents per kilo of milk + 1 eurocent per kilo milk for participating in an annual climate check as part of monthly milk payments.

(1) Arla - FarmAhead Incentive Model.

(2) Arla - How to reduce your farms carbon footprint.

7. Grassland Project Development

Image: Pasture for Life Tour, Source: Clem Sandison

Steps to develop a grassland project and access private funding

Development (1 – 2 years)	Intervention(s) (2 – 10 years)	Maintenance (10 years+)
Activities		
• Baseline survey and identification of target intervention(s). • Assessment of funding options. • Assessment of income, costs and financial viability. • Governance structure design. • Legal documents (e.g. s.106 agreement / conservation covenant for BNG, contract with scheme provider for soil carbon). • Registration of land (BNG).	• Grassland creation, restoration or enhancement.	• Credit / unit sales* • Ongoing grassland management • Ongoing monitoring and reporting*
Potential support required		
• Ecologist / grassland / grazing specialist • Legal advisor • Land manager / farm advisor	• Ecologist / grassland / grazing specialist	• Ecologist / grassland / grazing specialist • Broker / intermediary(1)
Cash flows*		
-£: upfront development costs (surveys, legals)	**-£: intervention costs**	**-£: ongoing scheme related costs; ongoing grassland management costs**
	+£ BNG upfront sales possible post-registration, pre-intervention	**+£ Ongoing unit / credit sales**

***Variable and highly dependent on target interventions and private funding scheme chosen**

(1) To support with route to market and sales.

Project delivery considerations (1)

Tenancies

- Assess whether land use change and the private funding opportunity is compatible with an existing tenancy.
- Consider whether landlord approval is required.
- Longer tenancies are more compatible with environmental actions that are committed to over time(1).

Mortgages

- Consider whether land use change is permitted by any mortgage over the land.
- Some land use changes will bring the land out of "agricultural land use", which may be prohibited by the mortgage terms. For example, BNG may require mortgage prepayment in certain circumstances.

Contract Farming

- Contract farming(2), where a landowner instructs a contractor to undertake actions on their land and deliver outcomes, may be considered for projects where outside expertise is required.

Tax

- Consider the tax implications of any land use change.
- Tax advice will be required.

(1) In January 2025, the Crown Estate launched a 15-year environmental Farm Business Tenancy to facilitate tenants' access to environmental diversification opportunities.

(2) Contract farming resource.

Project delivery considerations (2)

Wider Landscape

- Is the land within a Local Nature Recovery Strategy (LNRS)[1] or a designated National Landscape[2]?
- Consider whether there could be any other partnerships, organisations or projects in the area that could influence and/or support the design and delivery of the project.

Surveys

- An ecological survey to ascertain the land's starting condition will be required.
- The survey should be tailored to meet the specific requirements of the selected funding mechanism.

Habitat Bank Operator

- For BNG or Nutrient Neutrality only.
- Landowners may enter an arrangement with a Habitat Bank operator where: the operator leases the land and pays the landowner a fixed fee, acts as a broker between the landowner and unit/credit buyer taking a percentage of the purchase price.

Advisors

- Consider whether any external advisors will be required (e.g. ecologist, grazing specialist, financial advisor, legal advisor, tax advisor).
- Advisors should have a good track record and relevant site-specific knowledge.

(1) LNRS areas and responsible authorities.

(2) National Landscapes Association contact.

8. Stacking Guidance

Image: Balbirnie Home Farms, Source: Graeme Mowat at Cinecosse

Stacking

= Stacking permitted

= Stacking not permitted

= No clear guidance / scheme dependent

Stacking refers to combining payments received (through the sale of units/credits or directly) from different opportunities for the same activity/intervention on the same piece of land.

Stacking potential	Countryside Stewardship[1]	Sustainable Farming Incentive[1]	BNG	Grassland Carbon[2]	Nutrient Neutrality	Water Payments[3]	Voluntary Biodiversity[4]	Supply Chain Payments[5]
Countryside Stewardship[1]								
Sustainable Farming Incentive[1]								
BNG								
Grassland Carbon[2]								
Nutrient Neutrality								
Water Payments[3]								
Voluntary Biodiversity[4]								
Supply Chain Payments[5]								

***In certain circumstances, payments for different activities/interventions on a single piece of land may be able to be combined. Further habitat enhancements, on top of what a payment is received for, often can be considered a new activity/intervention, falling outside of stacking rules.[6]**

(1) SFI and CS can be combined with each other and with other funding schemes for **different activities** on the same piece of land.
(2) Assumption that grassland carbon income is outcome based and subject to additionality tests under the particular scheme.
(3) For example, no stacking is allowed under the Wessex Water River Stour Phosphorus Reduction Scheme.
(4) For example, Plan Vivo permits stacking of voluntary biodiversity credits with carbon credits where certain requirements are met.
(5) Assumption that supply chain payments are outcome based or offtake payments.
(6) Government guidance on stacking.

9. Risks

Image: Yellow rattle in hay meadow, Source: Lucia Chmurova

Risks (1)

The below table sets out some of the key potential risks associated with a grassland creation or restoration project funded by the opportunities explored in this Toolkit.

Risk Category	Description	Impact	Mitigation Strategy
Habitat Delivery Risk	The planned intervention may fail to establish the target habitat condition (e.g. species-rich grassland) within the expected timeframe due to challenging soil conditions, weather, incorrect management or other unforeseen circumstances .	**High:** This poses a significant financial risk, especially if biodiversity units or credits were sold upfront based on a promised outcome. You may be liable for the failure to deliver the target habitat condition.	Engage with grassland specialists for expert ecological advice on project design, management, and monitoring.
Long Term Commitment Risk	Projects for compliance markets like BNG and Nutrient Neutrality require legally binding commitments for 30 to 125 years. The associated Habitat Management and Monitoring Plan (HMMP) dictates specific land management (e.g. grazing density, cutting dates), reducing your flexibility to adapt to changing farm needs.	**High:** Loss of management flexibility for a significant period of time. A legally binding agreement is tied to the land and can be enforced, creating a long-term liability regardless of changes to your farm business.	Carefully review all long-term legal documents (e.g. s. 106 Agreement, Conservation Covenant, HMMP) with a legal advisor before signing.
Legal Risk	Existing tenancy or mortgage agreements may not permit the long-term land use changes required by the project. Project development costs for surveys, legal fees, and ongoing monitoring can be high and variable, and there may be unforeseen tax implications from changing land use.	**Medium-High**: Risk of breaching tenancy or loan conditions. Can lead to significant, unbudgeted costs that undermine the financial viability of the project.	Seek specialist advice from legal, tax, and financial advisors early in the process. Secure landlord and/or lender approval before committing to a project.

Risks (2)

The below table sets out some of the key potential risks associated with a grassland creation or restoration project funded by the opportunities explored in this Toolkit.

Risk Category	Description	Impact	Mitigation Strategy
Policy Risk	Several funding opportunities have significant dependencies on government policy and regulation. The viability of projects funded through BNG, Nutrient Neutrality, and public payment schemes (CS/SFI) is directly linked to current legislation and government budgets.	**High:** Changes to the legal frameworks underpinning the funding scheme or nature market through which a project is financed will fundamentally impact a project's overall viability. Uncertainty around policy changes can also undermine buyer demand.	Become informed about potential policy developments early-on in the project. Where possible, consider diversifying revenue streams, securing long-term agreements with buyers and whether risk can be minimised through contracting mechanisms or insurance.
Reputational Risk	Certain emerging funding opportunities may carry reputational risk where the underlying data measuring ecosystem services is uncertain and/or where the standards and verification protocols are still evolving.	**Medium- High:** Uncertainty or controversy around the data and/or methodology used to measure the environmental benefits generated by interventions could affect buyer demand and the project's overall viability.	Ensure schemes engaged with prioritise transparency in data collection and reporting and adopt third-party verification.
Financial Risk	The profit projections for a project may prove to be inaccurate due to inaccurate cost and/or revenue assumptions. Profit projections may be affected by several factors such as delays in habitat establishment, lower than expected buyer demand for units/credits, higher-than-anticipated costs and the materialisation of the risks highlighted above.	**High:** A project not meeting its financial projections can be detrimental, particularly where significant upfront costs have been incurred based on anticipated profits.	Consider whether costs have been under-estimated and whether projected revenues are overly optimistic. Carefully assess the commercial viability and risks of a project before committing significant resources. Consider whether expert financial advice is required for the project.

10. Conclusion

Image: Pasture for Life Tour, Source: Clem Sandison

finance earth

Plantlife

National Landscapes Association

PASTURE FOR LIFE

Floodplain Meadows Partnership

Conclusion: Realising Your Grassland's Potential

Grasslands are a valuable natural asset with the potential to generate diverse revenue streams. This toolkit is designed to empower you with the knowledge to explore funding opportunities for grassland and build a more resilient farm business.

Key Takeaways for Your Farm:

- **Public Funding is the Foundation:** Public payments through Countryside Stewardship and the Sustainable Farming Incentive provide a crucial and accessible income stream for grassland creation, restoration and management.
- **Private Markets Offer New Opportunities, with Caution:** Private nature markets are emerging. While Biodiversity Net Gain (BNG) is a well-developed opportunity (although demand for Biodiversity Units remains limited), other opportunities like carbon and nutrient neutrality carry higher risks and require careful consideration due to uncertainties (e.g. relating to policy and data).
- **Stacking Incomes is Possible but Complex:** You can strategically combine ("stack") public and private income streams on the same land, provided the stacking rules applicable to the income streams are complied with.

Your Next Steps:

- **Assess Your Land:** Use the guidance in this toolkit to identify potential interventions. An ecological survey can help pinpoint specific Ecosystem Service opportunities on your land.
- **Assess the Market:** Review the key schemes, such as BNG, Nutrient Neutrality, and soil carbon platforms, to understand eligible interventions, compliance, and MRV (Monitoring, Reporting, and Verification) requirements. It's also valuable to engage with potential corporate offtakers (buyers) to clarify demand and funding opportunities.
- **Start the Conversation:** Use the information gathered here to confidently approach potential partners, from local planning authorities for BNG to private scheme providers for carbon or water payments.

11. Appendix

Image: Sanguisorba officinalis, Source: Mike Dodd, https://www.amanita-photolibrary.co.uk/

Glossary

Image: Species-rich meadow, Source: Mike Dodd, https://www.amanita-photolibrary.co.uk/

Glossary (1/4)

Term	Definition
Additionality	A carbon project or biodiversity net gain project is additional if the emissions reductions or removals / biodiversity improvement (as applicable) would not have occurred without the expected revenue from the sale of carbon credits / biodiversity units (as applicable).
Agriculturally improved grassland	Grassland modified by practices such as reseeding, fertilising or draining to increase productivity, often resulting in reduced plant biodiversity.
BNG	Biodiversity Net Gain is an approach to development that requires developers in England to enhance biodiversity in order to mitigate biodiversity loss due to development, such that an overall10% increase in natural habitat and ecological features is achieved. If BNG cannot be achieved within the development site, developers must purchase offsite biodiversity units, measured using Defra's **Biodiversity Metric 4.0**, to meet requirements. BNG has been mandatory for all developments in England under the Town and Country Planning Act since 2024.
BNG Registration	Refers to registering a Biodiversity Net Gain site on the publicly accessible Biodiversity Gain Site Register.
BNG unit	Biodiversity Net Gain Unit, a unit of biodiversity, calculated by a qualified ecologist using the Biodiversity Metric, a biodiversity impact assessment tool. This forms part of the mandatory market for Biodiversity Net Gain (BNG) in England and differs to 'biodiversity credits' which form part of voluntary biodiversity markets.
Carbon reductions	Actions that decrease the amount of carbon dioxide emitted compared to prior practices.
Carbon removals	The process of removing carbon dioxide from the atmosphere and locking it away for decades, centuries or millennia.
Conservation Covenant	An agreement holding a project developer legally liable for the delivery and maintenance of a nature creation or restoration project (usually BNG), where monitoring and enforcement is carried out by a designated Responsible Body.
Defra Statutory Biodiversity Metric	A tool developed by Natural England in collaboration with Defra to calculate and measure biodiversity value for the Biodiversity Net Gain regime. It assigns a value and corresponding number of BNG units to habitats based on their type, size, condition and distinctiveness.

Glossary (2/4)

Acronym	Definition
Ecosystem Services	The benefits to human society that can be obtained from ecosystems, including provisioning, regulating, cultural and supporting services.
Floodplain Meadows	Species-rich wildflower meadows in a floodplain. Managed with an annual hay cut and often aftermath grazing and typically flooded in autumn and winter. Floodplain meadows are officially classified within the Lowland Meadows UKHab definition, but as they require substantially different management requirements and deliver a different range of ecosystem services, they have been given a separate category for the purposes of this Toolkit.
Floodplain Wetland Mosaic	Areas of floodplain that are either: (1) naturally functioning mosaics of wetland habitats with natural or near-natural hydrological function and/or good water quality; or (2) areas of modified floodplain, but only if they provide important refuges for wetland species whose natural habitats have been lost. May be situated anywhere within the floodplains of both coastal and freshwater water bodies.
Good quality semi-improved grassland	Grasslands which have been modified by artificial fertilisers, slurry, intensive grazing, herbicides or drainage, and consequently have a range of species which is less diverse and natural than unimproved grasslands.
Ha	Hectare, a unit of measurement of an area of land (10,000 m^2).
HMMP	Habitat Management and Monitoring Plan, a detailed plan that outlines how designated land will be managed over at least 30 years to: create and enhance habitats for biodiversity net gain (BNG); and manage and monitor the BNG.
LNRS	Local Nature Recovery Strategy(ies), a system of spatial strategies for nature, introduced in the Environment Act 2021. LNRS help map out the action needed to restore nature, working closely with local stakeholders including farmers and land mangers, with a view to meeting the Government's England-wide nature targets.
Lowland Calcareous Grassland	Grassland meeting two out of three UKHab criteria relating to species per m2, broadleaved herb and sedge cover and rye grasses and White Clover cover. Found on calcareous soils over chalk and limestone in the lowlands and upland fringe, generally <300m in altitude. Largely restricted to the warmer and drier climates of the southern and eastern areas of the UK.
Lowland Dry Acid Grassland	Grassland meeting two out of three UKHab criteria relating to species per m2, broadleaved herb and sedge cover and rye grasses and White Clover cover. Typically occurs on nutrient-poor, generally free-draining sandy soils with a pH of 4-5.5 and that is overlying acid rocks or superficial deposits such as sands and gravels. Often occurs as an integral part of lowland heath landscapes, in parklands and locally on coastal cliffs. Often found on commons at low altitudes, up to 300m altitude on the moors of southwest England.

Glossary (3/4)

Acronym	Definition
Lowland Meadows	Neutral grasslands meeting two out of three UKHab criteria relating to species per m2, broadleaved herb and sedge cover and rye grasses and White Clover cover. Occur throughout the enclosed lowland landscapes of the UK, often on shallow slopes or level ground with relatively deep soils that are neither strongly acidic nor lime-rich. Floodplain meadows are officially classified within the Lowland Meadows definition, but as they require substantially different management requirements and deliver a different range of ecosystem services, they have been given a separate category for the purposes of this Toolkit.
LPA	Local Planning Authority, the local government body responsible for planning and development within a specific area.
Modified Grassland	Species poor vegetation dominated by a few fast-growing grasses on fertile, neutral soils. It is frequently characterized by rye-grasses.
NCA	National Character Areas, that divide England into 159 distinct areas defined by a unique combination of landscape, biodiversity, geodiversity, history and cultural and economic activity. NCA boundaries follow natural lines in the landscapes, not country or district boundaries.
Nutrient Neutrality	In 2022, nutrient neutrality was made a requirement in designated catchments in England to prevent new developments from generating an increase in phosphate or nitrate levels beyond current levels. Developers can purchase offsite nutrient credits, generated through mitigation techniques such as wetland creation or taking agricultural land out of conventional production.
Other Neutral Grassland	A widespread grassland of the lowlands that occurs on farmland and in built-up areas. A catch-all category for neutral grasslands that don't meet the requirements for "Lowland meadows" or "Upland hay meadows". Low input pastures, road verges, paths, tracks, rivers, railways and the edges of fields are likely to be this grassland type. Land that is not farmed but is cut or mown annually often becomes this habitat.
Poor quality semi-improved grassland	Grassland that shows some legacy of agricultural improvement (occasional rye-grass and moderate soil P) but has not been recently reseeded or fertilised. Species-diversity typically 8-15 vascular species m^{-2}; broad-leaved herbs 10-20 % cover; rye-grass + white clover usually <30 % cover. Does **not** meet UKHab species-richness thresholds for priority habitats and should be mapped as g3c (Other neutral grassland) or, where obviously acidic / calcareous, the equivalent g1/g2 sub-code.
Purple Moor Grass and Rush Pasture	Consists of various species-rich types of fen meadow and rush pasture, dominated by Rush and/or Purple Moor-grass, usually on peaty-gley soils, with Sharp-flowered Rush or Soft Rush abundant to dominant. Occur on both poorly drained, usually acidic, soils in lowland areas of high rainfall and more base-rich soils. Found it southwest England, southern Wales, southwest Scotland and Northern Ireland. Also referred to as "Rhôs pasture" in the west of Britain and "culm grasslands" in northern Devon and north east Cornwall.

Glossary (4/4)

Acronym	Definition
Regenerative Agriculture	An approach to farming that improves the environment and in particular, regenerates the soil. It involves some mix of the following farming tools: minimizing soil disturbance, maintaining soil cover, fostering agricultural diversity and rotations, keeping living roots in the soil and integrating livestock and arable systems.
S. 106 Agreement	An agreement holding a project developer legally liable for the delivery and maintenance of a nature creation or restoration project (usually BNG), where monitoring and enforcement is carried out by the Local Planning Authority.
Species-rich Grassland	This term refers to grassland *condition* (≥2 of the UKHab species-richness criteria) rather than a separate habitat type. Use together with the relevant primary code (g1, g2, g3 etc.).
Stacking	Combining payments received (through the sale of units/credits or directly) from different opportunities for the same activity/intervention on the same piece of land.
UKHab	UK Habitation Classification system for classifying habitats.
Upland Acid Grassland	Acid grassland on unenclosed land in the uplands, normally above c. 300 m in altitude. The typical constituents of this habitat are Mat-grass, Wavy Hair-grass, Common Bent, Sweet Vernal Grass, Comon Wood-rush, Bedstraw, Tormentil and the mosses Springy Turf-moss and Broom Moss.
Upland Calcareous Grassland	Most occur 250-300 m in altitude but also found within unenclosed moorland at lower elevations and descends to sea level in northwest Scotland. Typically occur as components of habitat mosaics. Must meet two out of three UKHab criteria relating to species per m2, broadleaved herb and sedge cover and rye grasses and White Clover cover. Often species poor, with characteristic constants being Blue Moor-grass, Sheep's Fescue, Wild Thyme, Limestone Bedstraw and Common Bent.
Upland Hay Meadows	Confined to areas where non-intensive hay-meadow treatment has been applied in a sub-montane climate. Most characteristic of brown earth soils on level to moderately sloping sites. For the most part, in upland valleys in the north of England, with outliers in Scotland. No single grass species is consistently dominant. The most striking feature of the vegetation is generally the variety and abundance of dicotyledons including Wood Crane's-bill, Pignut, Great Burnet and Lady's Mantles.
Voluntary Carbon Market	A marketplace where private actors can voluntarily buy and sell carbon credits that represent removals or reductions of greenhouses gases in the atmosphere, often to offset their own emissions. Each carbon credit represents one metric tonne of carbon dioxide reduced or removed from the atmosphere.

BNG: Estimated Habitat Creation Timelines and Unit Generation

Image: Brush harvesting, Source: Plantlife

BNG - Estimated habitat creation timelines and unit generation

For arable reversion, by grassland type.

Starting condition	Target Grassland habitat	Standard time to reach target grassland condition[1]		Estimate of BNG units / ha created[2]			
		Poor condition (Years)	Good condition (Years)	Lower Bound – Poor Condition[3]		Upper bound – Good Condition[3]	
				Pre-verification sale[4]	Post-verification sale[5]	Pre-verification sale	Post-verification sale
Cropland	Floodplain wetland mosaic and coastal and floodplain grazing marsh	5	20	- 0.34*	3.40	0.91	13.60
	Lowland calcareous grassland	5	20	- 0.34*	3.40	0.91	13.60
	Lowland dry acid grassland	10	30+	- 0.15*	5.10	0.53	13
	Lowland meadows	5	15	0.21	5.10	2.64	18.70
	Other lowland acid grassland	1	15	1.86	1.70	5.03	8.50
	Other neutral grassland	2	10	1.72	1.70	6.40	8.50
	Upland acid grassland	1	15	1.86	1.70	5.03	8.50
	Upland calcareous grassland	10	25	- 0.61*	3.40	0.44	13.60
	Upland hay meadows	10	20	- 0.15*	5.10	1.88	18.70

*Pre-verification sales are not possible for certain grasslands with higher distinctiveness that are more difficult and take time to create/enhance.

(1) "Poor" and "Good" condition are the lowest and highest habitat conditions available under the BNG Metric.
(2) Key assumptions: (a) area not identified in local nature recovery strategy (LNRS). (b) Pre-verification sales occur in the first year of the project.
(3) For the For the lower bound, the grassland condition targeted is "Poor". For the upper bound, the grassland condition targeted is "Good".
(4) BNG Unit sales before the habitat has reached target condition.
(5) BNG unit sales after the habitat has reached target condition.

Nature Market Readiness Assessments

Image: Balbirnie Home Farms, Source: Graeme Mowat at Cinecosse

Funding Opportunities – Overall Market Readiness Score

The Overall Market Readiness Score corresponds to the stage of development of the market in question.

1-4	= Early stage	Indicates a nascent market that might only be suitable for farmers interested in innovative sources of funding which are more complex to access and carry higher risk.
5-7	= Developing	Indicates an emerging market that might be suitable for the needs of some farmers.
8-9	= Advanced	Indicates a well-developed market that most grassland farmers can consider as a potential source of funding.

BNG – Market Readiness Assessment

3 Market Structure

✓ **Legal and regulatory framework – Statutory BNG Regime**
- Mandates that target grassland must be maintained for 30 years under the terms of a binding legal agreement.
- BNG units are registered on the BNG registry.

✓ **Robustness of methodology to measure benefits – Defra Statutory Biodiversity Metric 4.0**
- The biodiversity value of a habitat is quantified in BNG units calculated through the Metric, a biodiversity accounting tool which must be used for calculating net gain in biodiversity.
- Based on a qualitative assessment of grassland type, extent & condition.

✓ **Underlying data quality**
- High confidence in ecological data measuring biodiversity uplift underlying the methodology.

✓ **Clarity of pricing mechanisms and trading processes**
- BNG unit prices are determined by market supply and demand.
- Trading occurs directly or through intermediaries (brokers, advisors, trading platforms).

2 Buyer Demand

✓ **Availability of buyers in the market**
- Active housing and infrastructure developer buyers exist but developers tend to prioritise onsite BNG which limits demand for offsite units(1).

✓ **Scale and stability of demand**(2)
- National projections suggest c. 7,700 offsite units are needed per year.
- However, the majority of developments (c. 67%) are delivering BNG on-site, with 33% requiring offsite units.

✓ **Pricing competitiveness**
- Generally competitive but variable depending on location and habitat type.

3 Implementation Ease

✓ **Availability of clear guidance**
- Government guidance is available (e.g. biodiversity metric guidance, land manager's guidance, stacking guidance and conservation covenants guidance) and regularly updated(3).

✓ **Access to technical support**
- BNG developers and ecologists are available to provide technical support for BNG projects.

✓ **Reasonableness of development costs**
- Vary per project but generally clear at the outset, allowing financial viability to be determined.

✓ **Financial viability**
- Highly dependent on project-specific demand but generally achievable.

Nature Market Readiness Score = 8/9

(1) Onsite BNG refers to the practice of property developers offsetting their biodiversity impact within the boundaries of the site on which they are building.
(2) The Environment Partnership, #BNG500 – what lessons can we learn from analysis of 500 BNG-compliant planning applications made in 2024?, March 2025.
(3) Government guidance is accessible here: https://www.gov.uk/government/collections/biodiversity-net-gain.

Grassland Carbon – Market Readiness Assessment

1 Market Structure

x **Legal and regulatory framework**
- No established legal or regulatory framework.

x **Robustness of methodology to measure benefits**
- No single accepted standard across the market.
- No UK government-backed code for soil carbon.
- However, many schemes use the Verra VM0042 methodology.

x **Underlying data quality**
- Significant uncertainty regarding the carbon sequestration potential of grasslands.
- Questions remain over additionality and permanence for using soil carbon for offsetting(1). Supply chain insetting(2) is generally seen as more credible.

✓ **Clarity of pricing mechanisms and trading processes**
- Some public pricing data and transaction records.

2 Buyer Demand

✓ **Availability of buyers in the market**
- Transaction volumes remain relatively low but there are active buyers in the market.

✓ **Scale and stability of demand**
- Growing demand from large UK retailers to reduce emissions in supply chains is likely to drive demand.
- Scope 3 emissions(3) reporting requirements for companies is likely to further increase demand.

x **Pricing competitiveness**
- Pricing is variable depending on the scheme and project in question.

2 Implementation Ease

✓ **Availability of clear guidance**
- Guidance for specific schemes and methodologies is available.
- No standardised guidance across the market.

✓ **Access to technical support**
- Technical support available through third party issuers of credits (e.g. Regenerate Outcomes).
- No standardised guidance across the market.

x **Reasonableness of development costs**
- Project dependent.
- Difficult to predict due to demand uncertainty.

x **Financial viability**
- Financial viability more likely where interventions fit into planned shift to regenerative practices and the land can remain productive.

Nature Market Readiness Score = 5/9

(1) **Offsetting:** An organisation purchases carbon credits from outside its value chain to compensate for its emissions.
(2) **Insetting:** An organisation purchases carbon credits from within its value chain to compensate for its emissions.
(3) **Scope 3 emissions:** Indirect greenhouse gas emissions that occur in the upstream and downstream activities of an organisation but are not included in scope 1 or 2 emissions.

Nutrient Neutrality – Market Readiness Assessment

2 Market Structure

✓ **Legal and regulatory framework**
- Legal requirement in the Conservation of Habitats and Species Regulations 2017 for LPAs to assess nutrient impacts of developments and mitigation measures when deciding on planning permission.
- Supporting guidance issued by Natural England(1) regarding mitigation measures for development in Nutrient Neutrality catchments.

✓ **Robustness of methodology to measure benefits**
- Natural England provides a generic methodology which is reflected in catchment-specific calculators(2).

✓ **Underlying Data Quality**
- Confidence in ecological data measuring nutrient reduction underlying the methodology.

x **Clarity of pricing mechanisms and trading processes**
- Prices are determined by market supply and demand and occur directly with landowners or through intermediaries.
- Price uncertainty due to low transaction volumes.

1 Buyer Demand

✓ **Availability of buyers in the market**
- Active developer buyers exist automatically due to market being legally mandated.

x **Scale and stability of demand**
- Highly variable by catchment.
- Demand for private credits tempered by: on-site mitigation, supply of credits by Natural England in some catchments, and policy uncertainty with the announcement of the Nature Restoration Fund in the Planning and Infrastructure Bill.

x **Pricing competitiveness**
- Pricing is highly variable depending on the catchment and project in question.

2 Implementation Ease

✓ **Availability of clear guidance**
- Natural England guidance and LPA-level guidance is available and regularly updated.
- Variations between LPAs can make the guidance challenging to navigate.

✓ **Access to technical support**
- Some technical support available through Natural England and LPAs.
- Not as comprehensive as for BNG.

x **Reasonableness of development costs**
- Variable depending on the project.

x **Financial viability**
- Possible but challenging due to upfront nature of credit payments and long project life (80-125 years).

Nature Market Readiness Score = 6/9

(1) Natural England - Nutrient Neutrality and Nutrient Mitigation.
(2) Generic methodology and catchment specific calculators.

Water Payments – Market Readiness Assessment

1 Market Structure

x **Legal and regulatory framework**
- No legal or regulatory framework.

x **Robustness of methodology to measure benefits**
- No established methodology.
- Measurement of water quality and/or flood management benefits varies from scheme to scheme.

x **Underlying data quality**
- No consistently used data used by water payment schemes to quantify water related benefits.
- Flood management outcomes are difficult to quantify, and underlying data is at an early stage.

x **Clarity of pricing mechanisms and trading processes**
- No clear pricing mechanisms or trading processes.
- Schemes are ad-hoc with different payment rates.

2 Buyer Demand

✓ **Availability of buyers in the market**
- Water companies are the main active funders.
- There is no established "market" with secondary buyers.

x **Scale and stability of demand**
- The availability of schemes is fully dependent on water companies and other companies' offerings.
- Schemes tend to be catchment specific
- Availability is hard-to-predict and variable.

x **Pricing competitiveness**
- Pricing is highly variable depending on the scheme.
- Payment rates are unilaterally set by scheme providers.

1 Implementation Ease

x **Availability of clear guidance**
- No standardised guidance is available.

✓ **Access to technical support**
- Some schemes provide technical support alongside funding.

- **Reasonableness of development costs**
- Vary per project and highly dependent on funding rates.

x **Financial viability**
- Highly dependent on the scheme and project in question.

Nature Market Readiness Score = 4/9

Voluntary Biodiversity – Market Readiness Assessment

1 Market Structure

x **Legal and regulatory framework**
- No established legal or regulatory framework.

x **Robustness of methodology to measure benefits**
- Several methodologies are being developed and/or piloted but there is no consensus on a standardised methodology to be used across the market.
- Disagreement as to whether credits for "avoided loss" should be permitted.

x **Underlying data quality**
- Varying degrees of confidence in the ecological data measuring biodiversity uplift and/or avoided loss underlying the various methodologies.

x **Clarity of pricing mechanisms and trading processes**
- No clear pricing mechanisms or trading processes
- Different schemes and issuers of credits.

1 Buyer Demand

x **Availability of buyers in the market**
- Few, ad hoc transactions.
- Mainly corporate buyers.

x **Scale and stability of demand**
- Demand remains low despite some evidence of growth.

x **Pricing competitiveness**
- Pricing is non-transparent and highly-variable depending on the scheme and project in question.

1 Implementation Ease

✓ **Availability of clear guidance**
- Guidance for specific schemes and methodologies is available.
- No standardised guidance.

✓ **Access to technical support**
- Technical support available through third party issuers of credits (e.g. Earthly, rePLANET).
- No standardised guidance.

x **Reasonableness of development costs**
- Highly project dependent.
- Difficult to predict due to demand uncertainty.

x **Financial Viability**
- Highly dependent on the scheme and project in question.

Nature Market Readiness Score = 3/9

Certification Schemes and Supply Chain Payments – Market Readiness Assessment

1 Market Structure

x **Legal and regulatory framework**
- No legal requirement exists for certification schemes or supply chain sustainability payments.
- Burden of enforcement and compliance lies with the scheme itself.

x **Robustness of methodology to measure benefits**
- A range of measurement, monitoring and certification tools but no standardised measurement, monitoring or reporting framework.

x **Underlying data quality**
- A range of different data sources in use.

x **Clarity of pricing mechanisms and trading processes**
- Uncertainty over potential for premium pricing from certification schemes.
- Limited platforms to trade farm-based ecosystem services.

2 Buyer/Funder Demand

✓ **Availability of buyers in the market**
- Growing demand from large UK retailers to reduce emissions and improve sustainability in supply chains.

x **Scale and stability of demand**
- Examples of premiums being paid for sustainable products.
- Limited payments for on-farm ecosystem services beyond soil carbon and water quality.

x **Pricing competitiveness**
- Pricing is bespoke depending on demand from supply chain companies or consumers.

2 Implementation Ease

✓ **Availability of clear guidance**
- Provided by certification schemes or retailers.

✓ **Access to technical support**
- Provided by certification schemes or retailers.

✓ **Reasonableness of development costs**
- Costs of certification generally clearly communicated and proportionate.
- Supply chain payment rates and ability to cover costs vary.

x **Financial viability**
- Premiums not always available or high enough to cover costs.
- Supply chain payments are not widely available.

Market Readiness Score = 6/9

Case Studies

Image: Yellow rattle in hay meadow, Source: Lucia Chmurova

Biodiversity Net Gain – Case Study

BNG unit generation potential for grassland restoration on a farm in Herefordshire, taking low quality grassland to very high distinctiveness lowland meadow habitat.

Site Summary	
Grassland intervention	Restoration[1]
Intervention area	7.15 ha
Baseline habitat type	Modified Grassland
Baseline habitat condition	Good and fairly good
Target habitat type	Lowland Meadows (very high distinctiveness)
Target condition	Good (noting that reaching this target condition for this very high distinctiveness habitat may be challenging in practice)[2]
Duration	30+ years

BNG Revenue Potential*

- **Unit price assumption:** £36,114 per BNG unit[3]
- **Cost assumptions would need to be applied to the estimated revenue to determine potential profit.**

Pre-verification sales[4]	Hybrid sales (50 – 50)[4]	Post-verification sales[4]
6.9 BNG units generated per ha	**12.7** BNG units generated per ha	**18.5** BNG units generated per ha
£248,000 revenue per ha per annum	**£458,000** revenue per ha per annum	**£668,000** revenue per ha per annum

***All BNG unit generation and revenue figures are estimates calculated based on assumptions. BNG revenue is highly dependent on demand and the ability to sell the units generated.**

(1) To go from modified grassland to lowland meadows is habitat "creation" per the BNG Metric.
(2) Additional reseeding may be required to ensure "Good" condition is met, which will increase maintenance costs.
(3) Biodiversity Units UK February 2025 BNG Pricing Report – Lowland meadows unit price for the South of England.
(4) Unit redundancy rate: 15% (pre-verification) / 10% (post-verification)

Case Study – Regenerate Outcomes

Healey Farm, Northumberland

Size	• 407 hectares.
Farm Type	• Mixed Farm.
Grassland Interventions	• Increased sward recovery times moving from set stocking grazing(1) to rotational grazing(2). • Reduced use of synthetic fertilisers.
Other Regen Ag Interventions	• Reduced tillage.
Duration	• 40 years.
Soil Carbon Credits	• 1-3 carbon credits/ha (£60 - £80 per carbon credit, with 67% to farmer split).

Image source: Regenerate Outcomes

Regenerate Outcomes' Role

- 1-2-1 mentoring to reduce input costs and improve farm resilience and profitability by building soil health.
- Baseline and remeasurement of soil carbon stocks to generate verified carbon credits under the Verified Carbon Standard's VM0042 methodology which the farmer can choose to retain or sell.

Farmer Commitment and Actions

- Required to engage with the mentoring team but remains in control of how to farm.
- Production of biennial "Whole Farm Plan" describing regenerative actions over the next two years.
- Completion of annual spreadsheet audit detailing farming practices per field and emissions data (fuel use, fertiliser use etc.).

Outcomes

- **Credit Generation:** Carbon credits expected to be generated after soil carbon measurement and third-party verification every 2-3 years.
- **Potential buyers:** Local and UK-based companies looking to offset their scope 1 emissions(3) and support UK farmers.

(1) **Set stocking grazing**: where grazing animals are left in a field for more than a week at a time.
(2) **Rotational grazing**: where grazing animals are moved through a series of paddocks on a regular basis.
(3) **Scope 1 emissions**: Direct emissions from owned or controlled sources. (GHG protocol, 2019).

Case Study – Water Payments

Assessment of eligibility of a farm in Dorset for Water Payment and Nutrient Neutrality opportunities following initial discussions with Wessex Water and Natural England.

Description of Land	• 10 ha of newly acquired grassland.	**Proposed Grassland Interventions**	• Grassland restoration including introduction of cattle and grazing plan.

	Wessex Water Tone, Parrett and Yeo Phosphorus Reduction Scheme[1] ✓	**Somerset Levels and Moors Nutrient Neutrality Scheme[4]** ✗
Description	• Payments from Wessex Water for farmers to implement certain habitat creation and farming actions to reduce phosphorus runoff.	• Nutrient Neutrality Scheme operating within the river catchment areas of the Somerset Levels and Moors Ramsar Site where third parties can sell phosphate credits to developers in the same catchment.
Eligibility	✓ **Location**: Farm is within one of the eligible sub-catchments (Parrett) and within the more targeted "Priority Area" eligible for additional actions. ✓ **Interventions**[2]: Potentially eligible for: • **Grassland subsoiling**[3]: £75/ha one off payment • **Watercourse fencing to exclude livestock**: one-off payment for up to 750m of fencing or £7,500	✓ **Location:** Farm is in the Parrett operational catchment and therefore within the boundaries of the scheme. x **Interventions:** Grassland restoration is not eligible to generate nutrient credits under the nutrient neutrality scheme[5].
Next steps	• On-farm assessment by Wessex Water catchment adviser to confirm eligibility. For the subsoiling payment, compaction tests to confirm the presence and depth of sub-surface soil compaction by digging test holes. • Completion and submission of an application form. • Subject to approval, entering into a project agreement with Wessex Water.	• If the intervention was grassland creation from arable: • Obtaining Natural England approval for the phosphorus mitigation scheme. • Submission of technical details to Somerset Council. • Legal process to agree the process for phosphorus credit allocation with Somerset Council.

(1) Wessex Water Tone, Parrett and Yeo Phosphorus Reduction Scheme Details.
(2) The scheme also offers payments for arable reversion, which are not envisaged for this farm.
(3) Using a low-disturbance grassland subsoiler to loosen compacted soil to a depth of 20cm to 35cm to reduce surface runoff through improved water infiltration.
(4) Description of the Third Party Phosphate Mitigation in the Somerset Levels and Moors Catchment Area.
(5) Grassland creation from arable resulting in cessation of fertiliser use would be an eligible intervention.

Voluntary Biodiversity Case Study

Broughton Sanctuary, Yorkshire.

Size	• 520 ha (total including non-grassland habitat)
Grassland Interventions	• Grassland restoration (floodplains and meadows) • Changes to grazing regime
Duration	• 10 years
Voluntary Biodiversity Credits	• 230,000 “Nature Credits”

Image source: Simon Jauncey(1)

Description(2)

- Partnership between Broughton, CreditNature and Ecosulis to finance landscape-scale rewilding by restoring wetlands, grassland, moorland and woodland.
- Starting condition as sheep pasture with scattered woods and a small moorland.
- Planned reduction in sheep numbers and introduction of other grazing breeds (cattle, ponies)(3).
- Project will use the CreditNature NARIA framework methodology to measure and quantify biodiversity uplift.
- In addition to Nature Credits representing improvements in ecosystem integrity, the project will generate carbon units.

(1) University of Oxford - Supporting local nature recovery at Broughton Sanctuary.
(2) Credit Nature - Projects - Broughton Sanctuary, Yorkshire and Rewilding Britain - Broughton Sanctuary.
(3) Nature Recovery at Broughton Sanctuary.

Supply Chain Payments Case Study

The Nestlé Regenerative Milk Plan with First Milk.

Description

- A partnership between Nestlé and farmer-owned dairy cooperative First Milk.
- Farmers that implement regenerative agriculture practices and take additional steps to lessen their environmental impact and protect and enhance the natural assets on their land can claim a **sustainability bonus on payments for milk[1].**
- **Interventions** available to farmers include the regenerating soils by implementing certain grazing practices (including rotational mob grazing and multi-paddock grazing[2]), planting trees, managing hedgerows, encouraging wildlife, protecting waterways, reducing emissions and capturing carbon[3].

Eligibility

- Farmers must supply Nestlé through First Milk
- Famers must implement interventions that are specified by Nestlé

Benefits

- Increased income from sale of milk
- The exact amount of the sustainability bonus is not publicly available

(1) First Milk - The Nestle Regenerative Milk Plan.
(2) Nestle - Responsible farming, sustainably sourced milk.
(3) Grocery Gazette - Nestle head of sustainability on its regenerative agriculture push.

Additional Resources

Image: Pasture for Life Tour, Source: Clem Sandison

finance earth Plantlife National Landscapes Association PASTURE FOR LIFE Floodplain Meadows Partnership

Grassland interventions – Additional Resources

Please note that resources provided are non-exhaustive.

Overview	Link
Government guidance on livestock grazing *Intended for SFI pilot participants	Graze with livestock to maintain and improve habitats (Defra farming blog)
Government guidance on maintaining species rich grassland *Intended for SFI pilot participants	Maintain species-rich grassland (Defra farming blog)
Government guidance on creating and restoring species rich grassland *Intended for SFI pilot participants	Create and restore species-rich grassland (Defra farming blog)
Floodplain meadow management and restoration	www.floodplainmeadows.org.uk
Guidance on managing meadows, the equipment needed, which seeds to choose and more.	Plantlife - Managing Meadows

Countryside Stewardship (CS) and Sustainable Farming Incentive (SFI) – Additional Resources

Please note that resources provided are non-exhaustive.

Overview	Link
Government Guidance on Countryside Stewardship Higher Tier	Countryside Stewardship Higher Tier: get ready to apply
Description of Countryside Higher Tier roll out	Countryside Stewardship Higher Tier (The Andersons Centre)
Links through to different grassland options for Countryside Stewardship – also in here is technical guidance.	Countryside Stewardship grant finder - GOV.UK
Range of guidance around requirements.	Natural England - Access to Evidence

BNG – Additional Resources

Please note that resources provided are non-exhaustive.

Overview	Link
Defra MAGIC map, to be used to check if you have priority habitat grassland and the grassland type.	MAGIC interactive map
Collection of government BNG guidance.	Information you need for biodiversity net gain (BNG)
Government guidance on livestock grazing *Intended for SFI pilot participants	Graze with livestock to maintain and improve habitats (Defra farming blog)
Advice on implementing conservation grazing and BNG.	Conservation Grazing: A Practical Approach to Biodiversity Net Gain for Landowners (Integrated Land Management)
Government guidance on maintaining species rich grassland. *Intended for SFI pilot participants	Maintain species-rich grassland (Defra farming blog)
Government guidance on creating and restoring species rich grassland.	Create and restore species-rich grassland (Defra farming blog)
BNG guidance for farmers in the South Pennines.	Biodiversity net gain guidance for farmers and land managers in the South Pennines (City of Bradford Metropolitan District Council)
BNG Market Report exploring supply and demand.	Biodiversity Net Gain: Navigating the Evolving Market (Carter Jonas)

Nutrient Neutrality - Additional Resources

Please note that resources provided are non-exhaustive.

Overview	Link
Explanation of Nutrient Neutrality.	Nutrient neutrality and housing development, House of Commons Library Research Briefing
Introduction to Nature Markets, including Nutrient Neutrality.	Introduction to Nature Markets (Green Finance Institute)
Natural England Nutrient Neutrality Principles.	Nutrient Neutrality Principles (TIN186) (Natural England)
Summary guide and FAQ on Nutrient Neutrality.	Nutrient Neutrality and Nutrient Mitigation (Natural England)

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