

MODULE 7

INTEGRATED DELIVERY

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- **Nature-friendly farmers** across UK are urging the public to buy local.

A sustainable food supply chain in the UK has never been more crucial, particularly in helping farmers to produce healthy, sustainable food, at the same time as protecting valuable wildlife and restoring the health of our environment.

The NFFN supports over 2,000 farmers across the UK, who are all working around the clock to produce nutritious food while tackling the great threats of our time: climate change and nature's decline.

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Hosted by  **Game & Wildlife Conservation Trust**

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Farmer Cluster

Landscape-Scale Farmer Led Conservation Project & Groups



Starting a Farmer Cluster
Find out how you can form a farmer cluster.

[Read more »](#)

Working with

 **AGRICOLGY**
SUSTAINABLE PRACTICAL FARMING

 **Bumblebee Conservation Trust**

 **EnTrade**

 **Kent Wildlife Trust**

 **kings**

 **3keel LENS**

 **Living Record**
Online environmental recording

 **oakbank**
SUSTAINING THE FUTURE OF THE COUNTRY

 **people's trust for endangered species**

 **South Downs National Park Authority**

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Farming Cluster

Landscape Farmer Led Conservation Projects & Groups

- By **working together**, helped by an advisor or '**facilitator**', farmers and land managers can work more cohesively in their locality.

Enables them to

- Collectively delivers greater benefits for soil, water & wildlife at landscape scale.
- Designed at farmer level, under guidance of a lead farm and conservation advisor.
- Work often supplemented by existing agri-environment schemes.
- Several projects set up with private sources of funding
- Majority have applied for Natural England Facilitation Fund opened in 2015.

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Farming Cluster

Landscape Farmer Led Conservation Projects & Groups

- The Game & Wildlife Conservation Trust (GWCT) have been involved with the concept from the beginning
- Helped to establish farmer-led Marlborough Downs Nature Improvement Area project in 2012
- First pilots of 'farmer clusters' in partnership with NE in 2014.
- Range of other rural organisations & independent advisors, provide support & advice to help new & existing groups
- First Farmer Cluster Conference in 2017
- <https://www.farmerclusters.com>



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The Arun and Western Streams Catchment



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The Arun and Western Streams Catchment

- Covers 149,000 ha
- Chalk ridge of South Downs & sand & clay of the Weald & lies predominantly within SD. National Park.
- Two main rivers, Arun and Western Rother
- Arun from its source near Horsham runs south to Pulborough where it is joined by the Rother
- The now tidal Arun, continue flowing south, cutting through the chalk above Arundel, entering the sea at Littlehampton.
- Catchment includes the rivers flowing south from the Downs towards Chichester and the coast.
- Anglers are the largest group who use the river for recreation.
- Pollution or obstructions affect the welfare of the numerous varieties of fish that inhabit the rivers.
- Bird lovers are attracted to the ever-changing comings and goings that take place throughout the year.
- Small boats and canoes, better suited to the tidal Arun, need safe and agreed launching places.
- The catchment is vital for business, particularly for farmers. Dairy cows, beef animals and sheep.
- Rother valley & Chichester Plain are important for salad crops, potatoes, glasshouse production & horticulture.
- Over 400,000 people live in the catchment, all need clean water and sewage taken away
- Water companies are very important to the health of our rivers and their environment.

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ARUN TO ADUR FARMERS GROUP



Formed in 2015, the group is now made up of 31 members covering 10,896 hectares (approximately 26,000 acres) which is over 80% of the groups eligible area. Situated between the River Arun and River Adur, the group covers the nationally important chalk downland habitat between the two rivers and the river valley floodplains.



<https://youtu.be/uTdsUIZVrCk>

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ARUN TO ADUR
FARMERS GROUP



- Strong history of effective farmland conservation in the area.
- Evolving to become independently funded, to advance further with farmland conservation in the area, having been previously set up as part of the Countryside Stewardship Scheme's Facilitation Fund.
- Looking for external funding from private sources, to fund projects which will benefit local wildlife.
- Selected a range of high priority wildlife species for targeted conservation.
- Water Vole, the Duke of Burgundy Butterfly, Grey Partridge, Lapwing and Corn Bunting and rare arable flowers such as Cornflower.
- Dedication to biodiversity is providing results, the Duke of Burgundy Butterfly population increasing and expanding into Wiston and Steyning areas.
- Well managed farmland delivers high quality food, bio-energy, diverse wildlife, an inspiring landscape, clean water, the building of soil carbon, flood defences and conservation of archaeological features.
- Intend to increase the environmental and agricultural value of their farmland while increasing both the resilience and profitability of businesses.

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IMPROVING SOIL HEALTH



- Soil health is a high priority with members always keen to expand their knowledge.
- In 2017, a 5-year project was launched to study how different management techniques affect the various soil types within the area, looking at organic matter, nutrient availability and soil biodiversity.
- This project is being led by forward thinking agronomist Stephen Woodley and Southern Water, & hopes to produce comparable data which can be used by farmers and agronomists to improve soil health throughout the region.

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SOIL HEALTH PROJECT

- Aims to increase awareness & understanding of impact of soil health on water quality, particularly NO₃⁻ leaching to chalk aquifer.
- Many of members have taken up land management options developed with & funded by Southern Water aiming to reduce NO₃⁻ leaching.
- Reduced NO₃⁻ leaching into groundwater in 2019/20 by est. 13,500 kg of N.
- Approximately 13 tonnes less N entered groundwater in Worthing drinking water catchments in one year,
- Reduced carbon footprint by three quarters of a million kilos of carbon.

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ENGAGING WITH OUR LOCAL COMMUNITY

- Educate about importance of farming & farmland conservation.
- Holds an Open Farm Sunday in collaboration with external partners
- Partnership with South Downs National Park Authority, along with Eastern South Downs Farmers Group developed a 'Meet the Farmer' project.
- Along South Downs Way, small signs erected displaying QR / NFC codes.
- Visitors able to access an informative video of resident farmer explaining the importance of farming & conservation as well as showing some of the wildlife that can be seen while walking through their stretch of the National Trail.
- Project locally recognised, winning a gold award in 2020 CPRE Sussex awards.

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FUTURE TARGETS FOR THE GROUP

- Explore opportunities to work with local communities & businesses to ensure important habitats are well-managed & new habitats are created.
- Has number of projects ready & looking for external funding opportunities to complete.
- Intends to actively reduce their C footprint & offer projects to local communities & business to fund climate change mitigation.
- Using knowledge gained through Soil Health project, increase awareness of soil as a valued living eco-system, through continual learning, research & support.
- Work with Southern Water to protect community's drinking water, working to reduce N₂O-leaching to groundwater via efficient N applications, improved soil health & other land management options.
- Build stronger sense of a supportive farming community, knowledge sharing & working together at its core.
- Committed to training members on a variety of topics relating agriculture & conservation.

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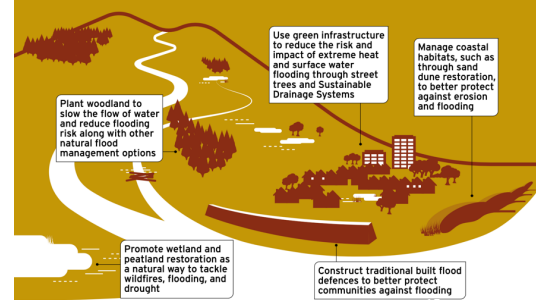
Environmental protection from 25 yr plan

- Bringing public, private and third sectors together to work with communities & individuals to reduce the risk of harm & drought
- Making sure decisions on land use, including development, reflect the level of current and future flood risk

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Goal 8 Reduced risk of harm from environmental hazards

Key policies to help us manage environmental hazards



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Potential organization stakeholders

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Integrated Scoping and delivery Initial Scoping of Assets

- Farm business / land area
- Available machinery – potential investment
- Succession planning
- Funding opportunities
- Site Plan to include – (digital mapping – geographic Information systems)
- Soil Type – Texture – Structure -
- Topography
- Natural habitats
- Water – stream – rivers – ponds – ghost ponds

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Potential organization to be involved

- Potential project partners: National Trust & Natural England
- Historic England for historic or sites of archaeological interest
- River trust
- RSPB
- Town Councils
- County Councils
- Local schools
- Universities



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Landscape Recovery

- *Scheme supports long-term, large-scale projects aiming to improve habitats, biodiversity, water quality and net zero.*
- For farmers & landowners - large-scale approaches to environmental
- Contact & climate action on their land through long-term projects that produce significant habitat
- **Settings**
- restoration and land use change.



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Landscape Recovery

First round of 22 projects announced 2022 with aims of

- Recover threatened native species & priority habitats
- Restore streams & rivers
- Provide other benefits such as contributing to net zero

They will receive support for finalising delivery plans & throughout the development and initial implementation phases.

Second round now open

- Will support 25 projects that target net zero, protected sites and habitat creation.
- The application deadline is Thursday 21 September 2023.



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Landscape Recovery



Who is eligible for Landscape Recovery

- All land managers & landowners are eligible to apply.
- Not restricted to farmers.
- Public bodies can apply where they are in a collaboration with private land managers.
- First LR round was open to any individuals or groups who wanted to come together to deliver large (500-5000ha) scale projects.
- Projects in round two will need to exceed 500ha.
- Land in an existing scheme can be included, although Defra will not pay for the same activity twice.



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What are the payment rates?



- As part of the process Defra will be looking at funding arrangements to ensure 'payment structures should provide a steady & reliable income stream for land managers'.
- Delivery agreements bespoke & negotiated during project development.
- Defra will benchmark payment rates against other government schemes to ensure payments offer value for money.
- Defra's indication payments in range of £200 to £900 per ha per year.
- These costs will be funded by a mixture of private & public funding.

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How will projects be developed?



- Defra are taking a staged approach to project development.
- Successful pilot projects go into development phase, could be up to two years, before moving on to project implementation.
- Defra will provide funding to support projects to prepare for delivery.
- Activities could include feasibility studies, local stakeholder engagement, obtaining consents, monitoring & evaluation plans.
- Applicants will need to develop a costed delivery plan.
- Process will involve development of be-spoke funding arrangements with Defra including negotiating payment rates and securing private funding.
- Not all projects will make it through to implementation.
- Defra will direct these projects to alternative funding.

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How long is an agreement?



- Agreement length will be be-spoke to the project.
- The expectation is they will be 20 years plus in length to deliver the environmental outcomes desired.
- Defra will look for long term safeguards to protect the land into the future, which could last beyond the length of the funding agreement
- e.g., conservation covenants or designations.

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Can land in an existing agri-environment scheme be included?



- Land in an existing scheme can be included, although Defra will not pay for the same activity twice.
- Defra will develop & test the process for exiting Higher Level Stewardship & Countryside Stewardship agreements early – without penalty – so they can enter Landscape Recovery.

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Will Defra accept multiple applicants for one project?

- Defra are expecting a single applicant for the project who can demonstrate sufficient management control, with agreement of participants, to deliver the project.
- Agent or project manager can apply on behalf of an applicant or group.
- Applicants will need to confirm they have the support of the landowners and tenants from the project area.



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How are pilot projects selected?

Defra & a panel of experts selected projects based on criteria including:

- feasibility & cost
- environmental benefits, carbon & climate resilience
- social impact & community engagement
- impact on food production

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Landscape Recovery 2022



- | | |
|--|--|
| <ul style="list-style-type: none"> • Adapting the Levels • Adur River Restoration project • Boothby Wildland project • Breckland Farmers Wildlife Network project • Darent Valley • East Dartmoor • Eelscapes: restoring the 7 Vale's wetland mosaics • Greater Frampton Vision Holnicote River Corridors • Killerton 3 Rivers Landscape Recovery project • Lake District Eastern Fells • Leven Carrs wetland project | <ul style="list-style-type: none"> • North East Cotswolds Farmer Cluster project • North Norfolk: Wilder, Wetter, Better for Nature • The Axe Landscape Partnership • The Enfield Chase Restoration project • The South Pennines Park – Nature's Holme LR • The Three Dales project • Upper Duddon LR • WaLOR (Waveney and Little Ouse Headwaters) project • Wareham Arc Wigan Greenheart |
|--|--|

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Landscape Recovery 2023 Round 2



- Focus on projects of at least 500 ha targeting net zero, protected sites & habitat creation.
- Apply now up until Friday 21st September at midday.
- Successful bids contacted by the end of November.
- Could include landscape scale projects creating and enhancing woodland, peatland, nature reserves and protected sites such as ancient woodlands, wetlands and salt marshes.
- Defra looking for **25** projects to take forward.
- Sites could be provided by any landowner or land manager, including individuals, organisations and collaborative groups.

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The Adur River Restoration Project



- Grant of £500,000 secured
- Support 27 farmers & land managers - part of the Adur Farming Cluster Group.
- Partnership between Horsham District Council & the Sussex Wildlife
- Supports development of plans to restore nature, reduce flood risks, improve water quality, & boost biodiversity.
- Support farmers & landowners to explore how new features & habitats can be created on their land, such as by removing embankments to allow flooding, & improve the health of the soil through regenerative farming techniques.
- Land managers contributing a portion of their landholding, mostly floodplains, to create a largely connected area of at least 766 ha of new habitat and river restoration, stretching from the Knepp estate to Shoreham, where the river meets the Sussex Bay restoration of the sea beds and kelp forests along the Sussex Coast
- Changes at this scale will require strong collaboration between all farmers and landowners involved in the project, and the organisations that are supporting it.
- There will be public engagement to explain the proposed changes to the communities that live and work in the area

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Integrated Scoping and delivery Initial Scoping of Assets

Individuals :

- Succession planning
- Skills analysis
- GAP analysis on skills
- Skills pipeline
- Opportunities
- Business Aspiration

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Integrated Scoping and delivery Initial Scoping of Assets

Organisations involved:

- LM Adviser
- Farmers & Land Managers
- Cluster groups
- Catchment Sensitive Officer
- NFU
- Natural England
- Historic England
- Local Authority
- Water Authorities
- ELMS – SFI – Nature Recovery – Landscape Recovery

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Integrated Scoping and delivery Motivation for Land Management



- Matching management options to the approach
- Audit the farm – topography – soil type – nutrients – habitat – hydrology
- Funding available Landscape Recovery – Capital Grants –
- Sustainability of farm
- Soil resilience

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Landscape – Scale Approach

- Implementation of on-farm conservation management impacts on a landscape scale for soil, water & wildlife management
- Audit biodiversity - gap analysis
- Look at neighbouring farms
- Area aspiration
- Soil Conditions

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Integrated Scoping and delivery Linking of habitats

- Benefits
- Wildlife corridors – Plant / Tree species – IPM potential
- Population of species
- Water – rivers – streams – water control
- Wetlands
- Marshes
- Scrapes

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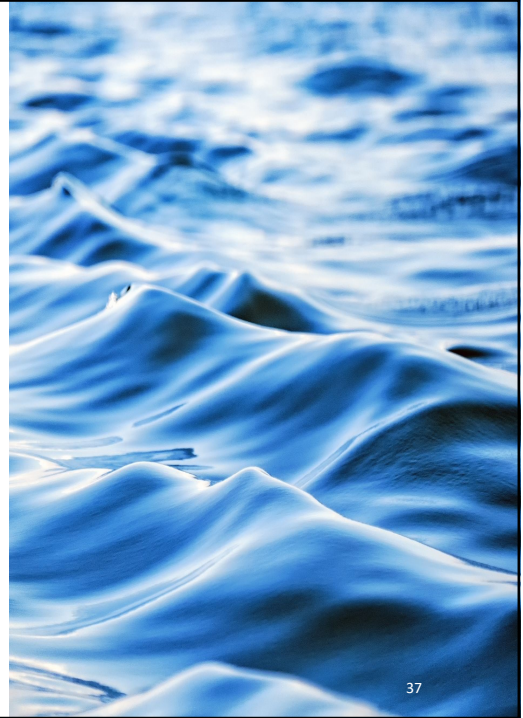
Integrated Scoping and delivery Catchment scale impact on water

Water quality:

- **Surface Water:** Biological & Chemical
(High – Good – Moderate – Poor – Bad)
- **Ground Water:**
Chemical & Quantitative

Pollution potential:

- Point Source
- Diffuse
- Air quality
- Nutrient management solution in drinking water



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Integrated Scoping and delivery Catchment scale impact on water



- Erosion
- Sediment
- Nutrient enrichment
- Air quality
- Ammonia loss – CO₂ – Nitrous oxide – Methane (livestock)
- Compaction
- Application method
- Nutrient source – Urea (New rules) Treated Urea – Ammonium nitrate
- Livestock – Efficiency of feed -
- Nutrient management solution in drinking water
- Neutrient Zero Nutality

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Integrated Scoping and delivery Catchment scale impact on water

- Nutrient management solution in drinking water
- Nitrate max 50mg/L
- Phosphate 0.1mg/L
- Nitrate by leeching – increase OM – match application to crop requirement – N source (Urea verses AN) Inhibitors
- P by soil erosion, bridges the soil particle – increase OM – reduce cultivations – crop type
- Direction of cultivation – cover crops

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Integrated Scoping and delivery Catchment scale impact on water

- Water quality – surface and ground water
- PPP application
- Individual a.s 0.1um/L
- Accumulative a.s. 0.5um/L
- Distance from water – 1m top of bank / 5m boom sprayer
- 50m from drinking water source – well – spring – borehole
- LERAP
- Buffer zones - distance

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Integrated Scoping and delivery Agri-environment Option and landscape scale initiatives

- Facilitation fund
- Working with NE, Local Catchment groups, Local Water Authority
- Cluster Groups – Farmer – Landowners – Local authority – RSPB –
- Chichester harbour conservancy -
- Large Scale Rewilding – linking farms – land - corridors
- Supporting landscape & catchment scale outcome – overview of catchments area – challenges and aspirations -

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Integrated Scoping and delivery Collaboration at Landscape Scale

- Farmers & land managers
- Common land
- Countryside Right of Way (CRoW) 2000
- National Parks 15 Parks
- Local South Down National Park
- Brecon Beacon (Bannau Brycheiniog)

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15 National Parks

England –

- Broads,
- Dartmoor,
- Exmoor,
- Lake District,
- New Forest,
- Northumberland,
- North York Moors,
- Peak District,
- South Downs
- Yorkshire Dales.

Wales –

- Brecon Beacons (Bannau Brycheiniog)
- Pembrokeshire Coast
- Snowdonia

Scotland –

- Cairngorms and Loch Lomond
- The Trossachs.



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HELP US TO #RENATURE

SOUTH DOWNS
NATIONAL PARK

- Centuries of human habitation shaped the National Park.
- Landscape has dictated where people have chosen to live & work land.
- Rich in folklore & legend has inspired generations of writers, artists & storytellers who have flocked to witness the beauty of the rolling chalk downland and the wooded heaths of the National Park.
- A place of worship for centuries, nurturing spiritual & emotional connection.
- Neolithic peoples, through to Roman occupation and beyond, a landscape steeped in the history of peoples who have called Britain their home.

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**Integrated
Scoping and
delivery
Priorities
balanced with
business**

Achieving:

- Biodiversity – Habitat & species
- Carbon capture - increase
- Water – clean unpolluted
- Reduce flooding
- Food Production – yield & quality
- Reducing waste -
- Increasing efficiency
- Productivity
- Educational
- Public accessibility

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