

Environment Land Management (ELM) scheme
BROADS TEST AND TRIAL

Full Report



October 2020

Broads Test and Trial – Full Report

This is the full report of the Broads Test and Trial to inform Defra’s development of the Environment Land Management (ELM) scheme. Supporting reports are available on the Broads Authority’s website at <https://www.broads-authority.gov.uk/looking-after/projects/environment-land-management-system>.

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1. Summary

Working in collaboration through the Broads Test & Trial of the Environment Land Management (ELM) scheme, partners have undertaken three main strands of work to engage with many farmers and land managers in the Broads and river valleys, including 77 through online surveys and 63 at a November 2019 workshop.

From partner and stakeholder feedback, we identified the following aspects for more detailed investigation in the Test & Trial:

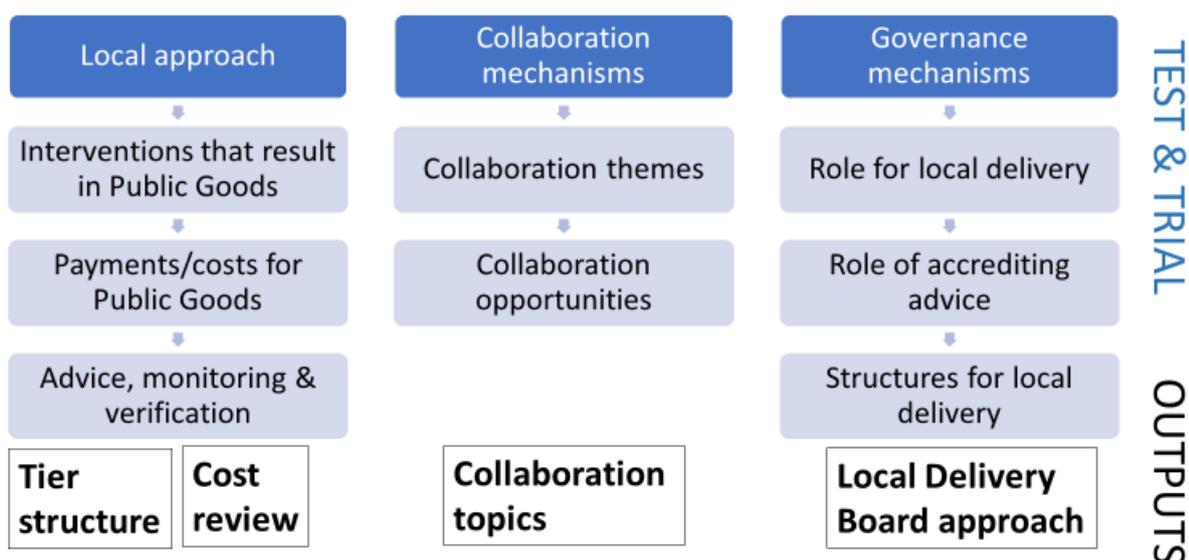
1. **A local approach to managing aspects of ELM scheme delivery.** The workshop participants supported a local approach for delivering priority outcomes in the Broads, with a focus on the management of grazing marsh and wetland habitats. We developed a Broads Tier Structure in response to a desire from the majority of workshop attendees and our Steering Group for a flexible, simple tiered scheme that incorporates the best bits from previous agri-environment schemes while addressing areas for improvement, including the ability to progress through tiers over time, highlighted in the workshop.
2. **Collaboration across farms.** An examination of the mechanisms that would encourage collaboration between farmers and land managers to deliver outcomes at a landscape scale.
3. **Local governance.** Examination of the potential for local governance mechanisms to oversee the provision of advice and the delivery of outcomes across the Broads and its river valleys linking with other strategic initiatives.

We explored these themes (see Figure 1) further through focus groups and one-to-one discussions in January to March 2020, and online surveys in June 2020. The outputs are the Broads Tier Structure (Annex 4), Grazing budgets – cost review (Annex 8), Collaboration topics and plan (Section 4.2.5.4), and recorded discussions around a Local Delivery Board (Section 4.2.1.1). Our key findings are set out below.

Figure 1

Summary diagram of main areas of work and outputs

Broads Test and Trial of ELM



Local approach

Local prioritisation

Our engagement with farmers and land managers in the Broads showed that they favour a map-based approach to prioritisation, using available information on water levels, land levels, species presence and other factors. Broads partner organisations can provide map-based local information including natural capital, carbon capture and breeding wader opportunity areas. These decision support tools can also help a Local Board as they look at opportunities and priorities.

Broads' farmers and land managers would like to prioritise opportunities for all to take part in a scheme to achieve landscape-scale coverage, and prefer continuity of management over the funding of new habitat creation. Important local priorities for land management include water quality and quantity, and habitat quality. Sustainable and low carbon management is also important, including harvesting of reed and sedge, together with the continuation of extensive grass-based livestock farms, which maintain the iconic landscapes and precious habitats of the Broads.

Broads Tier Structure

The Broads Tier Structure sets out the land management interventions and outcomes considered needed to deliver priority public goods in the Broads. It includes well-evidenced, essential interventions and novel suggestions for habitat creation that could support additional species, store water and capture carbon. The Steering Group recommends this structure for ELM scheme piloting by Defra.

The proposed Broads Tier Structure is simpler, less prescriptive, more flexible and more outcome-focused than previous agri-environment schemes. Applicants could use it to create a flexible Land Management Plan for their holding and progress through the tiers if they wish. The local elements of the Broads Tiers are intended to integrate with the national ELM scheme, so that Broads land managers can access funding to provide public goods on their wider holding, such as the clean water that is critical for the Broads' wetlands and grazing marshes.

Payments

We have produced costed grazing budgets that demonstrate that lowland livestock farmers delivering public goods through extensive grassland management would make a considerable financial loss without the Basic Payment Scheme (BPS). Our calculations suggest that annual payments between £633 to £1089 per hectare will be needed to match the current profitability of a high output grazing system.

Our consultees commented on the basis for payments, with many concerned about the practicality of using a 'payment-by-results' approach for Broads habitats, which can be complex and variable. However, most thought that land managers should achieve outcomes in return for ELM scheme payments.

Payments for investing in sustainable, low carbon management, such as capital grants to support specialist wetland management, appear to be essential to incentivise those land managers who undertake the work and achieve the outcomes, such as reed and sedge cutters.

Although reed and sedge cutters and graziers are critical to the delivery of outcomes in the Broads, they are often not tied into the payment which landowners receive, and they suffer from low incomes, threatening their future as land managers in the Broads. This lack of return from agri-environment schemes suggests that ELM scheme design should consider how to support these land managers so they can continue delivering public goods on behalf of the landowners/agreement holders.

Advice, monitoring and verification

Good advice is key to the delivery of good outcomes. Our discussions with farmers and land managers confirmed that they would expect the scheme to pay for and provide advice to applicants and for the lifetime of an agreement. This is important for the independence of such advice, and would favour environmental benefit over financial gain. It was considered that a scheme will deliver the greatest environmental benefits where it is initially co-designed with an adviser or project officer who is then able to make periodic pro-active management visits to ensure the scheme is delivering its full potential.

Strong support for self-monitoring was seen in our online survey, but less so in face to face discussions, where participants preferred monitoring to be carried out by a trusted and knowledgeable local adviser. We concluded that self-assessment is a useful tool to increase land manager understanding and achievement of outcomes, but most of our consultees had concerns about it being used for official monitoring and for the setting of payment rates. In addition, our fen self-assessment test found that results were subjective and thus create an issue for consistent monitoring of complex and variable habitats such as wetlands. If self-assessment is to be developed for ELM schemes, more work is needed to develop a simple and practical process that produces valid and reliable results. However, we acknowledge that our assessment focused on areas already achieving good outcomes and perhaps the differences between 'poor' and 'good' are relatively easy to see and monitor over a wider spectrum of conditions.

It is considered that advice, monitoring and verification should be done locally by people who understand the unique environment of the Broads, and who are well established in local patches. There was support for a 'Local Delivery Board' to have a role in the accreditation and training of advice providers. The Board could have a network of specialist advisers to draw on for specific advice to land managers (see Local Governance below).

It was felt that verification should be conducted by an independent person, and be separate to advice and monitoring. An independent environmental audit carried out by a qualified environmental professional would be more acceptable to land managers than an inspection by someone with little environmental knowledge.

Collaboration

During the Broads Test & Trial we have looked at mechanisms to encourage collaboration between farmers and land managers to deliver outcomes at a landscape scale. Farmers already collaborate as part of their farming businesses and are willing to collaborate more on environmental delivery. There was strong support for focusing on collaboration around environmental management topics and themes, not just on a geographical area.

Participants thought the greatest environmental gain in the Broads could be achieved from collaborating on predator control, specific species management tasks, water level management and the buffering of habitats. In addition, discussions and survey comments demonstrated a growing need to collaborate over water availability and the needs of both farming and nature.

There was agreement that collaboration should be supported by a short, written plan setting out objectives, funding and budget, action plans, timetables, monitoring, delivery milestones and outcomes. Funding for collaboration should be additional to tier payments and linked to the delivery of a collaboration plan, but how payments are developed to encourage collaboration and reward co-operative delivery was not universally agreed upon. Splitting of payments into two parts, with one for annual management tasks and collaboration activities and a further payment in the future following monitoring and delivery of objectives, is one solution worthy of further testing.

Linking knowledge exchange sessions to a number of the more complex management options was broadly supported. A 'Nature Management Points' system could be developed, similar to other Continuing Professional Development (CPD) systems.

Local governance

We heard a range of views on the potential for local governance mechanisms to oversee the delivery of outcomes across the Broads geographic area.

We discussed the idea of a Land Management Board to support people collaborating across the Broads to achieve environmental improvements. However, the need for a Board is unclear to many survey respondents and its role, membership and operation requires further discussion, as well as shaping by the members. It was agreed that any Broads Land Management Board should include farmers, land managers, conservation organisations and advisers, and that independence was important.

Main recommendations for future work

The Broads Steering Group supports the further co-delivery of ELM scheme development with Defra:

- A Broads pilot using the locally developed Broads Tier Structure
- Assess costs for fen management to inform Defra's and Natural England's payment evidence base
- Develop proposals for the better support of reed and sedge cutters and graziers
- To provide a well-resourced, local and trusted project officer-based advice provision for the initial and on-going support of applications and agreements, with a mechanism to make ongoing alterations to a scheme to meet the desired objectives.
- To develop a co-ordinated private market place, alongside funding body provided advice, for advice provision that enables the supported co-design of a scheme, followed by ongoing pro-active management advice and a mechanism to make ongoing alterations to a scheme to meet the desired objectives. Mechanisms need to be developed for this advice to dovetail with local advisers provided by the funding body.
- Further develop payment mechanisms for collaborative working to include the concept of splitting collaboration payments into two elements with the payment of one element held until the delivery of longer-term objectives.
- Self-assessment of outcomes for wetland habitats
- Initiate national-level discussions on the following topics which can impact on the delivery of ELM scheme objectives in the Broads and elsewhere:
 - Sustainable use of water resources for farming and nature conservation
 - Expand sustainable wetland crops, such as thatching reed to develop green growth
 - Sustainable wildfowling
 - Predator control

The Broads Steering Group welcomes extending the Broads Test and Trial, with Defra, to do the following:

- Explore how a local Land Management Board could play a role in prioritisation, coordinated advice provision, monitoring and verification, and collaboration
- Develop collaboration plans
- Develop the concept of knowledge exchange sessions as a requirement for specific options, such as breeding waders
- Develop a 'Nature Management Points' scheme to increase the environmental management skills of scheme participants and their advisers
- Develop a Broads pilot building on the above and using the locally developed Broads Tier Structure

2. Introduction

2.1 Defra proposals for an Environmental Land Management scheme to follow exit of the United Kingdom from the European Union

In February 2018, the Department of Environment, Food and Rural Affairs (Defra) published a consultation document entitled 'Health and Harmony: the future for food, farming and the environment in a Green Brexit'. This document set out a range of possible measures to be put in place in support of farming and the environment following the United Kingdom's exit from the European Union (Brexit). The Government's ambition for farming and the environment is:

"Leaving the European Union and the CAP will give us the opportunity for fundamental reform. We want a more dynamic, more self-reliant agriculture industry as we continue to compete internationally, supplying products of the highest standards to the domestic market and increasing exports. But, alongside this, we want a reformed agricultural and land management policy to deliver a better and richer environment in England.

We will incentivise methods of farming that create new habitats for wildlife, increase biodiversity, reduce flood risk, better mitigate climate change and improve air quality by reducing agricultural emissions. We will achieve this by ensuring that public money is spent on public goods, such as restoring peat bog and measures which sequester carbon from the atmosphere; protecting dry stone walls and other iconic aspects of our heritage; and reducing disease through new initiatives that better monitor animal health and welfare."

2.2 A new Environmental Land Management (ELM) scheme

A key part of delivering the Government's ambition is provided in a proposal for a new land management system, where public money is paid for the provision of public benefits. The Environmental Land Management (ELM) scheme is focused on the delivery of measures set out in the Government's 25 Year Environment Plan, published in 2012.

The ELM scheme will be underpinned by natural capital principles, so that the public benefits the natural environment provides for people and wildlife are properly valued and used to inform decisions on future land management. The new system aims to deliver goods and services such as better air, water and soil quality; increased biodiversity; climate change mitigation and adaptation; and cultural services that improve people's mental and physical well-being, while also protecting the historic environment.

2.3 The ELM scheme 'test & trial' process

In developing the ELM scheme, the Government intends to learn from past schemes, consult with stakeholders on scheme design, and undertake pilots in preparation for the introduction of the new scheme. This is being done through a series of ELM scheme 'tests and trials', which seek to explore various aspects of the scheme, with a high level of engagement with farmers, land managers and other stakeholders.

2.4 Broads objectives

An application for a Test & Trial in the Broads was submitted to Defra in July 2019 by the Broads Authority, working with the National Farmers Union (NFU), Natural England and Norfolk Farming and Wildlife Advisory Group (FWAG).

Defra accepted the proposal and delivery started in October 2019. (This followed the Authority's earlier submission, supported by the NFU, of a proposal for a pilot Agri-Environment Scheme in the Broads in March 2018). The Broads Test & Trial has five main objectives:

Objective 1. Confirm relevant public goods for the Broads and those that are a priority.

Objective 2. Identify the appropriate management interventions that deliver priority public goods and explore the basis of payments that would be most effective.

Objective 3. Identify how the interventions will be monitored, recorded and verified.

Objective 4. Identify the expert support structures needed locally to make this happen, including assessing how advice could be accredited and testing the concept of a local management board to provide advice and oversight.

Objective 5. Public goods at a landscape scale. Identify the interventions that need to be made across multiple holdings and how this can be encouraged and supported.

These five Broads objectives fit into Defra's thematic priorities of:

- Spatial prioritisation (Broads objective 1 and 2)
- Payments (Broads objective 2)
- Land management plans (Broads objective 3)
- Collaboration (Broads objective 4 and 5).

3. Methodology

3.1 November workshop

The Broads Test & Trial began with a workshop on 13 November 2019, attended by more than 60 local farmers and land managers. The aim was to initially explore the following Defra-approved test questions:

1. What should the land management interventions and monitoring and verification be to deliver 'basic, better and best' public goods for grazing marshes and fens/reedbeds and what are the costs for managing these habitats?
2. What coordinated advice will be required to develop and implement schemes? Is there a role for a local management board and how would that operate?
3. How can working across multiple holdings / landscape scale projects be incentivised to maximise delivery of public goods?

The groups were asked the following questions:

- Reflecting on previous agri-environment (AE) schemes: What worked well? What could be improved?
- What is required to deliver good outcomes in the Broads?
 - a) How do we ensure that those who do the active management are adequately rewarded, e.g. reed/sedge cutters and graziers?
 - b) How can we encourage farmers and land managers to work together to achieve good outcomes across the landscape / river catchments?
 - c) What sort of advice is required to achieve these good outcomes?

Prompts:

Who should pay for advice provision?

Should advice providers for the new scheme be accredited and how could this work?

d) Is it important to prioritise different outcomes locally? If yes, who should do this and how could it work?

The recording of the discussion captured the words as they were spoken, forming the basis for the report available on the Broads Authority's website at <https://www.broads-authority.gov.uk/looking-after/projects/environment-land-management-system>. The workshop outputs informed the subsequent development of the Broads Test & Trial.

3.2 Focus groups and one-to-one discussions

From the feedback at the November workshop, we identified the following aspects for more detailed investigation during the Test & Trial:

- **A locally-derived approach to the delivery of priority outcomes in the Broads**, with a particular focus on the management of grazing marsh and wetland habitats. This has taken the form of a set of Broads Tiers in response to a desire from the majority of workshop attendees for a flexible, tiered scheme, as well as advice from our steering group not to 'reinvent the wheel'. The resulting Tier Structure is designed to incorporate the best bits from previous AE schemes, while addressing the areas for improvement identified in the November workshop. Advice provision, monitoring and verification and payment rates are explored as part of this work area.
- **A further examination of mechanisms that would encourage collaboration** between farmers and land managers to deliver outcomes at a landscape scale.
- **Examination of the potential for local governance mechanisms** to oversee the delivery of outcomes across the Broads geographic area.

The Test & Trial Steering Group indicated that they wanted the Natural England contractor to produce an initial draft of the Broads Tier Structure. We then put the draft to selected land managers in small focus groups or via one-to-one discussions, where we asked for suggested changes and refinement. We also discussed payments, advice, monitoring and verification and, if time allowed, the consultee's thoughts on collaboration, prioritisation and a local delivery board. Annex 1 shows some of the questions posed during these meetings; these were tailored to the groups, and evolved throughout the process.

The Broads Tier Structure was refined as we went along, taking on board the suggestions of our consultees. We were due to present this to a wider group of land managers in two geographically-targeted workshops in spring 2020, but these had to be replaced by online surveys due to Covid-19.

3.3 The online surveys and follow-up work

We developed two online surveys covering the work areas delivered by two separate contractors:

- Survey 1 - Collaboration, landscape-scale delivery and local delivery structures (Norfolk FWAG)
- Survey 2 - Interventions, payments, advice, monitoring and verification (Natural England)

These were accompanied by narrated PowerPoint presentations. The questions asked are at Annex 2.

We used the comments from the survey participants to make further changes to the Broads Tier Structure. The latest version is at Annex 4. It should be regarded as a work in progress, as some aspects may need further investigation and discussion.

We also used the comments made by the focus groups and survey participants to:

- further develop some suggested terms of reference for a Broads Land Management Delivery Board,
- refine the contents of a Collaboration Plan, and
- explore appropriate mechanisms to pay for effective collaboration.

3.4 Fen outcomes self-assessment test

As part of our work on monitoring and verification, we carried out a simple practical exercise to test the self-assessment of fen outcomes. 10 participants, all of whom own or manage fens and reedbeds in the Broads but have differing levels of ecological knowledge, were asked to complete two exercises:

- Exercise A: assessing % cover of scrub in two areas of fen using aerial photos;
- Exercise B: assessing fen outcomes in the field, by completing a survey form at 5 fixed sample points.

The full methodology for the fen outcomes self-assessment test can be found in the report at Annex 5.

3.5 Testing payment rates for grazing marsh management

We want the Broads Test and Trial to demonstrate how much it costs to manage grazing marsh and river valley grassland extensively to produce public goods and meet the objectives in the 25-year Environment Plan. One of our Steering Group farmers produced a ‘grazing budget’ using figures from the John Nix Farm Management Pocketbook 2018 that details the income land managers forego and the costs they incur in managing their wet grassland habitats for environmental benefit. This was developed further by the contractor, incorporating locally-specific management costs provided by the RSPB. The resulting spreadsheet gives an indication of the level of payment required to compensate for the extensive management of grassland habitats in the Broads, as detailed in the Broads Tier Structure.

We shared the resulting spreadsheet with 12 farmers and land managers. We asked them to tell us if the grazing budgets ring true for their enterprises, and if they give a realistic indication of the level of change between various options or management scenarios. If their costs were markedly different, we encouraged them to edit the cells in order to produce a range of possible payment rates for different livestock enterprises.

We would have liked to carry out the same exercise for fen and reedbed habitats but time and budget did not allow it. The Broads Authority is working with Defra and hopes to provide up to date costs for managing these habitats if a budget is made available.

Table 1

Data summary

Data collection method	Date	Frequency of data collection	Est. hours of interaction time with all participants	Limitations
Delivery Group	Throughout	More than 10	100 (within Delivery Group only)	Membership combines farmer adviser and policy perspectives along with associated academic input. Requires good contact with members of the Steering Group to check key decisions.
Steering Group	Throughout	More than 5	190	Good balance of farmer and land manager interests represented and membership revised following review of interest’s represented.

Workshop	November 2019	Once	315	Good discussions with farmers and land managers. Workshops provide an optimal form of both communication and data gathering, so disappointing that covid-19 restrictions meant we could not do further workshops.
Online survey and narrated powerpoint	June 2020		86	Took significant additional time to prepare and assess, requiring new skills to be learnt. Farmer response rate was good and responses indicated that some of the information presented was new. Respondents don't gain immediate feedback or interaction.
One to one meetings with farmers and land managers Farmer or sector focus group meetings	December 2019 – March 2020	2	15	One to one meetings provide a very good form of both communication and data gathering, although require more resourcing than workshops. They can lead to greater insights and more candid views being shared. Sector focus group meetings provide a very good form of both communication and data gathering, although require more resourcing than workshops. They can lead to greater insights.
Fen outcomes self-assessment test	March 2020	Once	20	Sector focus group meetings in the field and focused on a common task can result in profound learning that is valuable in the long term. This needs to be repeated with key people to provide shared experience.
Testing payment rates for grazing marsh management	March to August 2020	More than 5	10	Figures used were gathered from existing sources and reviewed with peer group. There was no evidence that people were concerned about challenging other farmers figures.

4. Results and discussion

4.1 Demographics

4.1.1 November Workshop

63 people attended. The majority were farmers or farm managers (44%, or 28 participants), 9% were from conservation organisations, and the remainder were farm advisers, contractors, reed and sedge cutters and water company representatives.

4.1.2 Focus group and 1:1 discussion - participants

We carried out 8 focus group discussions and a one to one meeting, including workshops with the Broads Reed and Sedge Cutters Association (BRASCA) and the British Reed Growers Association (BRGA). This gave us detailed feedback from a total of 22 farmers or land managers, 6 reed growers (also land managers), 7 reed and sedge cutters, 2 agents, 1 adviser and 1 ecologist.

4.1.3 Survey 1 Collaboration, landscape-scale delivery and local delivery structures - participants

77 people took part in survey 1, with 65 answering all of the questions posed. Of these, 59% were farmers or farm managers. 12% were from conservation organisations, and the remainder were comprised of advisers, contractors, and 'other' (these included a nature reserve manager, a consultant, a reed and sedge cutter and a water company representative).

A broad range of sectors and farm sizes was represented, as shown in Annex 2. There was a large proportion of mixed farmers with arable and beef enterprises as is quite typical of the Broads. Farm sizes varied, but the majority were between 100-400ha. Tenant farmers were well represented with 28% of those who answered the question farming some or all of their land under a tenancy.

There was a very good level of experience of agri-environment schemes (Figure 2) and in the habitats under management (Figure 3).

Figure 2

Answers to survey question 'Which of the following agri-environment schemes have you been involved in?'

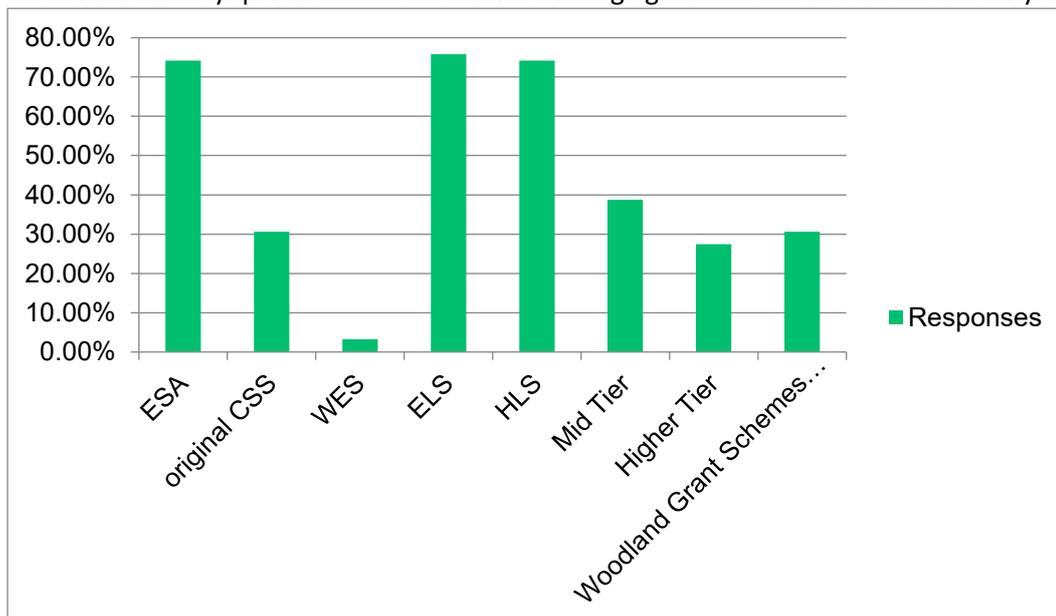
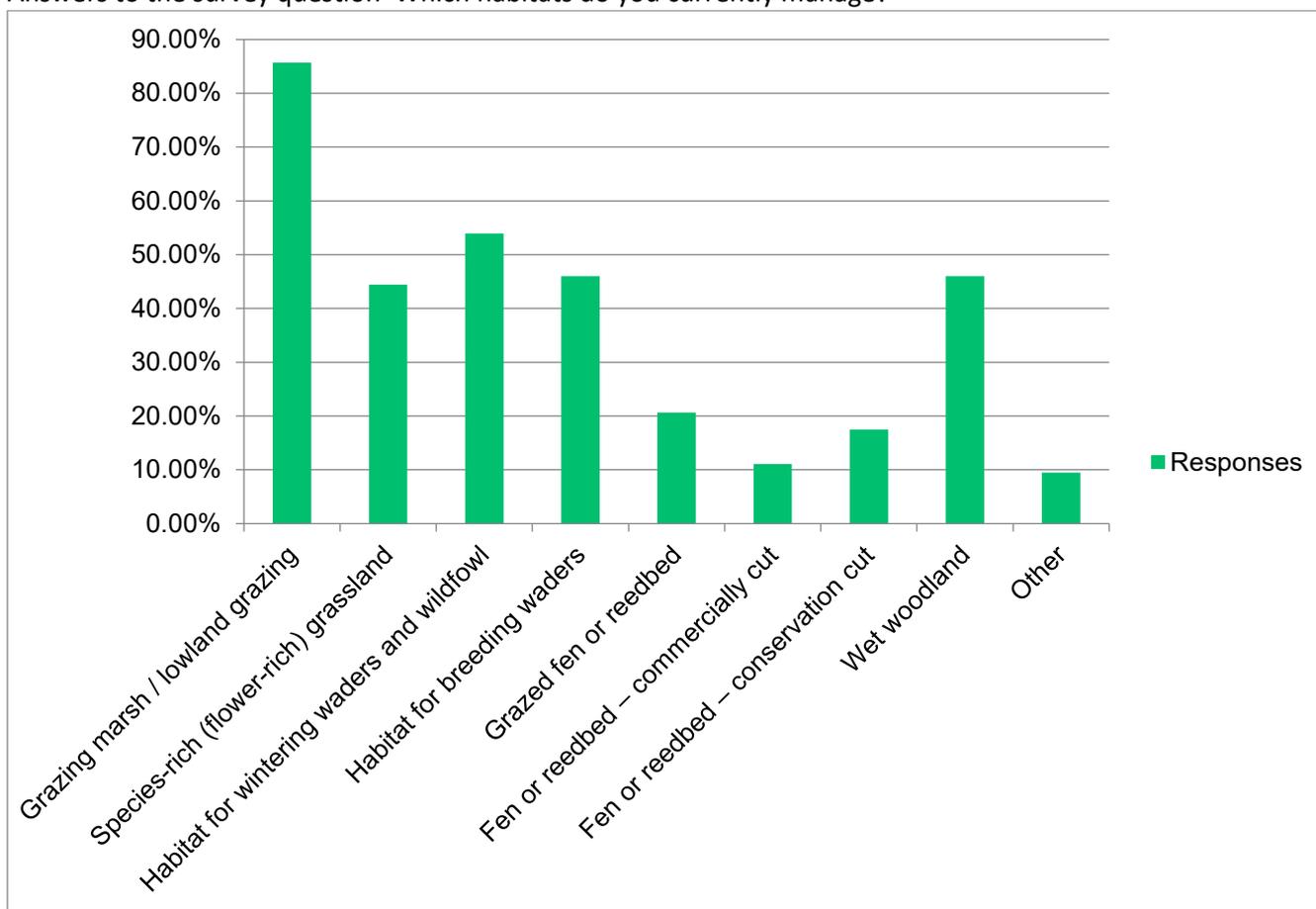


Figure 3

Answers to the survey question 'Which habitats do you currently manage?'



4.1.4 Survey 2: Interventions, payments, monitoring and verification – participants

46 people started survey 2, but 13 of these stopped answering questions after giving their baseline information. 40 provided details of their businesses. Of these, 59% (24 people) were farmers or farm managers, 15% (6) were from conservation organisations, and the remainder were advisers, contractors and 'other' (these included a nature reserve manager, a consultant, a reed and sedge cutter and a water company representative).

A broad range of sectors and farm sizes was represented, as shown at Annex 2. Of those who completed the survey, over half of the farms represented were mixed (13). Dairy was the only sector not represented (dairy farms are rare in the Broads). Our respondents included 4 conservation organisations, 4 tenant farmers, 5 graziers and 4 reed and sedge cutters (2 from conservation organisations and 2 commercial cutters).

As per survey 1, our respondents have experience of the full range of previous AE schemes. Over 70% (26) currently have a live agreement. 15 are in Environmental Stewardship (ELS/HLS) and 11 are in Countryside Stewardship (3 Higher Tier, 8 Mid Tier). The profile of habitat management experience was very similar to survey 1.

4.2 Test and Trial findings

Our findings are set out against the 5 objectives of the Broads Test and Trial, with specific test questions shown under points a. b. etc. Defra's thematic priorities are shown in the box under each objective.

4.2.1 Objective 1: What mechanisms will scheme participants use to select, plan and record the public goods they will deliver?

From Defra Thematic priorities: SPATIAL PRIORITISATION

- What mechanisms are available to set and agree local priorities?
- What are the benefits and issues associated with the different approaches?
- How often should local priorities be reviewed?
- How do local priorities work within a national framework of public goods?
- How do local partners determine local priorities using existing data and information?
- How can we utilise existing plans or platforms to identify and agree local priorities and how can new partnerships come together to agree priorities for an area where no holistic plans currently exist?
- What are the different spatial scales at which prioritisation might be delivered?

a. Is there a role for local prioritisation of public goods?

The November workshop identified strong support for a locally designed scheme with objectives for the whole landscape. There is no doubt amongst participants that prioritisation of public goods should be done locally.

b. What mechanisms are available to set and agree these local priorities?

During the focus group and 1:1 discussion, we asked participants how we could prioritise different objectives if funding was limited. They found this question concerning, as it implies that the ELM scheme might not be adequately funded. We had strong feedback that the scheme **must be properly resourced** in order to deliver the range of public goods required locally and nationally.

When pressed, several groups suggested that we should prioritise getting as much land as possible into basic options first to achieve **landscape-scale coverage**, i.e. manage existing habitats before creating new ones – as long as the basic options aren't too basic. There was support for **continuity of management** – keeping people in agreement before bringing in new holdings.

Several groups favoured a **map-based approach to prioritisation**. This could involve mapping where the various options/tiers detailed in the Broads Tier Structure could/should go, based on water supply, Water Level Management Plans, land levels, species presence and other factors. Applications which deliver these objectives would be prioritised over those that don't. Many thought that a local delivery board (discussed in section 4.2.1.1) could lead on this. Land managers should be involved in this process to ensure that prioritisation decisions can be implemented practically. This should include the reed and sedge cutters, and other people who manage land on behalf of land owners.

The groups suggested a few things which should be favoured in any prioritisation exercise:

- Applications which contribute to good water quality (as this is critical for our Broads ecosystems)
- Quality of habitat (good ditches, rare species, etc)
- Collaborative groups
- Applications which link habitats to increase the scale of delivery.

The participants were not keen on a scoring-based approach, and certainly not one that is based on size of holding. Land ownership in the Broads is very piecemeal, particularly on the grazing marshes, with a large number of small land holdings below 100ha. These **smaller holdings often support rare species and habitats, and can deliver public goods with or without collaboration**.

Other comments on prioritisation included:

- Big nature reserves should not take all the funding (although there was acknowledgement that they do deliver outcomes);
- Whatever method is used for prioritisation, it is important to apply this consistently over the years and not move the goalposts;
- Prioritisation decisions should be impartial;
- If funding were tight, reduce payments rates for all instead of reducing outcomes (akin to financial discipline for BPS);
- Attract alternative funding for expensive creation projects (tourist levy, carbon credits, Net Gain).

c. How do local priorities work within a national framework for the delivery of public goods?

4.2.1.1 The Role of a Land Management Board in Local Prioritisation

In Survey 1 we explored the concept of a ‘local delivery board’. The idea of a board to **co-ordinate local delivery** had initially been identified by our wider stakeholder group. It was discussed in the November workshop with comments collated around the theme of governance. These included:

- “We need trust between scheme governance and deliverers (farmers)”
- We need a mechanism to regulate and undertake compliance monitoring paid for by more resource or re-direction”
- “Management of the scheme rather than scheme itself is a critical point. Must be more flexible to adapt to local conditions.”
- Is there a role for a local management board and how would that operate?”

A further detailed suggestion put forward at the workshop was that a governance board could provide an online forum (for local participation) with webinars, administrative support for advisers and different advice and communication channels.

In the online survey we set out a range of roles and tasks that a local delivery board could undertake and asked the respondents to rank them in order of importance.

The results were that **setting local scheme priorities** is one of the most important aspects that a local delivery group could undertake, along with **creating locally specific delivery guidance** and **local monitoring of agreements**.

Table 2.

Roles and tasks of the Local Management Board

Roles and tasks	Percentage
Create locally specific delivery guidance	91%
Set local scheme priorities	91%
Provide monitoring of agreement outcomes	89%
Support & provide training for local advisers	84%
Support & provide training for landowners	84%
Set local budgets	82%
Accredit local advisers	80%
Source specialist advice	80%
Support ‘bolder/special’ projects	79%

Provide evidence of success and case studies	77%
Approve applications	73%
Other	71%

The local delivery board could be the mechanism for **setting and agreeing priorities** and was generally supported by the respondents, although there were concerns over lack of understanding of the purpose of a board, bureaucracy, the make-up of the board, that it would need funding and that it would need to be led by a neutral person or body. There was also support for a board to be a **decision-making group** with 82% saying it should set local budgets and 73% of respondents answering that the board should ‘approve’ applications.

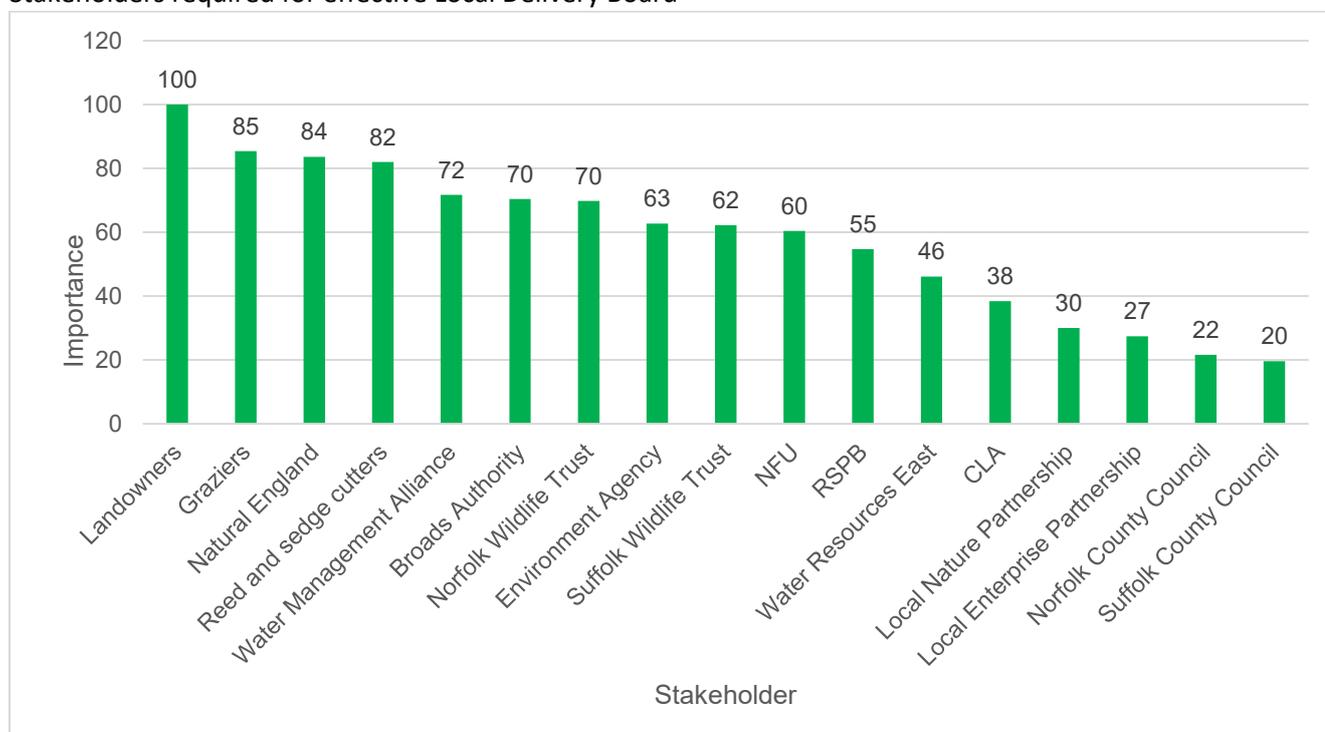
A number of other comments were also received from the small group discussions and included comments that a local delivery board should provide **local ownership and direction, ensure local farming viability and sustainability**. There were comments that it should be able to vary payments locally to meet certain criteria and outcomes and set and vary local rates i.e. the price for a reed bundle.

We consider that the role of a Local Delivery Board should be tested further to consider the practical roles that it could deliver and scope out exactly what role it needs to fulfil. It could, for example, do any one of the following overarching roles or all of them;

- Make decisions on financial matters, based on local prioritisation.
- Make recommendations to the decision-making body, based on local prioritisation.
- Coordinate the provision of knowledge exchange, for example advice and training, based on local prioritisation.

We presented a range of stakeholders that could make-up a Local Delivery Board and would be required to make it effective. We asked respondents to rank these in order of importance.

Figure 4
Stakeholders required for effective Local Delivery Board



It is clear that the presence of landowners, graziers and sedge and reed cutters are seen as essential to the functioning of such a group. This was not tested for different local board roles and responsibilities. It was left up to

the imagination of the participant to set the role of the local board. Therefore, the importance of different organisations on the group may vary under different roles of the board. The theme of **water management** is also of high importance with the Water Management Alliance (a group of 6 Internal Drainage Boards) seen as important by 72% of respondents. The continued role of Natural England as an adviser/scheme administrator is also seen as important. Other organisations that provide advice and have significant land holdings in the Broads were also identified as being important such as Norfolk Wildlife Trust, the Broads Authority, Suffolk Wildlife Trust and the RSPB. The role that Local Nature Partnerships, Local Enterprise Partnerships and County Councils might play was seen of lesser importance. A number of other organisations were also suggested including; British Association for Shooting and Conservation (BASC), Farming and Wildlife Advice Group (FWAG), local council planning departments and local residents.

4.2.2 Objective 2: How will the new scheme deliver the outcomes within the 25-year Environment Plan?

Defra Thematic priorities: SPATIAL PRIORITISATION / PAYMENTS / INNOVATIVE DELIVERY MECHANISMS
o *What public funding pays for and on what basis*

a. What are the range of different mechanisms that could deliver these outcomes and what role could they play in the new scheme?

The Broads Tier Structure at Annex 4 sets out the mechanisms (or options / management interventions) which would be needed to achieve the outcomes of the 25-year Environment Plan on wet grassland and wetland in the Broads. This was drawn up using feedback from the November workshop, which identified the following key aspirations for land management interventions:

- Tiered approach with the ability to progress through tiers
- Flexibility
- Simplicity and options for all in order to achieve landscape-scale uptake
- More aspirational than the original Broads Environmentally Sensitive Area scheme (ESA)
- Scheme evolution

The Broads Tier Structure is a working document which evolved throughout the focus group and 1:1 discussions. There are some key principles and assumptions (the full list can be found on page 3 of the Tier Structure):

- Scheme design is focussed on the floodplain – **our core Broads habitats** – whilst recognising the **importance of the surrounding land** (we hope that this would be covered by the wider the ELM scheme offer).
- Applicants can choose from the options in the Broads scheme PLUS those in the wider ELM scheme offer.
- **Flexibility** to move up/down through the Tiers, and to add/remove supplements – during the lifetime of the agreement.
- The grazing marsh and river valley grassland option should be **accessible to all** who wish to provide a basic level of public goods on their floodplain grassland.
- **Move away from historical scheme requirements which don't achieve outcomes**, such as certain date restrictions.
- Applicants will need access to **trusted local advisers** who can help tailor the scheme to the holding.
- The application process should be **straight forward and easily completed**.

We envisage that most of the management interventions detailed in the Broads Tier Structure would fit within Defra's Tier 2 of the ELM scheme, and some may fit within Tier 3.

4.2.2.1 Feedback from the focus groups and one to one discussions

Eight out of the nine groups or individuals **agreed broadly with the Broads Tier Structure**, saying that it was a good start or on the right track. They liked the fact that it contains **something for everyone**, including basic level interventions to **prevent intensification** of land management. However, one group said that **payments for basic management should not be too high**, as this acts as a disincentive to ambition / progression, and another said that the scheme should not include options which require minimal effort.

At the other end of the spectrum, there was **support for the habitat creation elements** of the Broads Tier Structure. The reed and sedge cutters were particularly keen on creation of reedbeds, as this can provide multiple public goods and, if well-designed, produce reed which is easier to harvest.

One of the groups was less supportive of the Tier-based approach. They favoured a more **Land Management Plan**-based approach, and were supportive of **collaborative projects** where farmers decide what they want to do together. However, on seeing a revised version of the Broads Tier Structure which took on board some of their feedback, one of the farmers said that the basic suggested format was a good start. We envisage that applicants could **pick from the Broads Tiers to build a Land Management Plan** for their holding, so these approaches are not mutually exclusive.

One person said that the Broads Tier Structure looked **a bit complicated**, although there was general agreement in that group that it **can't be too simple** as the habitats we manage in the Broads are varied and sometimes complex.

The Broads Tier Structure is broadly similar to previous AE schemes. Where this point was raised, four out of five groups were happy with this approach. One group commented that the concept of tiers, options and supplements is **familiar and well understood**, and is not 'one size fits all'. They had few complaints about HLS saying that it is sometimes too prescriptive but generally works.

One group suggested that there should be a **separate scheme for SSSIs and adjacent land**, administered by Natural England, to allow a more detailed approach to be taken.

A few aspects of the Broads Tier Structure came up frequently in our discussions and comments on these are as follows:

Access to the wider the ELM scheme

The Broads Test and Trial is focussed on our core Broads habitats but it is vital that land managers are supported to carry out environmental management on their **wider holding**, including arable land. In particular, management to reduce run off and diffuse pollution, public and educational access and management of habitats not covered by the Broads Tier Structure should be included in the wider ELM scheme.

There were some novel suggestions for land outside the floodplain. These include options to support wetland species on arable land, such as feeding areas for Common Crane and sacrificial wheat for geese. Water storage and flood protection were also raised, as was the need to include land which facilitates the management of the core habitats. These would need to be added to the Broads Tier Structure if they are not accommodated in the wider the ELM scheme.

We had strong feedback that the ELM scheme / Future Farming policy also needs to address issues related to **water availability and the sustainable use of water**, and in particular, conflicts between water for agriculture (abstraction) and wildlife conservation (wetland habitats). This is beyond the scope of the Broads Test and Trial and really needs to be discussed in detail at a national and regional level, given its potential impact on land

management across the country. It does however highlight the importance of water management decisions to influence the ability to achieve local priorities.

Flexibility

Flexibility is key to any scheme, but particularly where habitats and land management practices are varied and complex, as is the case for Broads grazing marshes and wetlands. The following aspects of flexibility were raised by our consultees:

- Ability to refine the scheme as it evolves / as we learn from it;
- Allow businesses to adapt whilst in a scheme (“You can’t go green if you’re in the red”);
- Allow land managers to make changes to their options and management actions, and take out things that aren’t working;
- Flexibility to respond to seasonal variations / unforeseen events (known as derogations in previous AE schemes) – if we assume that there will be some form of ‘prescriptions’, rules or baseline requirements then derogations will still be needed;
- ‘Blanket derogations’ so that land managers can respond quickly in certain situations, e.g. droughts;
- A slick, locally-administered approach to derogations so these are issued in a timely manner;
- Allow land managers to upgrade within the Tiers;
- Tailored management is needed (not standard interventions/outcomes) to adapt to different circumstances (e.g. peat versus clay marshes).

Outcomes

Most of the groups were **supportive of the concept of outcomes**, and several commented that land managers should be expected to achieve outcomes in return for scheme payments. They suggested that information sharing, collaboration and competitiveness should help to achieve results, and that **outcomes must be achieved in order to move up through the Tiers. Good advice is key to achieving outcomes.**

One group was not supportive and said that outcomes were “artificial aspirations” as they said that nature will decide what outcomes you get. They had concerns about being penalised if outcomes aren’t achieved.

Prescriptions

We described land management actions as ‘interventions’ in the Broads Tier Structure to avoid the use of the word ‘prescription’. However, most of the groups were **not against the idea of prescriptions**. 5 groups said that some prescriptions or rules are needed. They said that farmers aren’t ecologists, so prescriptions, action plans or similar guidance may be needed to achieve outcomes. Concise prescriptions give a framework for management. **“Farmers like guidelines and structure”**.

Prescriptions should only be included where they help to **achieve outcomes**, and they need to be flexible enough to take account of **geographical and seasonal variations**.

Capital items

There is a lot of support for **capital items to facilitate the delivery of public goods**, particularly for bolder projects, such as habitat creation. The Broads Tier Structure (Annex 4) contains an extensive list of items which would be needed in the Broads.

There is strong support for **infrastructure grants** to support reed and sedge cutting, **machinery grants** for cutters and **training grants** to help bring people into the reed and sedge cutting industry. Capital grants to help **new**

entrants into land management (e.g. cattle crushes) were also suggested. These are all things which have not been funded by AE schemes in the past. Some may fit better in the Productivity Scheme than the ELM scheme.

The conservation land managers raised the need for **substantial funding for water management infrastructure**, such as pumps, to maintain water levels at a landscape scale. Defra / EA funding has helped with large water-related projects to date – continued funding will be essential to realise the **land use change and collaborative projects** which are envisaged for Tier 3 of the ELM scheme.

Agreement length

Participants gave feedback that **agreement length needs to be appropriate for the degree of change**. Several participants favoured 10 year agreements with a 5 year break clause (like HLS), and the ability to roll these on if they are working well. Agreements involving land use change may need to be longer. This also needs consideration if payments are based on outcomes, as some outcomes will take longer to achieve than others. **Flexibility will be essential for longer agreements**, in particular.

Scheme administration

Scheme administration is a **major concern** for many people. Comments include:

- Payment system MUST work.
- Pay 6 monthly or annually and stick to the schedule. Need certainty of payments. Don't let inspections hold this up. Fruit and Veg Regime – claim 80% up front during the year, with 20% paid after a check at the end of the year. The ELM scheme could pay 75%-80% by direct debit, with a final payment at the end of the year.
- Need simple paperwork.
- Stop re-mapping / re-measuring fields – agree on the size of fields at the outset and stick to it.
- RPA call centre is a nightmare – can't get answers to queries.
- "The RPA has a very poor reputation with most parties because of its lack of relevant expertise and its inability to respond to even the simplest questions. Its failure to pay present farm subsidies in a disciplined and timely way is putting stress on farm cash flows and would simply not be accepted in the commercial world".

Collaboration

Collaboration over certain elements of the Broads Tier Structure was **strongly supported** by the majority of our consultees. This is discussed in more detail at section 4.2.5. However, **collaboration should not be mandatory as not all outcomes require it**. Large estates, in particular, can achieve outcomes over a large area without collaborating.

Predator management

The majority of consultees agreed that **predator control/management** is needed to achieve outcomes for certain species, such as breeding waders and other ground-nesting birds. They said that this should be included in the interventions, and capital items may be needed to support it. There is a lot of potential for collaborative predator management across the landscape – this is discussed in detail at section 4.2.5. However, one group warned against explicitly mentioning predator control in the scheme requirements, saying that this would not be palatable to the general public, particularly in a scheme which is delivering public goods.

Wildfowling

One of the intended outcomes of the Broads Tier Structure is increased populations of wintering wildfowl. **Wildfowling** (shooting wildfowl) is a traditional pursuit in the Broads, and can be managed sustainably alongside conservation practices. The number of birds physically killed is rarely a concern, but wildfowling can cause excessive disturbance if the frequency of visits is too high. Wildfowling is hard to monitor and land managers often have limited control over it. Some consultees raised concerns that land managers receiving payments to encourage increased bird numbers and then allowing those birds to be shot doesn't 'sit right' in a public goods scheme. Some suggestions / comments included:

- There should be no wildfowling on land in the wet grassland option.
- Ok to allow some traditional wildfowling (not commercial shooting).
- Pay a supplement for no wildfowling?
- Need a baseline limit on wildfowling even if you have a supplement.
- Small farm shoots result in unpaid conservation work so shouldn't be excluded from the scheme.

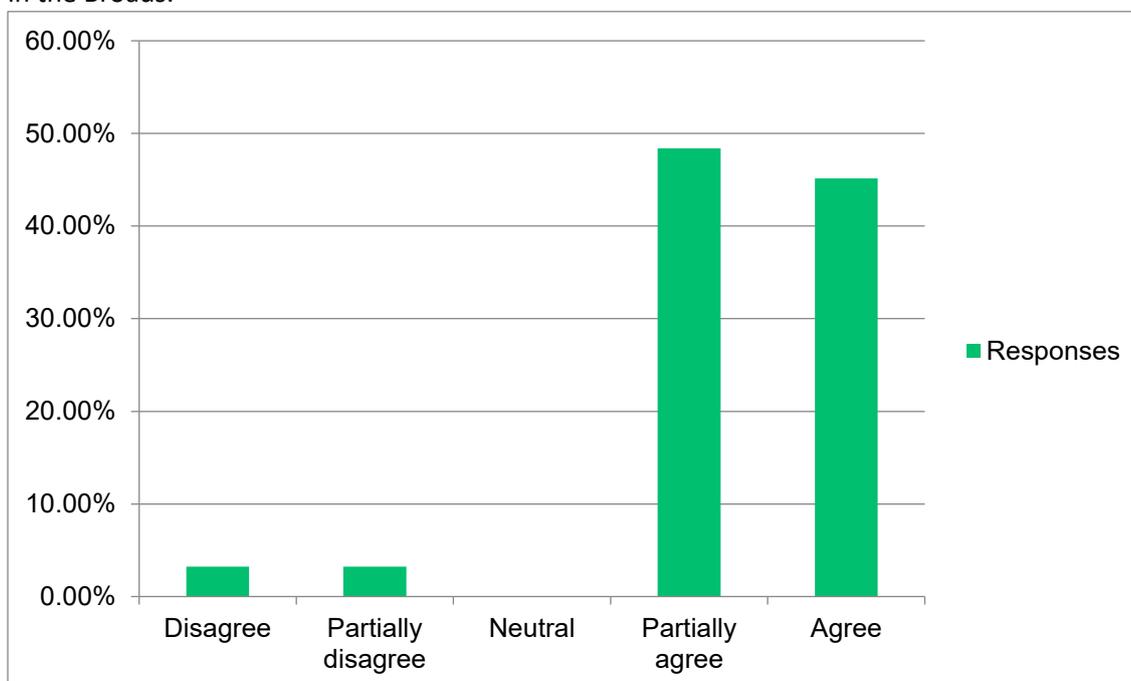
A **national level conversation** is needed to agree what constitutes 'sustainable' wildfowling, in terms of number of visits and disturbance effects, and how/whether this fits with the ELM scheme payments for public goods.

4.2.2.2 Feedback from the online survey

Respondents to the survey were similarly **supportive of the Broads Tier Structure**, with 94% (29 out of 31 respondents) giving a positive response to the question at Figure 5. This includes 4 out of the 5 people who answered this question who are not currently in an AE scheme.

Figure 5

Answer to the survey question 'Do you agree or disagree with the following statement? "The draft Tier Structure adequately captures the land management interventions needed to manage grassland, fen and reedbed habitats in the Broads."'



Some of the comments given include:

- The key is flexibility to be able to move up or down the tiers to find what is achievable.
- It captures the best bits from previous schemes. There should be something for everyone.

- This is a simple yet progressive tier structure which captures all the necessary requirements for environmental enhancement, and when linked to good advice will help farmers to achieve the required outcomes.
- It is essential that the Broads has its own scheme as it is a unique environment and is under threat.
- At last an attempt to revert back to a scheme that is specific to the Broads not only how it is farmed and/or managed to benefit wildlife to at least in part reflect the importance of protecting/enhancing the landscape.
- No mention of preference for low carbon and sustainable management [of reed and sedge beds].
- Beginning to be too complicated.

One person raised a concern that the options in the Broads Tier Structure have been available for many years through previous schemes, but **wading birds continue to decline**. This is a very valid concern which needs to be addressed, potentially through a combination of good advice, information sharing and collaboration, better monitoring and verification and a greater emphasis on outcomes.

84% (26 people) agreed or partially agreed that the options and interventions set out in the Broads Tier Structure would **provide priority public goods in the Broads**. In the comments, the importance of **water quality and quantity** was raised multiple times. This aspect may need to be strengthened in any future version of the Broads Tier Structure – perhaps by incorporating suitable management interventions on land outside the floodplain (this is already acknowledged in the Key Principles). The need for **adequate funding** to deliver the public goods was also raised, as was the importance of **advice** and “sufficient **assessment of outcomes** so that the new scheme is not just seen as a source of income”.

When asked which options they would consider applying for, the result was similarly positive. Only 2 people (7%) said they wouldn’t apply for any of the options, one because the respondent has no land of their own, and the other because the respondent doesn’t believe that the scheme will directly benefit graziers and reed cutters. There was a **good level of interest in all the options**, as shown at Table 3. 70% of people said they would apply for capital grants, confirming the importance of this to Broads land managers.

Over 30% of people said they would apply for arable reversion to grassland or special projects for habitat creation, indicating that the Broads Tier Structure has the **potential to increase the provision of public goods through land use change**, and potentially innovative, projects.

8 of the respondents who own or manage land are not currently in an AE scheme. Of these, 5 answered this question, with 3 saying that they would apply for one or more of the options in the Broads Tier Structure (including habitat creation in one case). The 2 that said they would not apply for any options were in this cohort – both are reed and sedge cutters, one of whom has no land of their own. This is a very small sample size, but it does suggest that there is potential for the Broads Tier Structure to bring new people into environmental land management (or bring people back into it). Further work may be needed with the reed and sedge cutters – this is discussed at sections 4.2.2.3 and 4.2.2.6.

Table 3

Answer to the survey question ‘Looking at the detailed descriptions in the draft Tier Structure, which option(s) would you be interested in applying for?’

Choices	Response %	Response no.
Grazing marsh and river valley grassland	76.67%	23
Supplement for enhanced management of grazing marsh and river valley grassland	70.00%	21
Wet grassland	70.00%	21
Breeding wader supplement (on wet grassland)	50.00%	15
Management of fens and reedbeds	40.00%	12
Wetland cutting supplement (on fens/reedbeds)	30.00%	9
Wetland grazing supplement (on fens/reedbeds)	30.00%	9

Conservation grazing or Difficult sites supplement	56.67%	17
Capital items	70.00%	21
Creation of grassland habitats (arable reversion)	36.67%	11
Special projects (including creation of fen / reedbed / wet woodland)	30.00%	9
None of the above	6.67%	2
	Answered	30

Some of the comments given include:

- A mixture of options would allow me to farm the land more efficiently;
- All of these are viable options for the range of habitats that we manage;
- I would love to do a big bold project but would need to have some sort of compensation to offset the reduction of grazing for my cattle;
- We could look at special projects that enhance some habitats, but need the detailed advice and guidance to achieve them;
- Think I would need capital grants to achieve higher tiers - need to know if these grants will be 100%;
- Capital items will always be vital, for example Broad dredging, dyke dredging, or scrub control.

Two people suggested that the Broads Tier Structure should include options for breeding waders on arable marshes, and one would like to see substantial payments for flooding grassland upstream of towns and cities.

65% of people said that the Broads Tier Structure would **allow them to manage their land differently**. The **less prescriptive** approach was mentioned twice. Those that disagreed said that this was because they were already managing their land extensively / using similar options. Other comments include:

- As a tenant with normal business outgoings either I have to farm intensively with increased stocking, fertiliser and all plant protection products, or intensively farm for conservation with reduced agricultural activity through extensification. The choice is yours.
- The ability to achieve highly local-specific land management goals has been one of the biggest issues with the current schemes. This sounds so much better/more logical.
- I think it will allow us to continue to manage and enhance the reserve as we have been for many years, but I can see how it would vastly benefit neighbouring land owners.
- I cannot see it will make any difference to reed and sedge cutting other than lining the pockets of those who do not do any management work.

b. Do the mechanisms (as set out in the Broads Tier Structure) work for all outcomes, sectors and geographies?

As shown in [Section 4.1] Demographics, a wide range of people from different sectors and farm sizes responded to the survey. Only 2 people (6%) disagreed with the statement “The draft Tier Structure adequately captures the land management interventions needed to manage grassland, fen and reedbed habitats in the Broads.” Of these, one suggested detailed changes to the Broads Tier Structure, but indicated that they would consider applying for most of the options available.

Participants in the focus group and one to one discussions were similarly representative of a range of sectors and farm/land holding types. Most were broadly supportive of the Broads Tier Structure, with the possible exception of one group of farmers who manage land in the Waveney valley (including the only dairy farmer we spoke to). The Broads Tier Structure mechanism **appears to work for the majority of farming sectors**, although further work may be needed to test it with farmers outside the ‘core Broads’.

4.2.2.3 Reed and Sedge Cutters

Only two of the survey respondents said they would not apply for any of the options; both were reed and sedge cutters. Concerns about the reed and sedge cutting industry were raised at the November workshop, and explored in detail in focus group discussions with BRASCA (the cutters) and the BRGA (the reed growers). A statement of the current issues and challenges facing the industry can be found at Annex 6. These include:

- At least 85% of the reed used for thatching in the UK is imported, including from as far afield as China (with associated high carbon footprint);
- Demand for Norfolk reed far exceeds production;
- There has been a **steady decline in commercial cutting**, especially sedge (used for the ridges of thatched buildings), over the past 5 years;
- The main reason for this is **low incomes** – cutters are turning to other work;
- Other challenges include site access to cut and remove the product, water flow / levels, restrictions on the timing of harvest and limited availability of reed cutting equipment;
- Cutters rarely have their own land and are not always paid enough by the landowners who receive AE payments (particularly where land agents administer these agreements);
- **Lack of monitoring / enforcement** results in some landowners claiming AE cutting payments but not undertaking the work;
- Some landowners choose to do conservation cutting (cutting and burning the arisings) instead of commercial harvesting;
- There is no emphasis on reed and sedge cutting as a **sustainable, low carbon** form of land management in current AE schemes;
- Fen and reedbed cutting (whether for commercial use or not) is critical to maintaining the habitat value of these wetland habitats – the cutters provide a **crucial service** for landowners in the Broads.

We have tried to address some of these concerns through the Broads Tier Structure, with flexible cutting dates, ditch management plans, an emphasis on the harvesting of reed and sedge where desirable and practical, and the requirement to involve commercial cutters in decisions on cutting and ditch management. We also acknowledge that work is needed to agree what constitutes ‘poor quality’ water for fens and reedbeds.

Other potential solutions relate primarily to payments, so this is explored further at section 4.2.2.6.

4.2.2.4 Graziers

Concerns were also raised about the pressures on livestock producers, particularly those who don’t own land. One of the graziers we spoke to indicated that they might pull out of livestock altogether, due to **low incomes**. Another is currently being paid less than the cost of production for beef, despite receiving a premium price. Some landowners currently allow their graziers to claim the BPS payments, which puts them in a precarious position with the removal of BPS. These farmers provide an **essential grazing service**, maintaining the wildlife value of the Broads grazing marshes and river valley grassland.

The potential solutions we discussed relate primarily to payments, so this is explored further at section 4.2.2.6.

These issues are compounded by **animal rescue charities** who pay well over the market value for grazing marshes for their horses, thus **pushing up rents** for graziers. We considered excluding horse grazing from the Broads Tier Structure, as it doesn’t tend to produce good outcomes for wildlife. However, this would preclude beneficial horse grazing, such as conservation grazing with native breed animals. This issue needs more thought if a Broads-based scheme is developed. Poorly managed and destructive horse grazing could be reduced by having an emphasis on outcomes, coupled with good monitoring and verification, but only if **payment rates are high enough to incentivise entry into the ELM scheme**. If renting grassland to animal rescue charities is a more profitable option then some land managers will choose that.

c. What payment mechanisms are most appropriate to incentivise these outcomes?

4.2.2.5 Outcome-based payments

Only one of the focus groups we spoke to was in favour of outcome-based payments (where increased outcome delivery results in higher payments) with **6 groups not in favour**. (This does not mean that they object to the concept of outcomes, as discussed below.) Concerns about ‘payment by results’ included:

- Complexity;
- Time frame for achieving outcomes may exceed the lifetime of the agreement;
- Land managers incur costs and reduced incomes whether outcomes are achieved or not;
- Not in control of certain outcomes, e.g. water levels managed by the Internal Drainage Board; what happens in a dry summer?

Despite not agreeing with payment by results, 4 groups agreed that land managers should be **expected to achieve outcomes** as a requirement of the ELM scheme payment. They said that payments should be withheld if outcomes aren’t achieved, but land managers should receive advice from a **trusted adviser** and be given a chance to improve their management before any action is taken. They also said that outcomes need to be **tailored to the holding**, using an ecological assessment to set realistic targets.

The strongest support for outcome-based payments came from one of the conservation organisations.. Some of our other consultees were supportive of **bonus payments for certain locally-tailored outcomes**, and some said that **collaboration payments could be outcome-based**.

A **mixture of payment mechanisms was strongly supported by the survey respondents**, as shown at Table 4. The respondents raised similar concerns about the need for cost recovery if outcomes are not achieved. They also warned that income-forgone + costs does not include an element of profit, and therefore will not motivate land managers to enter into a scheme which seeks to replace BPS. They may choose to intensify their farming operations instead.

Table 4

Answer to the survey question ‘Which method of payment rate calculation do you think would be most effective?’

<i>Answer Choices</i>	Responses	
<i>a) The cost of the management you carry out and the income you forego by being in the scheme</i>	12.90%	4
<i>b) Valuing the results or outcomes that you produce</i>	6.45%	2
<i>c) A combination of (a) and (b)</i>	74.19%	23
<i>d) Other method</i>	3.23%	1
	Answered	31

Other comments include:

- If you go the last mile to create better habitat that should be rewarded, it is a public good.
- a) has worked well in the past, but more checks are required to make sure land owners are completing work to the level required.
- I would like to see outcomes valued, however this would take much time and effort, as the same values cannot be applied to every piece of land.
- Despite the difficulties of payments based on results, without some form of evaluation there will always be some land managers who will minimise effort to maximise returns. If not directly measurable then at least an evaluation of the level of effort or commitment on the ground should be made.

- Reed bed management should be paid on improving water quality. Poor management= no payment. This would promote active management from landowners rather than sit back and collect payments.
- Need some recognition of basic interventions, which may provide limited public goods benefits, but for more involved, complex and developmental interventions aimed at achieving specific outcomes, recognition of success needs to be factored in.
- There are, at present, major differences with the payments, funding and tax exemptions made to different land owners who are achieving the same results - this needs to be addressed to encourage base farmers, tenants and smaller land owners to join the schemes.

Linked to outcome-based payments is the concept of self-assessment. This is explored under Objective 3, monitoring and verification, at section 4.2.3.

4.2.2.6 Payments for reed and sedge cutting, and grazing services

During the focus group discussions, it was acknowledged that some landowners support their reed and sedge cutters well, paying them to undertake other work, such as scrub clearance. This provides an income throughout the year and supports the cutters in years when the harvest is poor. We discussed whether a proportion of the AE scheme payment could/should be **paid directly to the cutters** (as is the case in the Netherlands). Most groups (including the cutters themselves) were **not in favour of this**, with some saying that landowners / land agents would simply charge a royalty for the reed/sedge to compensate.

Some of the cutters felt that the payment rate for commercial cutting should be higher than for conservation cutting, to incentivise this over conservation cutting. The reed growers and conservation organisations were not supportive of a differential rate. Arguments for and against are shown in Table 5.

Table 5

Comments for and against paying a higher rate for commercial reed and sedge cutting

For	Against
Incentivises a low carbon, sustainable form of management	Conservation cutting is important for certain rare species
Commercial cutting provides more public goods (sustainable product; cut reed filters water more effectively)	No difference in public goods provided by commercial or conservation cutting
	Too complicated and difficult to monitor
	Need flexibility to switch from one to the other in response to water levels, crop quality or other seasonal factors
	Commercial cutting should be cost neutral, as the crop is sold*.

**Most landowners currently allow the cutters to take the crop for free.*

The reed growers said that the scheme should **only pay for the area which is actually cut each year** (a change from current AE schemes which pay for the whole area in a cutting rotation).

The suggestion of a higher payment rate for '**restoration cutting**' (perhaps paid as a capital item) was universally supported by the cutters. This is a labour-intensive initial cut or cuts to restore a bed to commercial use over 2+ years' time. It requires an up-front investment of time and money, with no guarantee that the bed will produce a commercially viable product in future. Again, the reed growers were less supportive of this idea, feeling that landowners should pay the cutters for restoration cuts.

There was support from all parties for **capital grants** for infrastructure, machinery and training (as indicated at section 4.2.2.1 Capital Grants). This may be the simplest and most effective way to support the reed and sedge cutters.

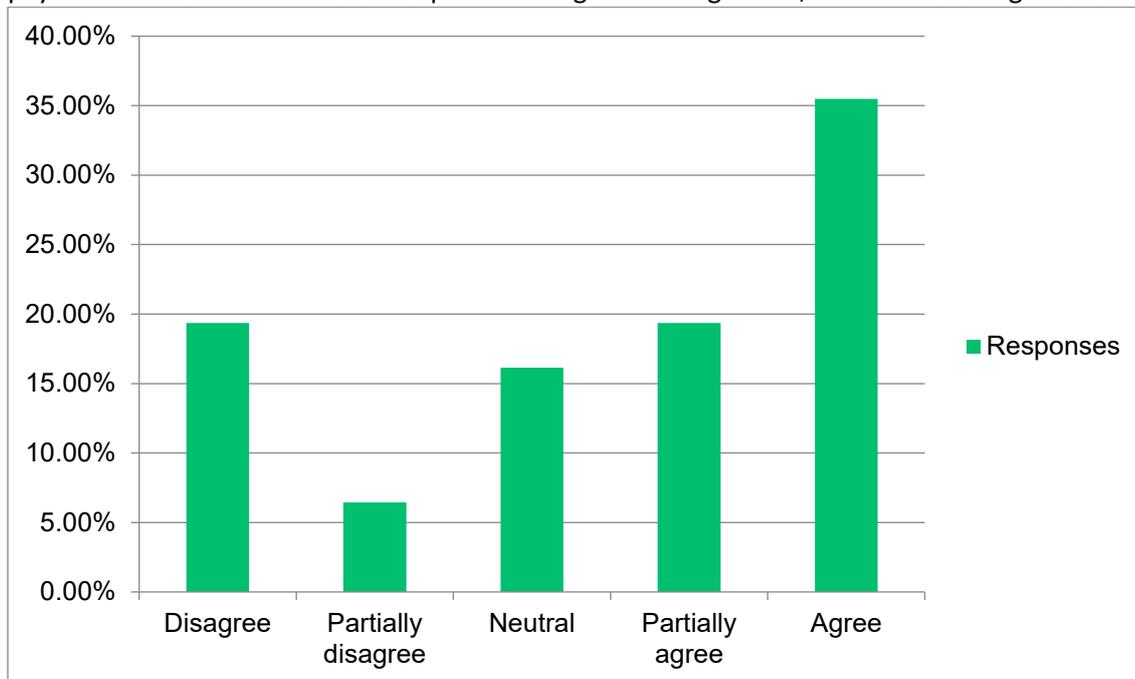
The graziers we spoke to suggested that **payments for grazing should go to the stock keeper**. The landowner may respond by increasing grass rents, but graziers have a choice whether to pay this or not. Option payments should be reduced if the landowner chooses not to graze the fields.

The majority of other groups we spoke to were **not in favour of direct payments to graziers**, as this would **distort the market**. They said that landowners should look after their graziers and charge a fair rent, and that the scheme should not get involved in the landowner-contractor relationship.

We tested the idea of direct payments to graziers and reed/sedge cutters in the online survey, as shown at Figure 6. Over 50% of the respondents (17 people) were positive about this, but we did not have the chance to discuss the pros and cons with these people.

Figure 6

Answer to the question 'Do you agree or disagree with the following statement. "Part of the land management payment should be directed to the person doing the management, for instance the grazier or reedcutter."



Five graziers answered this question; three gave a positive response and two a negative response. The response from cutters was similar, with two positive and two negative responses.

Comments included:

- The success of any improvement will be dependent on the person responsible for the management.
- I think it would be incredible to be able to provide some additional payments to the people actually doing the work, as well as the land owner who has agreed to be in the scheme. Many graziers or conservation contractors work tirelessly and deserve an additional financial incentive.
- Without graziers, it would be unmanageable. Current environments were created by graziers.

- Completely support this, however how this is done.
- The correct economic route is through the owner. No doubt reed cutters would like a subsidy but that would be wide open to manipulation.
- While I can see the benefits of this I can also see that this could cause issues where there is a disagreement between the grazier/reed cutter over who has contributed to both a successful or unsuccessful outcome.
- The landowner should be responsible - i.e. just one source is accountable. The landowner needs to build a relationship with the grazier by looking after him fairly.
- I feel that any payment to reed cutters should be for extra work, i.e. path cutting or fen restoration work as the reed cutting should pay for itself
- Recognition of appropriate management is needed especially if this involves a change from current management, which may take some time to adapt to. It would also help overcome some situations where for example graziers are driving water level management based on their presumption that dry grassland is better than wet, thereby limiting public goods, and within a wider landscape adversely affecting more integrated management of water levels.

Further work is needed to explore whether direct payments could work, and test mechanisms for this.

4.2.2.7 Payments need to be sufficient to underpin farm viability and extensive management of land in a post-BPS world

We received strong feedback from the November workshop and focus group discussions that **lowland livestock farming is not profitable without BPS** and that AE payment rates have dropped in real terms over the years. We produced a set of costed grazing budgets that demonstrate how much land managers would need to be paid for extensive grassland management (as set out in the Broads Tier Structure) for it to match the potential returns from a high output grass-based system. Table 6 summarises our findings. This covers two different livestock enterprises: a suckler cow unit where calves are sold as stores in the autumn (Farm X), and a suckler cow unit where calves are sold at maturity (Farm Y).

Table 6

Summary of outputs from the costed grazing budgets

Net margin or grazing payment	Farm type	Baseline, high-output system	Broads Landscape Tier - grazing marsh	Broads Habitat Tier – species-rich grassland	Broads Habitat Tier – grassland for wintering wildfowl	Broads Habitat Tier – grassland for breeding waders
Net margin before overheads (with BPS) ¹	Farm X	£ 666	£ 158	-£ 194	-£ 79	-£ 86
	Farm Y	£ 435	£ 32	-£ 225	-£ 127	-£ 134
Grazing payment required to match high output baseline (before removal of BPS)	Farm X		£ 508	£ 860	£ 745	£ 752
	Farm Y		£ 405	£ 660	£ 562	£ 569
Grazing payment required to match current high output baseline once BPS is removed ²	Farm X		£ 738	£ 1089	£ 975	£ 982
	Farm Y		£ 633	£ 890	£ 792	£ 799

¹Figures in red are negative values. All figures in the table are £/ha/year.

²This compares the extensive systems, post-BPS, with the intensive system in receipt of BPS, to demonstrate the level of payments required to maintain profitability at current levels.

The full grazing budgets can be found at Annex 8. They are not full income-forgone + costs calculations, but they follow similar principles. Business overheads are not included as they vary so much. The figures coming out of these calculations will vary considerably for different farms, so they should not be seen as accurate costings for the Broads as a whole. Instead, they give an indication of the **level of change** between the different management scenarios and a useful comparison with the **potential returns which land managers could achieve if they choose intensification** over the delivery of public goods through the ELM scheme.

With BPS, only the high output system and the Broads Landscape Tier grazing marsh would make a positive net margin in the absence of AE scheme payments. **Without BPS, none of the extensive Broads Tiers would be in profit.** This shows that **the ELM scheme payments will be vital to supporting continued extensive grassland management.**

Once BPS is removed, payments would need to be **at least £633 per hectare** for Broads Landscape Tier grazing marsh to achieve the same profitability as the current high output system, and payments may need to be **over £1000 per hectare** for the most extensively-managed scenario (wet species-rich grassland on peat soils). These scenarios under Countryside Stewardship would currently receive £90-95/ha (GS13 Management of Grassland for Target Species or GS2 Permanent Grassland with Very Low Inputs) and £309 (GS6 Management of Species-rich Grassland with SP2 Raised Water Level Supplement) respectively – see [CS grants](#) on GOV.UK for option details.

These figures assume normal market rents – if grazing rents are inflated by the animal rescue charities, or other factors, then Broads payments may need to be even higher to incentivise entry into the scheme.

We asked land managers to help verify these costs. The response was low, which could be because we weren't able to explain this detailed work in face to face meetings. Nevertheless, we did receive some comments, as follows:

- Overall these models work and certainly provide the direction of travel.
- They are not a complete enterprise costing.....the objective was just to demonstrate the impact of changing management regimes in the grazing period.
- They illustrate really well how we **can't match the returns of the intensive sector** on our low input wildlife friendly grazing regimes.
- **Wildlife friendly grazing regimes are virtually unprofitable** on many low lying areas of Broadland without stewardship and/ or BPS payments and this is what we are seeing with our small herd and with our neighbouring farms where livestock are decreasing in numbers and virtually being kept as a hobby.
- I've been through the 5 costing scenarios & it's pretty sobering stuff. **Doesn't look unrealistic either.**

4.2.2.8 Other feedback on payment mechanisms

One consultee suggested that payments should be **index-linked** to keep pace with market changes.

4.2.3 Objective 3: How will we monitor and verify that scheme participants are delivering the public goods they have signed up to deliver?

From Defra Thematic priorities: LAND MANAGEMENT PLANS

- *Suggest mechanisms for monitoring and verification to deliver public goods, incl discussions of issues raised*
- *Who should be responsible for monitoring and verification?*
- *Will we require a combination of approaches depending on the public good or type of participant?*

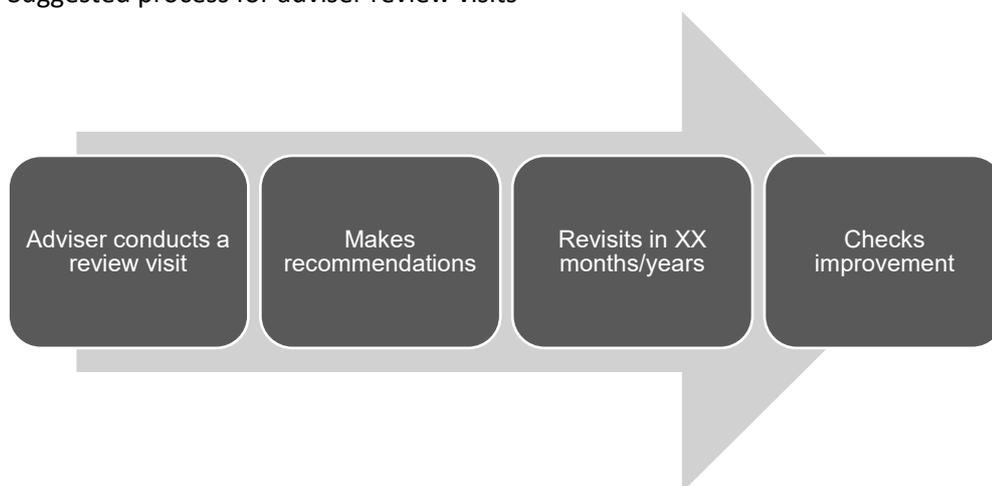
a. **What are the mechanisms that the local management board will require of advisers and scheme participants?**

Consultees at the November workshop and 5 of our focus groups mentioned the importance of **trusted advisers** in monitoring and verification. They told us that monitoring and enforcement needs to be fairer (“advisers shouldn’t be trying to catch you out”), and should focus on **rectifying problems** rather than penalising land managers, although some said that proportionate penalties are required. Attendees at the workshop raised a need for **better communications** and a **greater sense of trust** to allow the farmer to get on with scheme delivery.

Several groups suggested a **regular review with a knowledgeable adviser**. “Someone who understands the environment and not just the rule book.” They suggested the following process:

Figure 7

Suggested process for adviser review visits



This regular review process should include opportunities to remove or amend things which aren’t working, and to upgrade within the tiers to achieve more. Further action would only need to be taken if the land manager does not make the necessary changes to their land management.

Advisers would need to be **accredited**. This could be a role for a local delivery board. One person suggested that land managers would benefit from a **pool of local advisers with different expertise**. Another suggested that each sub-catchment / valley should have a dedicated adviser, who could help bring land managers together to achieve landscape-scale benefits.

We need discipline to **ensure that advisory / monitoring visits do happen**. These suffered from a lack of resourcing under ES and CS, so **must be properly funded** under the ELM scheme. The reed and sedge cutters are particularly critical of the lack of monitoring for fens and reedbeds under previous schemes.

Other approaches to monitoring and verification suggested by our consultees were:

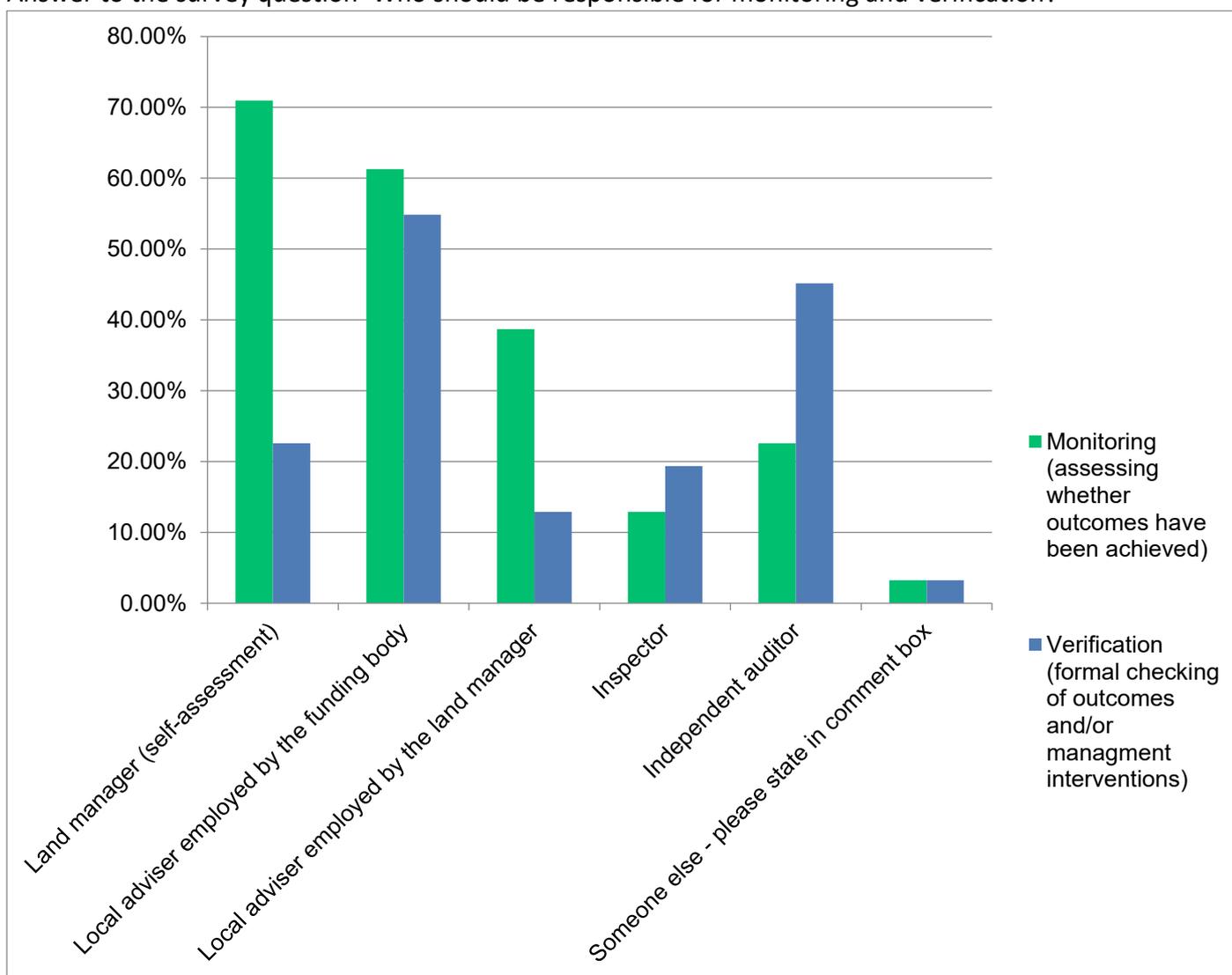
- Requirement to carry out a breeding wader survey every year.
- Monitor land use change against a map of priorities – both at a scheme and holding scale.
- Species monitoring at a landscape scale to assess the success of the scheme.
- Involve independent experts in monitoring, such as ecologists.
- Where management is hard to monitor through site visits, land managers may need to provide some evidence, such as fen and reedbed cutting maps.
- Farm Assurance Schemes could play a role.

b. Who should be responsible for monitoring and verification?

We asked this question in our online survey and Figure 8 shows the response. The first choice for monitoring was the **land manager (self-assessment)** selected by over 70% (22 people) and the second choice was a **local adviser** (over 60% / 19). A **local adviser** was the first choice for verification (55% / 17), with an **independent auditor** in second (45% / 14).

Figure 8

Answer to the survey question ‘Who should be responsible for monitoring and verification?’



There was strong support for **monitoring and verification to be done by separate people / bodies**, and for verification to be done by an independent person.

Other comments included:

- By having a local funding body adviser doing the inspections you have a friendly face, hopefully, built a rapport, and be more willing to take advice from to enhance what you are doing and correct any shortcomings.
- Land managers and their advisers should be able to monitor targets and outcomes but there needs to be verification from the funding body to create even standards.
- Monitoring and verification must be undertaken only by people who understand the unique landscape, and who are involved from the beginning. Government office based auditors are clueless.
- I do think land managers could do the monitoring themselves, but appreciate some might not have the time and would prefer to get others to do it.....there needs to be some form of 'fine' if there is clear attempts of inflating what is actually being delivered on the ground.
- The taxpayer needs to know he/she is getting what he/she has paid for. 10% of all grants should be earmarked for a professional audit by a qualified professional of which there are enough.

4.2.3.1 Self-assessment of outcomes

Self-assessment was supported by over 70% of our survey respondents but not favoured by the majority of our focus groups. Attendees at the November workshop gave some support for practical and straightforward 'base level' monitoring, but the vast majority of groups said that **official monitoring should be done by the scheme advisers**. Some of the conservation land managers were more supportive of self-assessment but even this group had concerns. Comments for and against self-assessment include:

Table 7

Comments for and against self-assessment include:

For	Against
Self-assessment of basic interventions should be possible	"Farmers are farmers, not ecologists."
RSPB Test and Trial has had a positive response to self-assessment from farmers so far	Too complicated
Water Management Alliance use self-assessment for water vole returns	How would you measure outcomes and verify these?
Disagree with subjectivity argument	Subjectivity
Can overcome time-lag issue by using a 5 year mean (one conservation organisation does this for their species monitoring)	Time-lag between carrying out management and achieving outcomes – can be many years
Could provide support mechanisms to increase skills and awareness	Could put people off entering the scheme
Give training in self-monitoring even if payments are not based on this (good practice)	Time-consuming
	Self-inflation of achievements
	Self-assessment doesn't work and will be the preferred option of the self-interested

There was general agreement that self-assessment should focus on **habitat characteristics** not presence of species, although the one representative from a conservation organisation was more in favour of species assessments and suggested using volunteer surveyors.

4.2.3.2 Testing self-assessment of fen outcomes

We conducted a short test of self-assessment on a fen. Our participants enjoyed the test and would be willing to carry out self-assessment on their own land. However, there was **very little consistency** in the results achieved. This could be partially addressed through better instructions and training, but some of the inconsistency was a result of **subjectivity** which is inevitable to some extent. The participants who are conservation professionals came up with different results to the NE adviser who set the task, so this is an issue regardless of technical knowledge. Key learning points were:

- Wetland habitats are **complex and variable** so coming up with a list of standard outcomes to assess is very difficult. **Site-specific outcomes** are likely to be needed in most cases.
- Self-assessment could be a **useful tool for improving land manager understanding** of their fen habitats, resulting in **better management**.
- Self-assessment needs to be accompanied by detailed, **face to face training**, even for conservation professionals, in order to produce more consistent results.
- Self-assessment is **unlikely to be accurate enough for formal monitoring** of wetland habitats.
- Formal monitoring should be done by **accredited advisers** following **standard methodology**, especially if results-based payments are introduced.
- Additional monitoring, such as **species surveys**, is likely to be needed for wetland habitats.

4.2.3.3 Verification

Several people told us that inspections should be **separate to advice and monitoring** and carried out by different people (potentially using information provided by the adviser). Feedback from the November workshop, focus groups and online survey all suggest that an **independent environmental audit** carried out by a qualified professional would be more acceptable to land managers than an inspection. At the November workshop, 5 out of 7 groups raised concerns about fear and unfairness arising from the RPA inspection regime. However, one person did comment that inspectors may be needed in cases of non-compliance or dispute.

c. Will we require a combination of approaches depending on the public good or type of participant?

We did not explore this in detail, but there is some support for **self-assessment of basic outcomes / interventions**. The results of the fen outcomes assessment suggest that this will be **very challenging for more complex habitats**, such as wetlands. Whilst we might expect conservation land managers to be better able to self-monitor these habitats, **subjectivity** is still likely to be an issue. It may be fairer for the monitoring of more complex options / interventions to be done by suitably qualified professionals, using standard processes, regardless of the land manager's level of ecological competence.

d. What will be locally determined versus driven by national priorities and mechanisms?

The responses to our questions around the local delivery board in Survey 1 point to **strong support for monitoring and verification to be done locally** with 89% of respondents saying that this was an important or very important role. In survey 2, almost a third of the comments about who should be responsible for monitoring and verification mention the word 'local' or imply that local knowledge is needed. This also came across strongly in the focus group and one to one discussion. Some comments include:

- By having a local funding body adviser doing the inspections you have a friendly face, hopefully, built a rapport, and be more willing to take advice from to enhance what you are doing and correct any shortcomings.
- Monitoring and verification must be undertaken only by people who understand the unique landscape, and who are involved from the beginning.
- The success of this scheme is around Broads Bespoke and the monitoring and verification ought to be local, to include the agreement owner in the monitoring element.
- Local advisers bring the benefit of a range of experience from different farms. Reassuring.

Only one person commented differently, stating a preference for someone who is neutral and from outside the area, although it is not known whether they were referring to advice and monitoring or verification (or all three).

4.2.4 Objective 4: What expert support will participants require to help them plan and record which public goods they will deliver?

From Defra Thematic priorities: ADVICE & GUIDANCE

- o Expert support participants may require: to help them plan and record which public goods they will deliver and who deliver this*
- o Accreditation of expert advisers: What are the mechanisms that the local land managers group will require of advisers and scheme participants?*
- o Mandatory and free advice*
- o Ensuring the advisers have the skills and knowledge they need: training, role of the land managers group*

- a. **Who could deliver this?**
- b. **How will these advisers be accredited?**
- c. **How many accredited experts will we require?**
- d. **Should advice be mandatory? How much free advice should we give?**

One of the key points regarding advice made during the November workshop was that one of the benefits of the ESA scheme was the availability of advice from a locally based project team. At the time this team was provided by Defra's Rural Development Service (RDS), one of the government bodies that became Natural England. The advisers were locally based and accessible and regarded as knowledgeable, understanding of the farmers objectives and were trusted by the farmers delivering the scheme.

One particular aspect of this local project officer-based advice that was highly desirable was their ability to bring some measured flexibility into the scheme. An example of this would be the authority and knowledge to adjust agreements in order for the desired outcomes to be achieved. This ability to adjust the individual scheme requirements is also seen as being important as a process of continuous improvements of habitats is delivered.

Another aspect that was particularly valued was the continuity of the one-to-one relationship between the land manager and adviser over the lifetime of the scheme. This was especially important in allowing farmers to progress to higher levels of environmental delivery over time through scheme evolution and amendment.

Our focus groups were generally in favour of the **scheme paying for advice and monitoring**. "You're spending public money so a public agency should oversee this." This would control the **quality of advice and monitoring**, and **avoid any conflict of interest** arising from the adviser being paid by the land manager. One person suggested an allocation one day advice per holding / agreement per annum.

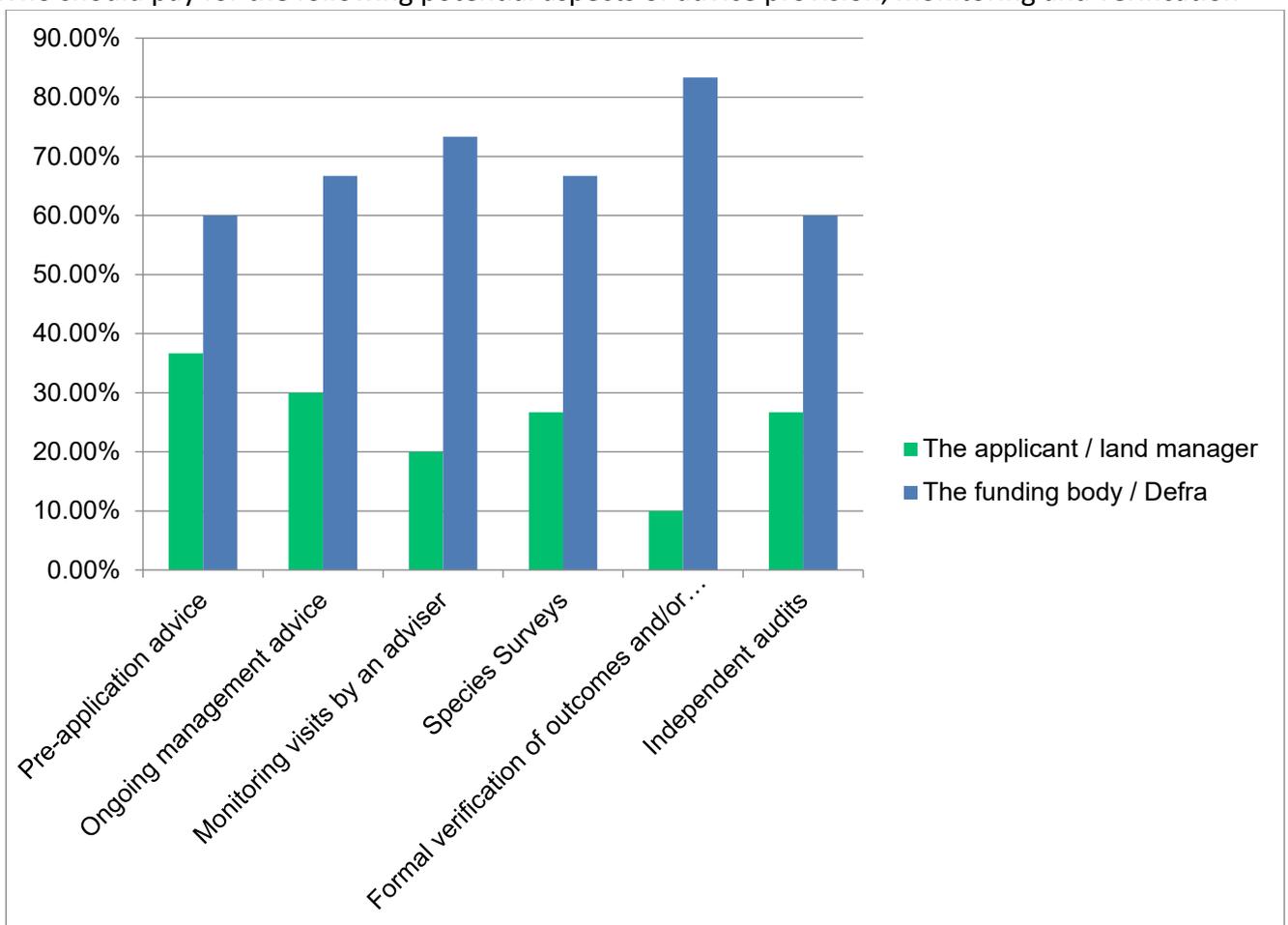
Only 2 groups / people said they would be prepared to pay for their own adviser – one person said they would prefer this.

At the November workshop there appeared to be an even split between the scheme paying for advice and farmers paying for advice directly. One group suggested that land managers could club together to **employ an adviser across their land holdings**.

To explore this in more detail, we asked our survey participants who should pay for different aspects of advice provision, monitoring and verification and the results can be found at Figure 9. There was strong support for the **scheme to fund all aspects**, but some support for applicants paying for pre-application advice (just over a third of people chose this). Over 70% felt that monitoring and verification should be paid for by the scheme. There was more support for the land manager paying for independent audits and species surveys (8 people) than for formal verification (3).

Figure 9

Who should pay for the following potential aspects of advice provision, monitoring and verification



Other reasons for favouring scheme-funded advice include:

- Ensures independent advice which favours environmental benefits over financial gain
- Lack of funding could be a blocker to land managers seeking advice or even applying for the scheme

Several people suggested that advice, monitoring and verification should be provided by the scheme but the **costs could be recouped from the scheme budget**, e.g. payment rates are set slightly lower to compensate. Others said that **land managers would pay if scheme payment rates were high enough**.

Other suggestions were:

- There could be cost-sharing on surveys, independent audits, and ongoing advice. Funding going into a communal pot to be used appropriately by a landowner/grazier group, especially in collaborated schemes.
- The applicant should pay for initial advice on the potential of any scheme but this should be recouped once successful.
- Basic economics suggests that the landowner needs to be responsible for paying for services relating to his/her land. An independent audit is essential is vital to ensure that the public is getting what it's paid for. 10% of all grants should be specifically earmarked for this.

The survey showed that respondents felt that **pre-application and ongoing advice** were the most important areas of advice provision, closely-followed by **adviser-led monitoring visits**.

Figure 10

The most important aspects of advice provision, monitoring and verification



There is currently both a publicly funded advice provision provided by Natural England (which is highly valued but generally considered to be under-resourced) and also a functioning private advice market made up of a number of different private and charitable organisations. There is a wide range of advice providers and a corresponding range of quality and knowledge. The majority of participants at the workshop and the survey **would prefer for the advice to be paid for and delivered by the funding body**, as this would control the **quality of the advice** and ensure that it is aimed at **environmental gain**, not just maximising financial gain for the applicant.

If landowners need to employ their own adviser the funding body could **provide a 'set payment amount for them to spend on advice'**. There are old and current precedents for this. It could be similar to the 'Farm Environment Plan' payments that were available to Environmental Stewardship applicants, or it could also be similar to the currently available Woodland Creation Planning Grant, which is a payment towards the completion of a desk-based exercise to identify constraints and opportunities for proposed woodland planting.

We know from the ELM consultation that the scheme is very likely to be underpinned by a Land Management Plan and we therefore suggest payment for advice is linked to the **production of this plan to a required standard**. In order to ensure the quality of advice received from the private marketplace we suggest there is the requirement for **a register of approved advisers and an accreditation scheme**. We also consider that a Local Delivery Board could play an important role in maintaining the register, training and accrediting the advisers. This would provide a **locally based mechanism** by which a number of advisers from both the private and public sectors could be aligned in a basic understanding of the requirements and objectives of the scheme, and should lead to a **stronger and more consistent advice provision** and the production of higher quality Land Management Plans and ultimately the environmental delivery.

The advice provision should not be limited to the initial application stages of the scheme, as our workshops and survey both suggest that **ongoing advice is critical to the realisation of scheme objectives**. This ongoing advice could be achieved by the proper resourcing of the funding body to provide an annual visit to each agreement holder or for the funding body to provide an annual payment for a landowner to use to bring in **independent advice** to ensure that they are on track. In both cases these annual visits should take the format of a **pro-active management review, not an inspection**. The visits should be about encouraging the management that is working well and the areas that may need changing and tweaking to ensure that the objectives are met. If changes are to be made and recommended under an independent review, there must be a mechanism through which to discuss the proposed changes and get them implemented.

4.2.5 Objective 5: How do we encourage and incentivise collaboration for the delivery of public goods?

From Defra Thematic priorities: COLLABORATION

- o Encourage and incentivise: mechanisms suggested, additional incentives (e.g. funding) required*
- o What works well in current facilitation projects and how this could be adapted:*
- o Working together on topics (breeding wader knowledge exchange session – survey Q22/23)*
- o Benefits of working together*
- o Barriers to take-up of collaboration*

a. How are farmers and land managers willing to lead collaboration supported and their outputs verified?

4.2.5.1 Attitudes to Collaboration

We asked a series of questions in our online survey to determine farmers and landowners’ **attitudes towards collaboration**. 83% of participants agreed or partially agreed with the statement “I already collaborate with other land owners, farmers, graziers, reed cutters or conservation bodies on aspects of environmental management”.

4.2.5.2 Topics for Collaboration

We also asked what kind of environmental management they were currently collaborating on and the areas they were expecting to be collaborating on in the future. It is clear across all of the categories suggested that respondents considered that they would be collaborating more over management in the future as shown in Table 8.

Table 8
Current and Future Collaboration Topics

	Already Collaborating	Future Collaboration	Change
Predator Control	55%	91%	+35%

Water Level Management	67%	91%	+24%
Buffering habitats	36%	89%	+53%
Water Quality	46%	87%	+42%
Flood Mitigation	39%	87%	+49%
Species Management e.g. breeding waders	43%	93%	+50%
Provision of access	34%	63%	+29%
Other	50%	67%	+17%

There were also a number of other areas that respondents expected to be collaborating on more in the future and this was centred around **water quantity** with a series of comments including; **water management, abstraction, water resource issues, drought and water resilience**. One further area mentioned in the survey was **tourism**. In our small group discussions, topics including **deer management, non-native species** and **carbon capture** were suggested.

When asked which of the environmental management actions respondents considered would bring the **biggest environmental gains** through working collaboratively, **species management for breeding waders**, followed by **water level management** were identified as the most important as shown in Table 9.

Table 9
Collaboration Topics for biggest Environmental Gains

Species Management e.g. breeding waders	91%
Water Level Management	89%
Predator Control	83%
Buffering habitats	81%
Water Quality	73%
Other	64%
Flood Mitigation	58%
Provision of access	17%

This was further tested by asking which areas of collaboration were the easiest to collaborate over. Predator control was seen as being far and above the easiest to collaborate over as shown in Table 10.

Table 10
Ease of Collaboration on different topics

Predator Control	66%
Water Level Management	49%
Species Management e.g. breeding waders	46%
Buffering habitats	26%
Other	25%
Water Quality	48%
Flood Mitigation	20%
Provision of access	33%

When the two tables are cross checked for where the biggest environmental gains could be achieved and which areas are considered easiest to collaborate over, the **top areas for collaboration are predator control, water level management and species management for breeding waders**.

4.2.5.3 Payment for Collaboration

84% of respondents agreed or partially agreed that they should be **financially rewarded for collaborating** over environmental management. The comments section for this question provided strong support for this view:

- Anything that takes extra time and effort needs reward since it diverts you from other aspects of what you do
- Any kind of management of any system equates to time. Time equals money. I am a farming business with a loan, mortgage and family to support, not a charity.
- If the extra benefit from collaboration is due to a conscious decision and not just serendipitous
- Reward for collaboration is fine but it should not be at the expense of farmers who are already doing a lot, or will do a lot, on their holding, especially if that holding is already of an ecologically viable scale. The aim of collaboration should be to achieve the necessary scale, not an end in itself.
- There needs to be some incentive to encourage collaboration. Any financial payment should recognise the value of a landowner making that choice and recognises a commitment to what may be in many cases 'making a change' and 'committing to managing in an environmentally sustainable manner.'
- If farmers are to be encouraged to collaborate and achieve the same environmental delivery as other landowners / stakeholders they should be given access to the same or equivalent financial rewards, funding and tax exemptions to create a level playing field
- if financial reward is needed to get people talking and collaborating it should be available but a better way would be that people who collaborate are more likely to get entry into a scheme and have increased benefits within the scheme such as being able to use it as a promotional tool for there products across the whole farm.

We also tested how the money should be distributed amongst those farmers and landowners who are collaborating over an aspect of environmental delivery and asked respondents whether they agreed or disagreed with the following series of statements;

- Payments for collaboration should be separate and additional to payments for other environmental delivery.
- The greater the number of landowners collaborating the greater the payments for collaboration should be
- Additional payments for collaboration should be paid to the Collaborative Group of landowners as a whole and distributed amongst the group themselves.

65% of respondents agreed that the **payments for collaboration should be additional and separate to other payments**, 7% disagreed and the remaining 28% were neutral. The comments provided in Table 11 are typical of the different responses.

Table 11

Comments on how to be paid for collaboration

Agree	Neutral	Disagree
It's important to keep areas distinct from each other to aid clarity	Tough one, payments going beyond the basic in a collaborative group which go above and beyond	this should be a pre-requisite of entry into a scheme.

	what an individual can achieve should be rewarded.	
To ensure by going the extra mile, this is acknowledged, rewarded and therefore may encourage others to participate	Depends if it would influence other payments?	Separate payments focused on different activities to sustain environmental habitat and public access , are joint exercises in total farm management and splitting payments would blur mutually beneficial activities and ring payments would tend to separate mutually confirmatory actions on environmental planning .
Difficult question to answer. Maybe the payments could be paid retrospectively or phased during the lifetime of an agreement following successful collaboration rather than as an upfront payment	The 'extra' payment incentive to collaborate could be beneficial to forming larger areas.	Collaboration should benefit all but that does led to all neighbours agreeing and working harmoniously together, and therefore scheme members should not be penalised if they cannot find collaborative partners

There was no clear agreement from respondents on whether payments for collaboration should be greater if more landowners/farmers are involved in the collaboration. 33% of respondents disagreed, 36% agreed and 31% were neutral on the subject. A range of comments are provided in Table 12.

Table 12

Comments on greater payment for more landowners collaborating

Agree	Neutral	Disagree
More effort is more cost	There should be the aim to collaborate anyway where it is environmentally beneficial - should not be a need to keep increasing this payment.	Its not about number of landowners but areas and occupiers
The wider the area covered the greater the potential for benefits to be delivered.	It would be an administrative nightmare I would think	I can see how this might motivate others to join and do environmental work, but at the very least there would need to be a cap in place, and see payments distributed fairly depending on what a land owner was actually doing as part of the collaboration.

<p>See above. Also if we are looking at landscape scale improvements it is not just number of collaborating landowners that is important but the area (and quality) of contiguous land that could be a factor</p>	<p>A larger group is more work so maybe the end goals will need to be more modest.</p>	<p>This must depend on what is happening not just the number of people involved</p>
<p>Again the more people involved the more opinions you will have, and therefore more problems, so yes a higher payment would be needed. It's not far to punish smaller farmers who's neighbours will not embrace the scheme.</p>		<p>Any scheme shouldn't be based on the number of landowners committing to a collaborative venture but should be based on the potential of the collaboration and the outcome and outputs of that delivery e.g. more efficient water management, increased wildlife, more efficient grazing management and quality product at market.</p>

We tested the concept of a collaborative group distributing additional payments for collaboration amongst the group members themselves. This was unsupported by the respondents with 42% in disagreement, 28% neutral and 30% in agreement. The common theme across the comments provided was that this is an idealistic approach to the distribution of the payments that would be very difficult to implement fairly, and potentially lead to disagreements over payments amongst group members.

4.2.5.4 Mechanisms to Support Collaboration

A suggested mechanism by which collaboration could be achieved was presented in the narrated presentation and a suggested process and detail for a short Collaboration Plan to support this is shown in Figure 11 and Figure 12.

Figure 11
Collaboration Process

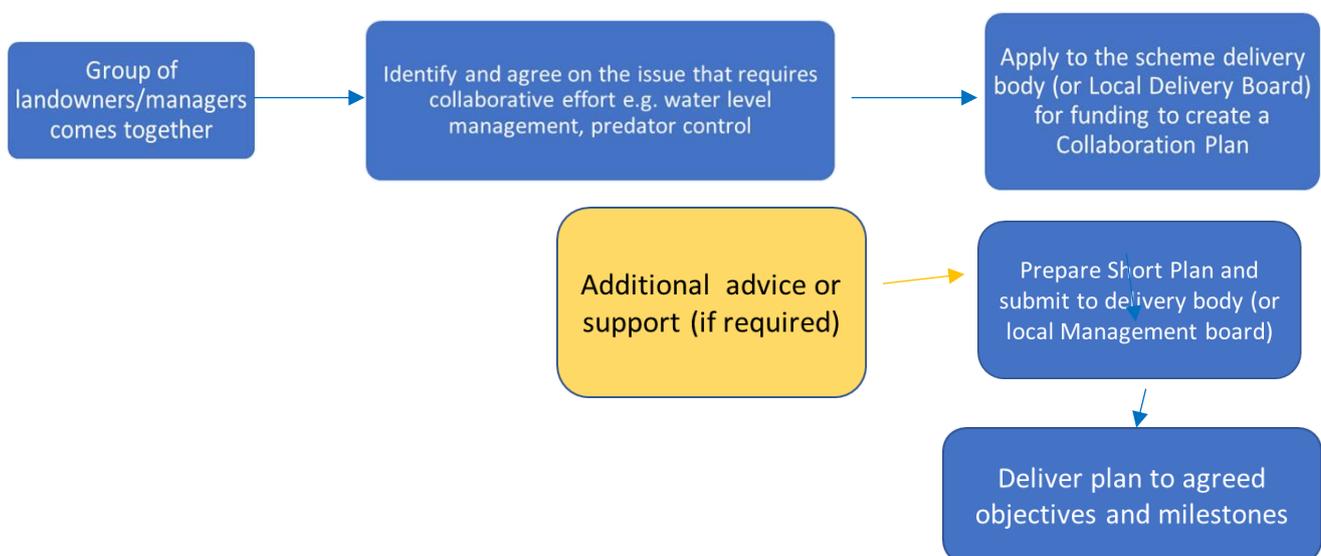


Figure 12

Collaboration Plan headings



The requirement for a **collaboration plan** was supported by the survey respondents with 84% agreeing or partially agreeing that a plan is required to support a collaborative approach. There were a number of comments providing additional feedback on the plan as originally presented including:

- These defined objectives will **reinforce commitment and long-term planning objectives**.
- Looks simple and practical. Group Members should be updated periodically with predator activity + results of control.
- the objectives need to be more outcome based. i.e. example objective is about controlling predator to improve breeding success. This objective should be to improve breeding wader success, action should be to identify predator carrying causing low success, use appropriate methods to control.
- You need to include (a) Funding or budget (b) a map (c) who will do what (assuming the work is not equally distributed) (d) a timetable for different actions. Most of this can be wrapped up in a single table under Actions - call it an Action Plan.
- should be a feedback loop review, adjust on evidence. share the learning

Following the feedback from respondents we have further developed the concept of a 'Collaboration Plan' and revised the headings and content whilst ensuring it remains simple and applicable to the topics that would lead to more effective delivery if collaborated over. An example collaboration plan for a group of landowners coming together to manage for Water Quality is in Annex 7.

58% of respondents agreed or partial agreement that payments should be made dependent on delivery of the 'Collaboration Plan' **milestones and delivery of measurable objectives**. The comments raised a number of things for further consideration:

- Successful delivery of measurable objectives may not ALL be within the landowner's control
- All deliverables should be subject to independent audit. 10% of all grants should be earmarked for this and paid to qualified professionals. Self-assessment should not be an option.
- the outcomes from collaboration would need to be demonstrably greater than the sum of the individual farm actions
- Stick as well as carrot required
- Traditionally independent businesses coming together, and then being penalised as a whole because of the failures of one of the parties could lead to very negative outcomes.

- The payments should be based on intent, not on delivery of objectives which might not be delivered (for a wide variety of reasons beyond the control of the participants).
- Yes some people are all talk and no action. Managers completing their work should not be penalised, by the failures of others.
- So long as the milestones are realistic and measurable
- As soon as it is measured it becomes an overriding objective which will remove diversity and the ability to vary and area to suit its location rather than the measurement.

The comments and concerns naturally group into two areas – not meeting objectives due to the actions or inactions of other group members and secondly not meeting group objectives due to outside factors such as the weather and climate change. One way to consider structuring the payments for collaborative themes is a two-stage payment, with a base level of payment being made and then a further payment being applied for a measurable change being achieved over a longer-term. An example of this is set out below:

<p>Predator Control Collaboration Payments</p> <p>Group of 5 farmers over 250ha of Breeding Wader Grassland</p> <p>£350 – Breeding Wader Payment per ha per annum</p> <p>£50 – Co-ordinated predator control payments per ha per annum to deliver objectives of collaboration plan and provide evidence of activities.</p> <p>£100 - per ha bonus payment if after 5yrs monitoring trend shows increased chick productivity from year 1 baseline</p>

A stakeholder has raised the potential risk that there may be scenarios when people are voluntarily carrying out a task such as predator control on other people’s land and that if a landowner, were to become paid for the activity, it may lead to the voluntary activities ceasing, along with aspects of good will and existing local collaboration. New collaboration initiatives as set out above, should be careful not to compromise existing collaborative arrangements especially concerning those carrying out actions voluntarily.

The question of who should monitor and verify the outcomes of these collaboration plans comes back our work on monitoring and verification already discussed. The feedback is that this should be undertaken locally, by people who understand the unique environment of the Broads. There was strong support for a local delivery board to play a role in monitoring and verification.

4.2.5.5 Knowledge Exchange to support Delivery and Collaboration

One area of collaboration that was seen as important, easy to collaborate on and would lead to the greatest environmental gain was **collaborative and co-ordinated management for breeding waders** through the future scheme. We tested whether land managers undertaking breeding wader management should attend an **annual knowledge exchange session** with other land managers, advisers and experts. This concept had support from the focus group consultees, and, when tested with the survey respondents, was widely accepted with 84% agreeing or partially agreeing.

The thinking behind this suggestion has come out of wider discussions with farmers participating in the payment by results scheme for wild bird seed and pollen and nectar options in Norfolk. In discussions with a number of them it has become clear that one of the greatest benefits they have gained is the **extra focus on the options, access to expertise and discussions with other farmers over the challenges** presented by any given season and set of

conditions. There has been a focus on learning, establishment techniques, seed selection, aftercare regimes etc. It is likely that that the delivery of all options would benefit from this **increased focus on successful management**.

For a breeding wader knowledge exchange session, we envisage one or perhaps two 2hr sessions a year hosted on different farms delivering breeding wader options. Land managers in the local area with the option in their agreement are required to come along hear about how the season has been progressing, successes, failures and challenges. There would also be demonstrations of best practice and an open forum for discussion.

The comments received also support this as a concept worth further exploring;

- “we need to learn from others what works and does not work”
- “100% agree”
- “should be beneficial all round”
- “it’s important to information share and discuss what worked and didn’t”

We went onto see whether this approach would be possible on other aspects of environmental delivery. 76% of respondents agreed and suggested the following topics:

Table 13
Suggested topics for environmental delivery

Cost benchmarking	Veterinary workshops	Agronomy	Grassland nutrition
Fen Management	Fen Ecology	Predator knowledge	Weed Control
Species rich fen	Sustainable reed & sedge bed management	Weed knowledge	Sense of Community
Water quality	Reed & sedge bed management	Grassland management	Livestock management

We propose that a simple system is put in place to provide **CPD points (continuing professional development) points for different environmental management aspects**. For example, to make the annual claim for a Breeding Wader option you must have evidence of 5 Nature Management Points (NMP) to submit with your claim. You gain NMP by attending relevant knowledge exchange events held over the course of year. This system could be run along very similar lines to BASIS or National Register of Sprayer Operators (NRoSO) points both of which are schemes that farmers are very familiar with.

5. Conclusions and recommendations

Objective 1 – local prioritisation

- The scheme should prioritise landscape-scale coverage and continuity of management before funding the creation of new habitats. Landscape-scale land use change projects are important but should not be at the expense of existing high-quality sites.
- Our consultees favoured a map-based approach to prioritisation, which uses data on water quality and availability, land levels, soil types and other characteristics to prioritise land management interventions across the landscape.
- Key local priorities include water (quality and quantity) and habitat quality.
- Setting and varying local scheme priorities should be a key role for a local delivery board.

Objective 2 – mechanisms to deliver the objectives of the 25-year Environment Plan

Interventions and outcomes

- The majority of our consultees are broadly supportive of the Broads Tier Structure. This sets out the interventions and outcomes that would be needed to deliver priority public goods in the Broads. This could be used as the basis for a Broads-based ELM scheme pilot.
- We envisage that land managers would be able to choose from the Broads Tiers and the wider ELM scheme to build a Land Management Plan for their holding.
- The Broads Tier Structure uses the format and content of previous schemes that are familiar and well understood, while being simpler, less prescriptive, more flexible and outcome-focussed. It contains options for all and can be used in a more innovative way, through collaboration and landscape-scale land use change projects.
- Future Farming policy needs to address areas of potential conflict which impact on the delivery of public goods in the Broads and further afield. These include wildfowling and the sustainable water use (balancing the needs of agriculture, wetland habitats and the provision of other public goods related to water).
- Defra should consider how predator management can be accommodated in the ELM scheme. This is essential to the delivery of certain priority outcomes in the Broads.
- Capital items are key to facilitating the delivery of outcomes in the Broads, and should be expanded to include grants to help the sustainable and low carbon harvesting of reed and sedge and to support new entrants into sustainable land management.

Payments

- Our focus group consultees have concerns about payment by results, but agree that land managers should be expected to achieve outcomes in return for scheme payments.
- Our survey respondents favour a mixture of income-forgone plus management costs and outcome-based payments.
- Outcomes need to be tailored to the holding, particularly for complex and variable habitats like wetlands.
- Although reed and sedge cutters and graziers are critical to the delivery of outcomes in the Broads they are often not tied into the payment that agreement holders receive and suffer from low incomes that threaten their future. ELM scheme design should consider how these land managers could be supported so that they continue delivering public goods on behalf of the land owners.
- Our costed grazing budgets demonstrate that lowland livestock farmers delivering public goods through extensive grassland management will make a considerable loss without BPS. Our calculations suggest that annual payments in the range of £633 to £1089 per hectare will be needed to match the current profitability of a high output grazing system. Defra should consider these locally-developed costs in setting payments.

- Continued EA / Defra funding for large water management infrastructure is vitally important for managing water at a landscape scale in the Broads, especially in the face of a changing climate.

Objective 3 – monitoring and verification

- Self-assessment received strong support from our survey respondents, but had less support from consultees at our workshop and focus group discussions, who would prefer monitoring to be carried out by a trusted and knowledgeable local adviser.
- Self-assessment is a useful tool to increase land manager understanding and achievement of outcomes, but most of our consultees had concerns about this being used for official monitoring and for the setting of payment rates.
- Our test of ten outcomes self-assessment found that subjectivity is a major barrier to consistent monitoring of complex and variable habitats such as wetlands. More work is needed to develop a simple and practical self-assessment process which produces reliable results.
- Advice and monitoring needs to be properly funded so that it does happen.
- Verification needs to be conducted by an independent person, and must be separate to advice and monitoring. An independent environmental audit carried out by a qualified professional would be more acceptable to land managers than an inspection.
- Monitoring and verification need to be done locally, by people who understand the unique environment of the Broads. There was strong support for a local delivery board to play a role in monitoring and verification.

Objective 4 – expert support and advice for ELM scheme participants

- Our discussions with farmers and land managers confirmed that they would expect the scheme to pay for an element of advice to applicants. This is important to ensure the independence of the advice and would favour environmental benefit over financial gain.
- Pre-application and then periodic ongoing advice were seen as the most important areas of advice.
- There should be set payments made available for the completion of a Land Management plan and to receive the appropriate advice at the outset of an agreement and either annual contact from locally-based funding body advisers or a payment to receive annual advice from accredited local advisers.
- There must be the flexibility to alter and refine agreements after receiving professional advice to ensure that agreements meet their environmental objectives.
- There was support for a Local Delivery Board to have a role around the training and accreditation of advice providers. A board would also potentially have a network of specialist advisers it could draw upon to provide specific advice to applicants.
- It was discussed that sub-catchment / valley groups could be places for bringing land managers together to achieve landscape-scale benefits.

Objective 5 – Collaboration

- Farmers already collaborate as part of their farming businesses and they are willing to collaborate more on environmental delivery.
- There was strong support to focus on collaboration around environmental management topics and themes, not just on a geographical area.
- In the Broads our participants thought that the greatest environmental gain could be achieved from collaborating on predator control, specific species management tasks, water level management and the buffering of habitats.
- In small group, one to one discussions and survey comments sections there were many comments over a growing need to collaborate over water availability and the needs of both farming and nature.

- Collaboration should be supported by a short, written plan setting out objectives, funding and budget, action plans, timetables, monitoring, delivery milestones and outcomes.
- Funding for collaboration should be additional and linked to the delivery of a collaboration plan, but how these payments are made to encourage collaboration and reward co-operative delivery was not universally agreed upon. Splitting of payments into two parts with one for annual management tasks and collaboration activities, and a further payment in the future following monitoring and delivery of objectives is one solution worthy of further testing.
- Linking knowledge exchange sessions to a number of the more complex management options was broadly supported. A 'Nature Management Points' system could be developed similar to the BASIS and NrOsO system. Different options would have a points tariff, with points gained by attending training sessions and land management demonstrations.

6. Main recommendations for future work

The Broads Steering Group supports the further co-delivery of ELM scheme development with Defra:

- A Broads pilot using the locally developed Broads Tier Structure
- Assess costs for fen management to inform Defra's and Natural England's payment evidence base
- Develop proposals for the better support of reed and sedge cutters and graziers
- To provide a well-resourced, local and trusted project officer-based advice provision for the initial and on-going support of applications and agreements, with a mechanism to make ongoing alterations to a scheme to meet the desired objectives.
- To develop a co-ordinated private market place, alongside funding body provided advice, for advice provision that enables the supported co-design of a scheme, followed by ongoing pro-active management advice and a mechanism to make ongoing alterations to a scheme to meet the desired objectives. Mechanisms need to be developed for this advice to dovetail with local advisers provided by the funding body.
- Further develop payment mechanisms for collaborative working to include the concept of splitting collaboration payments into two elements with the payment of one element held until the delivery of longer-term objectives.
- Self-assessment of outcomes for wetland habitats
- Initiate national-level discussions on the following topics which can impact on the delivery of ELM scheme objectives in the Broads and elsewhere:
 - Sustainable use of water resources for farming and nature conservation
 - Expand sustainable wetland crops, such as thatching reed to develop green growth
 - Sustainable wildfowling
 - Predator control

The Broads Steering Group welcomes extending the Broads Test and Trial, with Defra, to do the following:

- Explore how a local Land Management Board could play a role in prioritisation, coordinated advice provision, monitoring and verification, and collaboration
- Develop collaboration plans
- Develop the concept of knowledge exchange sessions as a requirement for specific options, such as breeding waders
- Develop a 'Nature Management Points' scheme to increase the environmental management skills of scheme participants and their advisers
- Develop a Broads pilot building on the above and using the locally developed Broads Tier Structure

Annexes

Supporting reports are available on the Broads Authority's website at <https://www.broads-authority.gov.uk/looking-after/projects/environment-land-management-system>.

November Workshop see <https://www.broads-authority.gov.uk/looking-after/projects/environment-land-management-system>

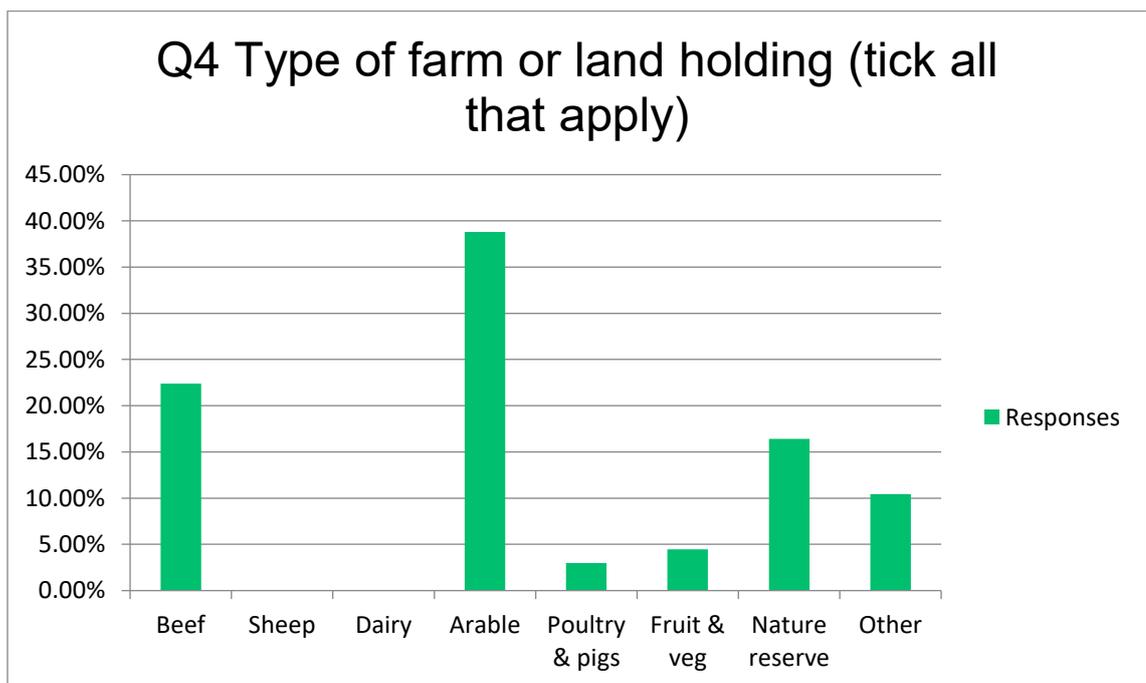
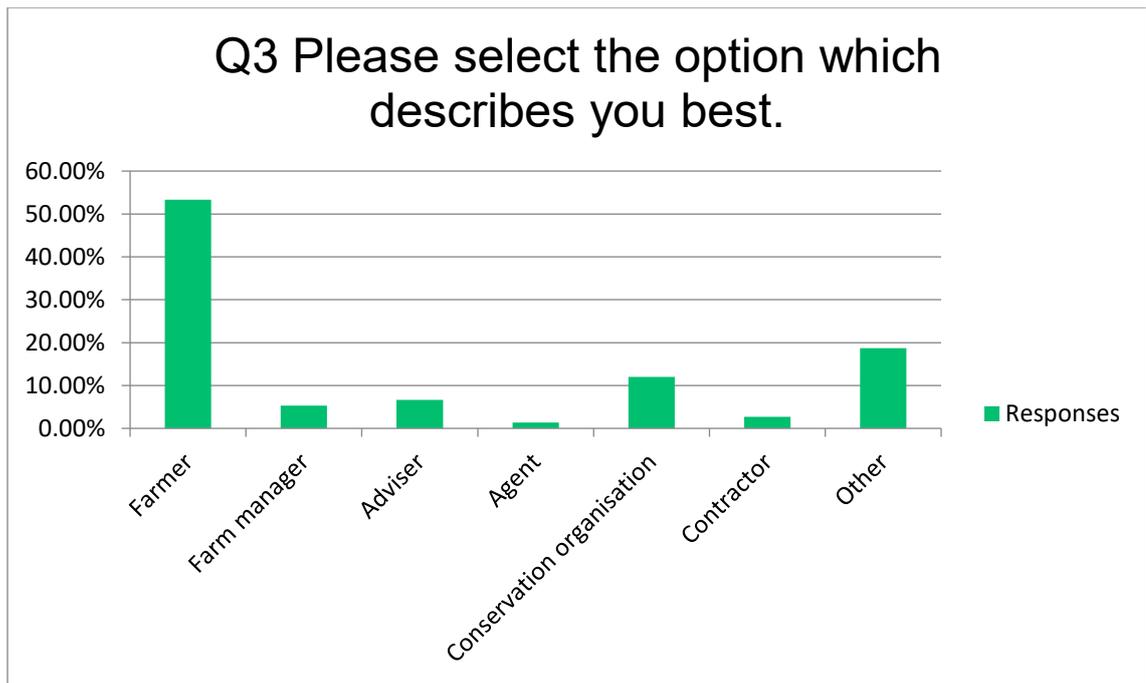
1. Land manager questions

Questions posed to land manager focus groups (not all questions were asked in every group):

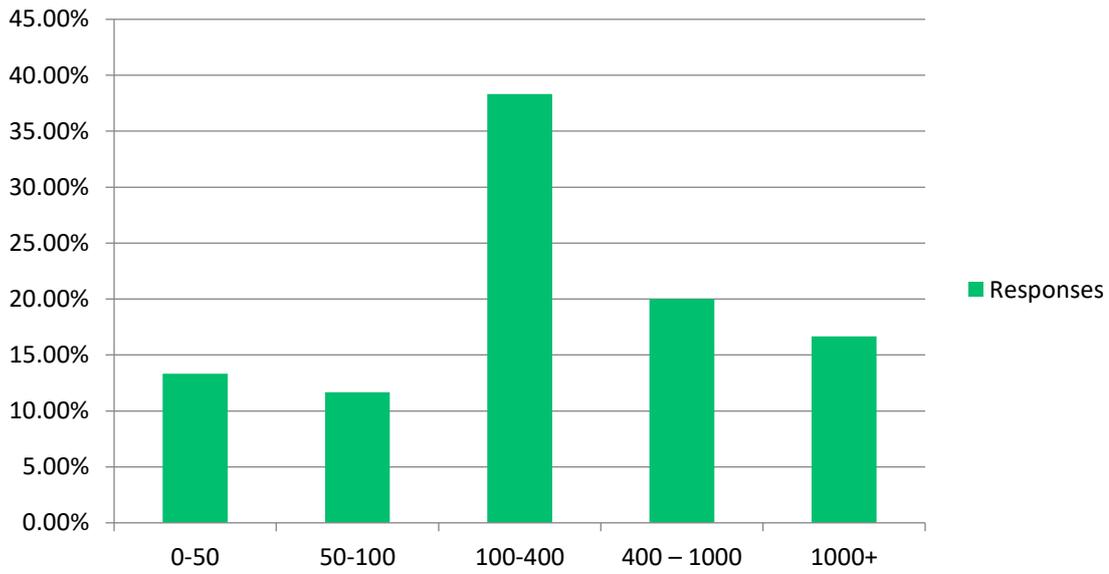
- A. Do you agree with the Broads Tier structure and options / supplements?
- B. Do you agree broadly with the outcomes and likely interventions – any glaring errors or omissions? *There probably won't be time to go into detailed discussions on points of detail – we will note these points and return to them if time allows.*
- C. How prescriptive should the likely interventions be? e.g. do we need an earliest cutting date for basic grazing marsh?
- D. Which outcomes could be subject to bonus payments for achievement of certain levels of outcome?
- E. What do you feel about the concept of directing payments to graziers?
- F. How could we ensure that payments for fen/reedbed cutting a) get through to the cutters and b) result in the desired cutting rotations being achieved?
- G. If we were short of money, how would we prioritise between applications for the various Tiers / options?
- H. Do you have any ideas as to how the interventions could be monitored and verified?
- I. Would you be interested in collaborating with neighbouring landowners over specific activities, such as predator management?
- J. What do you think about the suggestion that landowners undertaking the breeding wader supplement should attend an annual training / knowledge sharing event? Are there other aspects of land management that would benefit from this approach?

2. Online survey questions, graphs and comments

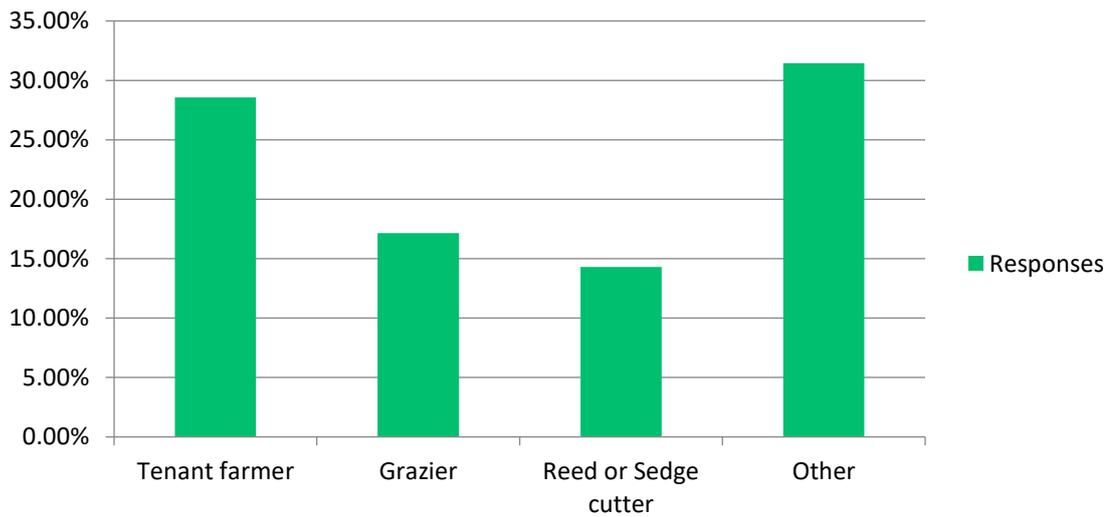
Survey 1 - Collaboration, landscape-scale delivery and local delivery structures



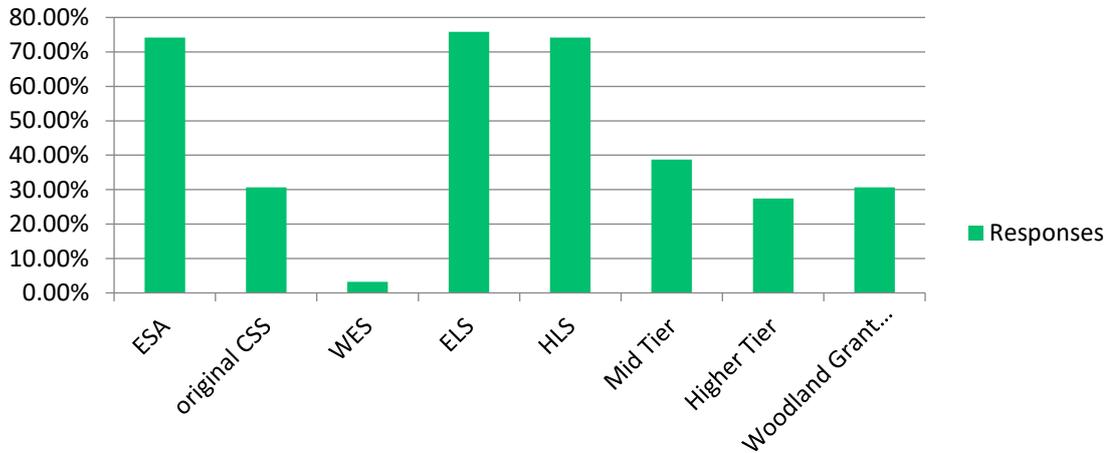
Q5 Size of farm of land holding (ha)



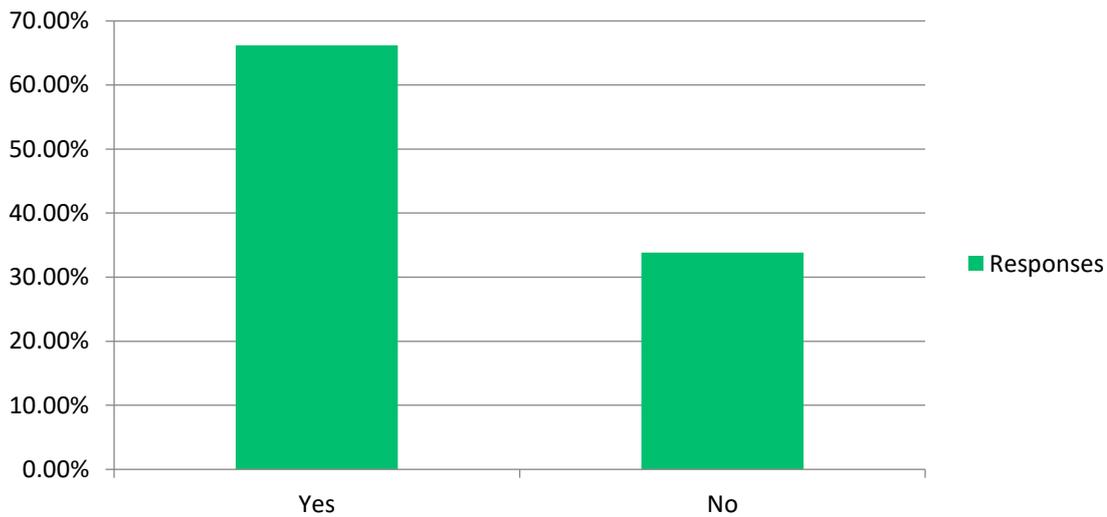
Q6 Please select if any of these apply to you



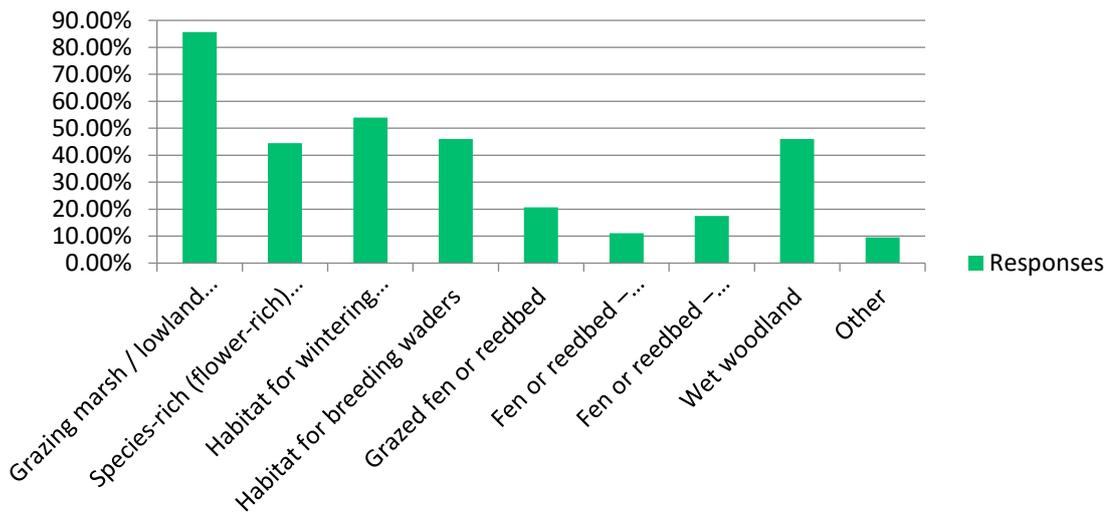
Q7 Which of the following agri-environment schemes have you been involved in? (please select all that apply)



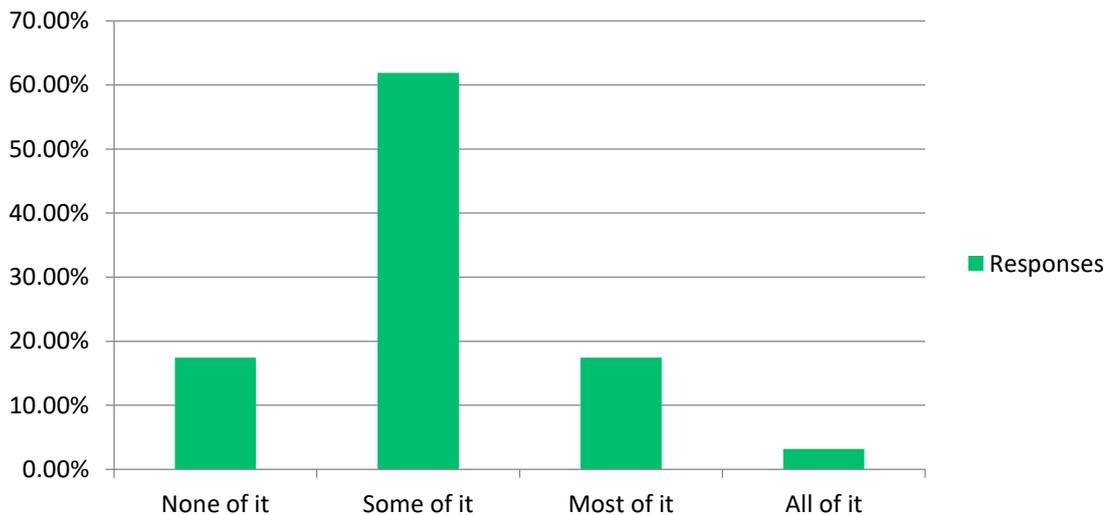
Q8 Do you have a live agri-environment agreement?



Q10 Which habitats do you currently manage? (please select all that apply)

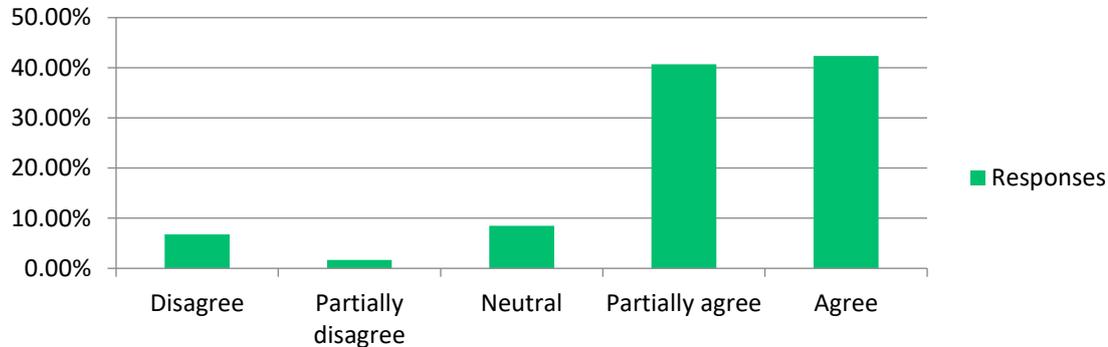


Q11 How much of this information presented was new to you?



	Comment
12	Do you agree or disagree with the following statement. "I already collaborate with other land owners, farmers, graziers, reed cutters or conservation bodies on aspects of environmental management."

Do you agree or disagree with the following statement. "I already collaborate with other land owners, farmers, graziers, reed cutters or conservation bodies on aspects of environmental management."

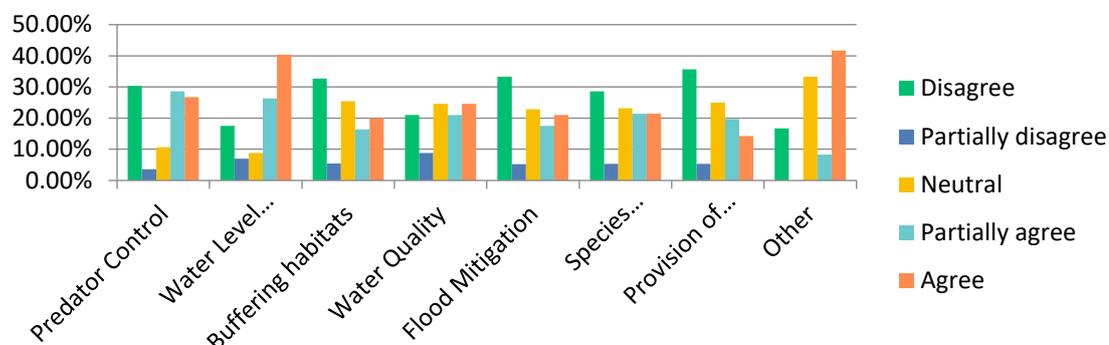


Liaison with conservation bodies
Grazing on water meadows is let on a spring let to neighbouring farmer, who we intend to collaborate with on hedgerow management and public access .
I am involved in vermin control with a number of other land owners
With neighbouring farmers, landowners, graziers, a collaborative HLS group.
Here at PLACE we work alongside neighbouring land owners, (ORGANISATION and Farmers), alongside conservation contractors. However, this is fairly disjointed, with each land owner doing their own thing, with no shared objectives or goals.
I am sure we could do more collaboration with neighbours around specific projects.
We worked closely with the ORGANISATION on the Catfield Fen Inquiry.
I have various graziers and reed cutters involved for part of the year
Drainage Board re water levels. FWAG re countryside stewardship
Speaking as ESW we work in many partnerships many of which focus on environmental management
Have taken advice from various conservation bodies with respect to our land and tried to "advise" neighbouring landowner with important non-scheme habitat to at least maintain its current status (how this land is not in a scheme is an utter farce)
Advice from Norfolk FWAG, have been involved with mud the pumping projects and Muckfleet bank strengthening and Filby Common cutting.
Deer management
We collaborate with graziers over the grazing of pastures, especially those within Countryside Stewardship. We collaborate with NWT and other conservation bodies over wildlife surveys.
We are members of the Upper Wensum Cluster Farm Group
I have an access agreement with the Broads Authority to enable the management of PLACE. I collaborate with a grazier for another business where I have a management input.

	As the landowner I am in partnership with my tenant grazier to ensure prescriptions are met and positive HLS results are achieved. However, there is no external collaboration to my knowledge
	This is a critical element of RSPB's ambition to save nature at the Landscape scale as will be defined within our Priority Landscape Plan for the Broads. Working at the scale of a nature reserve/landholding will have value, but more can be achieved by expanding wildlife and land management principles at a larger scale.
	Reed cutters / graziers
	We work with graziers, land managers and the drainage boards to provide resolutions to environmental management challenges.
	We have collaborated in the past with Natural England, FWAG and GWCT but recently there have been no options for collaboration made available
	Regular dialogue with a number of land users to ascertain the water level needs of both wildlife interests and graziers
	I have provided advice and facilitation for such collaboration.
	Muck v straw Share machinery Buying powers
	Dredging of dykes has been known to be undertaken collaboratively as well as to a limited degree predator control
	As an individual but also through the organisation I work for we already provide help, support and collaborate with many landowners in the Broads. this also includes graziers who we rely on
	Muck for straw. Land management with neighbour on adjacent fields. Use grazier to manage grassland
	I'm a reed/sedge cutter and conservation contractor so I work for/with/alongside various conservation bodies and landowners
	some catchment sensitive works undertaken and some low intensity grazing.
	I'm a member of a buying group and we do muck for straw. Also work together for hay making.
	As a conservation body we are working with our neighbouring landowners as much as they will allow
	The HTS scheme applied for has been prompted by a collaboration between two other land owners and the National Trust. It has not started yet.
	structured Water Level management plans, capital landscape schemes, planned Pumping station asset replacements, Task & finish groups through to existing community lead groups such as Upper Thurne
	If collaboration means several neighbours are in the same scheme delivering similar outcomes and making a landscape, then yes we are doing that. Has it been formally brought together? No
	We provide grazing services on other farms that are in HLS
	i cut areas as directed by conservation bodies/landowners
	In reality there is poor collaboration regarding environmental management in the Broads. Brasca does not have regular meetings now with any organisation. There is a drastic need for change and more dialogue yet alone collaboration.

13	Do you agree or disagree with the following statements. "I am currently collaborating with other land managers on the following environmental management areas"
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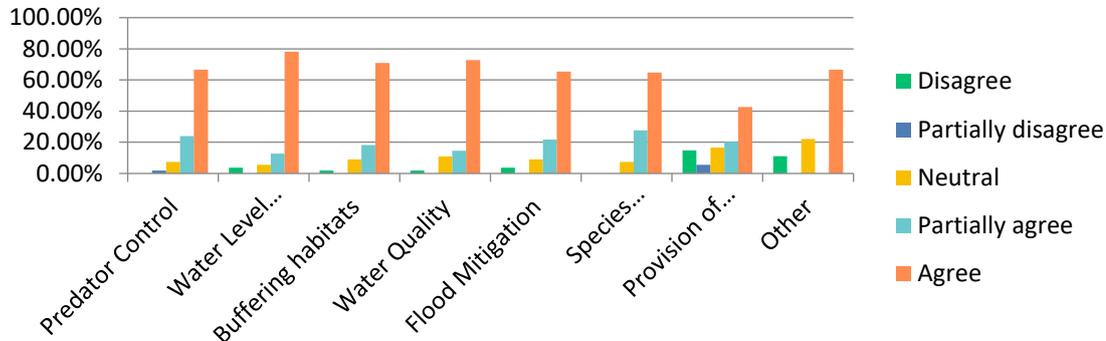
Do you agree or disagree with the following statements. "I am currently collaborating with other land managers on the following environmental management areas"



	Provision of facilities for tourists visiting the Broads.
	Water management, particularly abstraction, is the most critical issue in the Broads but there is no consensus on this because the farming community is deeply conflicted.
	Most of these are not current options as majority of adjoining land is either owned by "distant" landowners but on a (disastrous to native wildlife) long term grazing rental to PLACE or to my neighbour with great habitat but little apparent interest in managing it to date (though he has attended your workshops)
	We are doing all of these things within our own holding.
	The ORGANISATION neighbour our land and have been very helpful at times and in the areas above. However, I have not heard from them since the departure of PERSON
	Habitat creation as a mitigation measure for Nationally Significant Infrastructure projects
	Wet woodland management
	I am helping farmers in the Ant catchment resolve water resource issues. The way this is being handled by the Agencies is causing tension and will not help collaboration in the future.
	We collaborate with many other landowners in the broads, both conservation organisation and other framing business operation to discuss hydrology, habitats and successes/failures. We don't as an organisation talk much about predator control. unfortunately this is still seen as a taboo subject but is a hugely important part of managing wetland sites to benefit ground nesting sites. there are also many way that it is carried out, some effective other less so.
	Water resilience for Drought additional new water for irrigation
	Landscape
	I do mink control, regularly moan about the lack of action to improve water quality and water flow, but I am not in with the Broads "meeting click" (Those who seem to do little else but meet with one another !)

14	Do you agree or disagree with the following statements. "I would consider collaborating on the following environmental management areas in the future if part of a scheme?"
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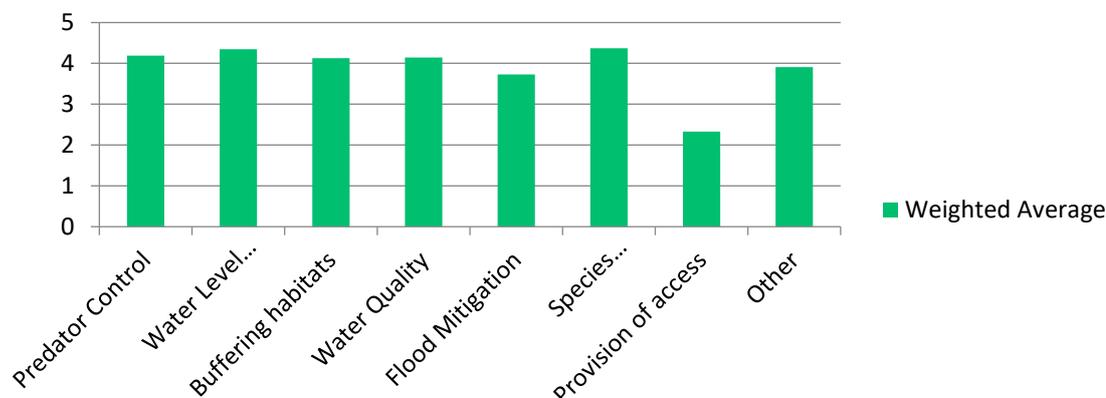
Do you agree or disagree with the following statements. "I would consider collaborating on the following environmental management areas in the future if part of a scheme?"



	Happy to allow access for the study but not public access
	A landscape management group- soil, water and air
	Enhanced offer for visiting tourists.
	There is no prospect of any meaningful collaboration in the Broads unless the critical issue of water supply, particularly abstraction, is recognised and addressed. Most revealingly your questionnaire makes no reference to it.
	Very keen to work/coordinate with neighbouring landowners to try and achieve better landscape-scale environmental improvements
	Wet woodland management
	I am not in a position to initiate and follow only commissions/requests to help.
	the only way we are going to get current wildlife population away from reserves and back into the wider landscape is by working together, putting any historical pre conception behind us and moving forward. we are stronger as a group than as individuals and the same can be said for wildlife. they don't respect borders/boundaries, they go were there is the best opportunity for them to successfully breed.
	Landscape and species protection
	Landscape
	Yes, I would collaborate but I have little confidence in this process which will be dominated by the needs and wishes of conservation bodies, BA, Nat.Eng & wealthy landowners.

15	Of the following topics that you could collaborate on which are the most likely to deliver the greatest benefits for the environment?
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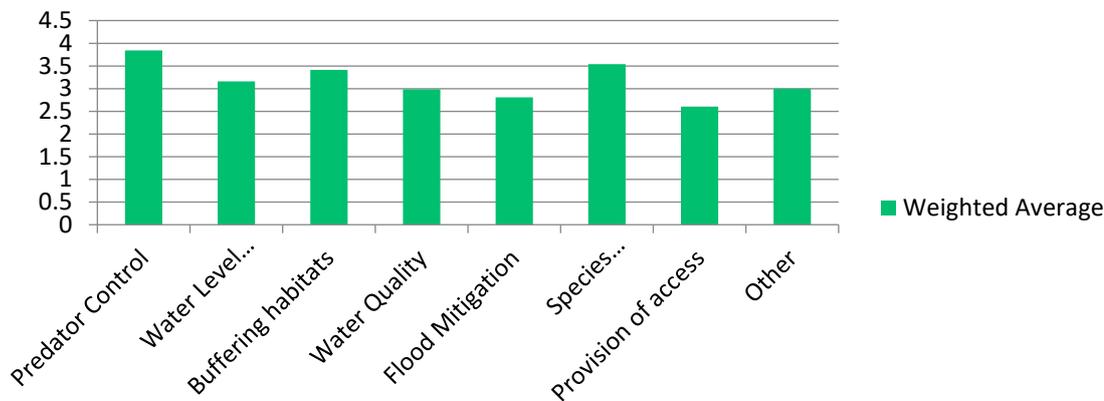
Of the following topics that you could collaborate on which are the most likely to deliver the greatest benefits for the environment?



	What is "access"?
	Providing the best experience for visitors to the Broads.
	Most tellingly you don't even have water QUANTITY on the list ! Unless the key issue of water abstraction is recognised and addressed collaboration will be restricted to minor issues, like predators. This is the #1 issue in the Broads and because of vested interest no one wishes to address it !
	Constant problem with dog walkers - they have nil understanding of animals and birds being frightened by their 'pet'
	Correct application of management methods e.g. correct grazing pressure, correct cyclical management of sedge and reed, both as a cop and as a habitat, appropriate levels of non-intervention and disturbance free areas - providing space for nature, removing conflict between development and habitat management e.g. appropriate allocation of water resource
	Site restoration, ensuring long term sustainable management and re-creation of lost habitats are all critical in the Broads.
	other areas for collaboration: grazing animal types and ages specialist machinery sharing/contracting sharing of specific expertise on all of above
	water security /drought resilience is an increasing pressure within the region
	Landscape, greater area that is protected
	Getting local people involved, interested and give them hope that things will change and improve.

16	Of the following topics that you could collaborate on which do you consider would be the easiest or most difficult to collaborate on?
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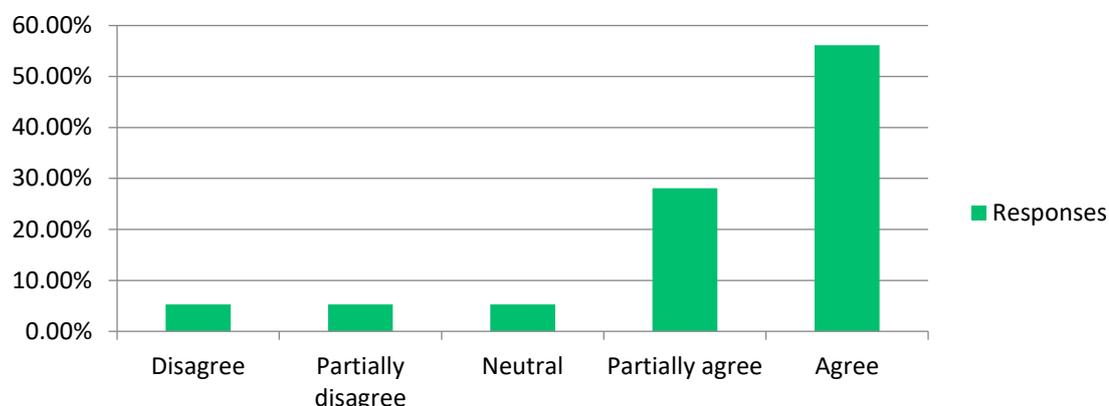
Of the following topics that you could collaborate on which do you consider would be the easiest or most difficult to collaborate on?



	What is "access" ?
	Improved experience for visitors.
	There is no consensus on water issues in the Broads because of the vested interest of the farming community. Unless this issue is recognised and addressed collaboration except on incidentals like predator control will be a sham. You risk building the equivalent of "Potemkin villages" which so impressed Catherine the Great!
	Again loose dogs and people upset natural habitat. I strongly believe it should be made law that persons with a dog keep it on a lead at all times when away from their own property. I have had to euthanise a calf only this week after a dog ran it into a gate.
	Issues around predator control: depends on what is regarded as a predator to control (ie. not in favour of the old style gamekeeper "if it's got a hooked beak - kill it" approach)
	Correct application of management methods e.g. correct grazing pressure, correct cyclical management of sedge and reed, both as a cop and as a habitat, appropriate levels of non-intervention and disturbance free areas - providing space for nature, removing conflict between development and habitat management e.g. appropriate allocation of water resource
	Nearly all of the big hitters in terms of biodiversity delivery will be difficult otherwise they would have been done. All the easy stuff is being done. It emphasises that making real, long term change that has significant benefit will be difficult because fundamentally if these benefits are to be realised will need wholesale change in the way land is managed.
	water security /drought resilience is an increasing pressure within the region
	Without getting local people onboard and interested, I think any improvements will be difficult.

17	Do you agree or disagree with the following statement. "I should be financially rewarded for collaborating over my environmental delivery?"
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Do you agree or disagree with the following statement. "I should be financially rewarded for collaborating over my environmental delivery?"

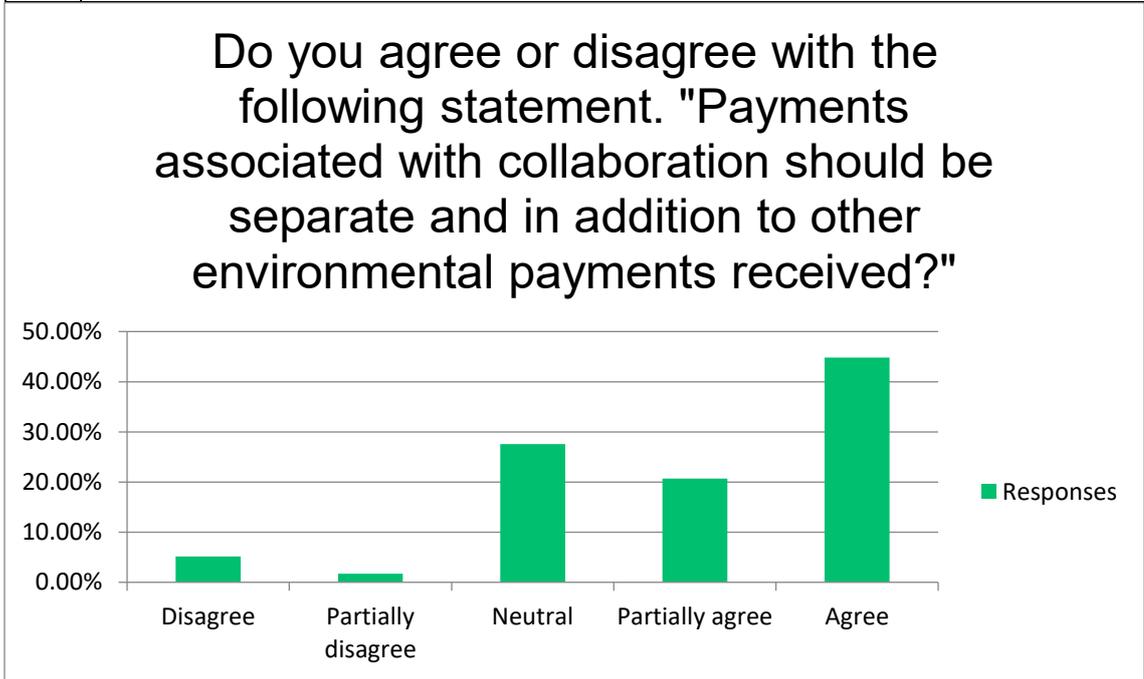


The cost of additional work to sustain environment habitat and public access would be helpful.
Anything that takes extra time and effort needs reward since it diverts you from other aspects of what you do
Only if you go above and beyond what you may already be doing in an environmental scheme and the objectives above plus others of local importance are set out to be improved. Mother nature doesn't always let you achieve these goals every year.
I guess because it is such an open question, and very early days, it depends on how any collaboration scheme is set out and what is required from land owners etc. There will always be a feeling that work for the environment benefits everyone and everything, and so land owners should not be financially rewarded. But speaking from my experience, much of the conservation / environmental work would never get done without financial reward for various reasons.
If we are providing public goods at our own cost we should be compensated for those costs.
The key issue for the future of the unique ecosystem of the Broads is water supply but there is no consensus on this, nor any present means of achieving it. Unless and until there is, collaboration will be either meaningless or a sham.
Any kind of management of any system equates to time. Time equals money. I am a farming business with a loan, mortgage and family to support, not a charity.
Collaboration should be within the spirit of an enviro agreement anyway
If the extra benefit from collaboration is due to a conscious decision and not just serendipitous
Difficult if I am willing to be flexible but have a limited number of adjacent landowners and/or if they have no interest in collaboration.
Should be compensated for potential income forgone and any costs incurred.
Reward for collaboration is fine but it should not be at the expense of farmers who are already doing a lot, or will do a lot, on their holding, especially if that holding is already of an ecologically viable scale. The aim of collaboration should be to achieve the necessary scale, not an end in itself.
Collaboration will enhance environmental delivery over and above individual isolated schemes and ought to be financially rewarded, collaboration increases the likelihood of fulfilling the Lawton Report objectives.

<p>As financial support for the production of food is currently viewed as unimportant, farmers will need to be financially assisted for environmental delivery to make ends meet. All custodians of the land want to see a thriving environment but we can't do it for free.</p>
<p>There needs to be some incentive to encourage collaboration. Any financial payment should recognise the value of a landowner making that choice and recognises a commitment to what may be in many cases 'making a change' and 'committing to managing in an environmentally sustainable manner.'</p>
<p>Some neighbours work well and have similar ideas, others have a very different view! A large financial incentive would be required with the latter.</p>
<p>There needs to be a financial incentive to provide environmental delivery, whether with or without collaboration. I needed to collaborate in the Broads Grazing Scheme in 1985 because marsh rents had fallen to loss making levels for the landowner. I had a choice of ploughing up grass marshes for arable production (I implemented a drainage scheme in anticipation of this) or I could collaborate in the Grazing Scheme. I chose the latter.</p>
<p>carbon capture will be a competitor</p>
<p>If farmers are to be encouraged to collaborate and achieve the same environmental delivery as other landowners / stakeholders they should be given access to the same or equivalent financial rewards, funding and tax exemptions to create a level playing field</p>
<p>Successful collaboration will mean a pre discussed balance from all interested parties, some sacrifices and some gains will inevitably result, if sacrifices affect the ability or compromise earning potential from the land then the potential income should be protected in the form of payments. Failure to agree a payment structure will lead to gaps in the plan in terms of some landowners opting out and continuing to do their own thing. If a carrot is to be dangled it must be sufficiently succulent to make a bite worthwhile!.</p>
<p>If it's for public benefit then there should be a strong element of public funding. Also if it does not benefit the landowner they will not cooperate. Only the conservation organisations have wildlife as their core purpose.</p>
<p>If your primary reason for collaborating is financial will you be able to collaborate effectively? Support will work if the chemistry is right first.</p>
<p>if financial reward is needed to get people talking and collaborating it should be available but a better way would be that people who collaborate are more likely to get entry into a scheme and have increased benefits within the scheme such as being able to use it as a promotional tool for their products across the whole farm.</p>
<p>If the collaboration brings greater benefit then there should be financial incentives</p>
<p>rent to pay, need to make a living. compensation needed for loss of potential agricultural output to make a scheme attractive.</p>
<p>Anything that takes me away from my core business of food production needs to be compensated.</p>
<p>Outstanding outcomes could be rewarded to encourage others to go that extra mile</p>
<p>It is covering the cost of providing enhanced managed habitat and loss of income that comes from removing areas that previously provided financial benefit to the business.</p>
<p>N/A for IDB however, land managers need longer term sustainable business plan so provision needs to reflect this expected commitment</p>
<p>Ware I am carrying out an option that is part of the greater good but detrimental to my own business needs</p>
<p>Participation in the scheme is collaboration really. there will be extra costs if trying to work with others and some compromise may have to taken into account</p>

How about "I should be financially penalised if what I do has a detrimental impact on the environment"

18 Do you agree or disagree with the following statement. "Payments associated with collaboration should be separate and in addition to other environmental payments received?"



Separate payments focused on different activities to sustain environmental habitat and public access , are joint exercises in total farm management and splitting payments would blur mutually beneficial activities and ring payments would tend to separate mutually confirmatory actions on environmental planning .

Its important to keep areas distinct from each other to aid clarity

Tough one, payments going beyond the basic in a collaborative group which go above and beyond what an individual can achieve should be rewarded.

Where possible, it would make sense to combine the two, otherwise collaboration objectives in one area may differ or conflict with an individuals environmental objectives. However it may be difficult to set up a system to tie the two in together.

The two are different.

You are not addressing the key question of water QUANTITY. Unless and until this happens collaboration will be either a sham or focused on incidentals like predator control.

To ensure by going the extra mile, this is acknowledged, rewarded and therefore may encourage others to participate

The 'extra' payment incentive to collaborate could be beneficial to forming larger areas.

See previous answer

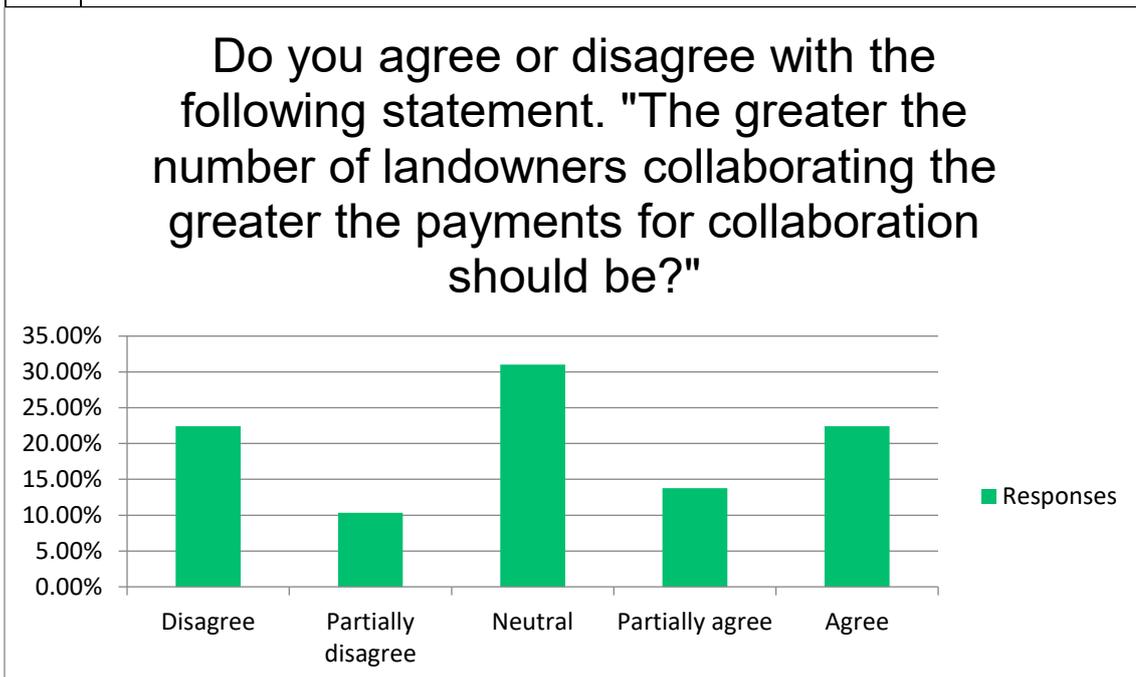
See previous comment: depends on views and actions of neighbouring landowners which is outside an individual's "control"

Extra benefit should be identified to give incentive to participate.

Collaboration should benefit all but that does led to all neighbours agreeing and working harmoniously together, and therefore scheme members should not be penalised if they cannot find collaborative partners

	Difficult question to answer. Maybe the payments could be paid retrospectively or phased during the lifetime of an agreement following successful collaboration rather than as an upfront payment
	Not far on a isolated farmer who wants to embrace environmental changes and all their neighbours don't want to be involved.
	Other environmental payments might not include any element of collaboration. Each situation should be judged on local and varying criteria. There should not be a "one size fits all" approach to this.
	payments for projects such as flood mitigation should be separate and payment should be linked to the cost savings for councils, insurance companies, utility companies and property owners in achieving a reduction in flood damage thro flood mitigation
	The ESA scheme was a good example of local area success.
	There are additional costs associated with collaboration that do not accrue from doing it wholly within a farm holding. These costs need to be recognised.
	It's a new concept to me maybe not ready to say yet
	this should be a pre-requisite of entry into a scheme.
	Should be specific to the type of collaboration
	Depends if it would influence other payments?
	If it is dependent on then then it will be a limiting factor
	done well could incentivise, poorly dissolution potential partners
	Payment must be separate, it's not a given that neighbours have the same philosophy.
	It looks like neither Cutters nor Graziers are going to get any share of any future funding so really this is a pointless question

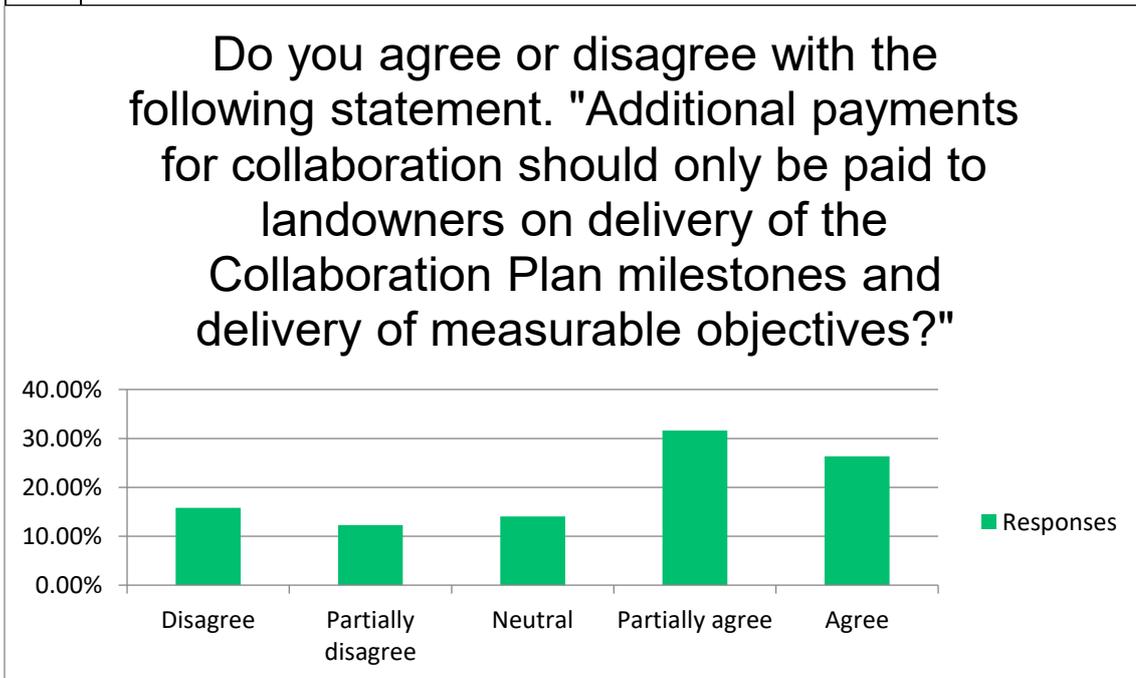
19 Do you agree or disagree with the following statement. "The greater the number of landowners collaborating the greater the payments for collaboration should be?"



It's not about number of landowners but areas and occupiers
Extending " joint " collaboration financial support would underpin commitment to any programmed environmental habitat mutual cooperation .
More effort is more cost
This would detract from very specific, special sites which maybe unique to a small locality.
I can see how this might motivate others to join and do environmental work, but at the very least there would need to be a cap in place, and see payments distributed fairly depending on what a land owner was actually doing as part of the collaboration.
The wider the area covered the greater the potential for benefits to be delivered.
Unless you address the water QUANTITY issue about which there is no consensus in the Broads, meaningful cooperation will not be possible. It is a precondition.
This must depend on what is happening not just the number of people involved
There should be the aim to collaborate anyway where it is environmentally beneficial - should not be a need to keep increasing this payment.
It would be an administrative nightmare I would think
See above. Also if we are looking at landscape scale improvements it is not just number of collaborating landowners that is important but the area (and quality) of contiguous land that could be a factor
Depends on the project.
That statement does not take account of farm/estate size. The key surely is the area not the number of holdings.
Collaboration should be encouraged for good of the objectives and results which favours all in the long term, but not economically dependent.
Any scheme shouldn't be based on the number of landowners committing to a collaborative venture but should be based on the potential of the collaboration and the outcome and outputs of that delivery e.g. more efficient water management, increased wildlife, more efficient grazing management and quality product at market.
Again the more people involved the more opinions you will have, and therefore more problems, so yes a higher payment would be needed. It's not far to punish smaller farmers who's neighbours will not embrace the scheme.
Collaboration on a small, local scale should not be penalised by being judged against a large-scale scheme. Neither one nor the other would be necessarily more beneficial.
limiting payment to large dominant landowners can be detrimental to small landowners.
Yes it's a scale thing and there are no economies of scale - the more people that are involved, the more time it takes and the more cumbersome the management, this all equals time, and cost.
A larger group is more work so maybe the end goals will need to be more modest.
each landowner should receive additional benefits from being in a group that is collaborating, they shouldn't necessarily receive greater financial payments individually.
Everyone should be rewarded so the more landowners collaborating the larger the payment. Provides an incentive to collaborate

	The payment should be based on results for the environment and compensation for time spent earnings lost etc.
	it's not about the number of people but the area they can influence
	Smaller collaborations maybe delivering more so needs to be on a case by case basis.
	No idea how that would be reasonably organised between those with a large garden or paddock and those with a productive farm.
	yes if sliding scale payments then outcomes will need to be a factored/conditioned SMART objectives etc
	Please understand that it is the land users and managers, not the landowners who provide the effort and incur the costs associated with the provision of the goals that are identified. The exception is where any undertaking has a long term and irreversible effect on the landowners capital asset.
	depends on which part of collaboration
	Again, this is all about the status quo so really not applicable to those outside the box.

20	Do you agree or disagree with the following statement. "Additional payments for collaboration should only be paid to landowners on delivery of the Collaboration Plan milestones and delivery of measurable objectives?"
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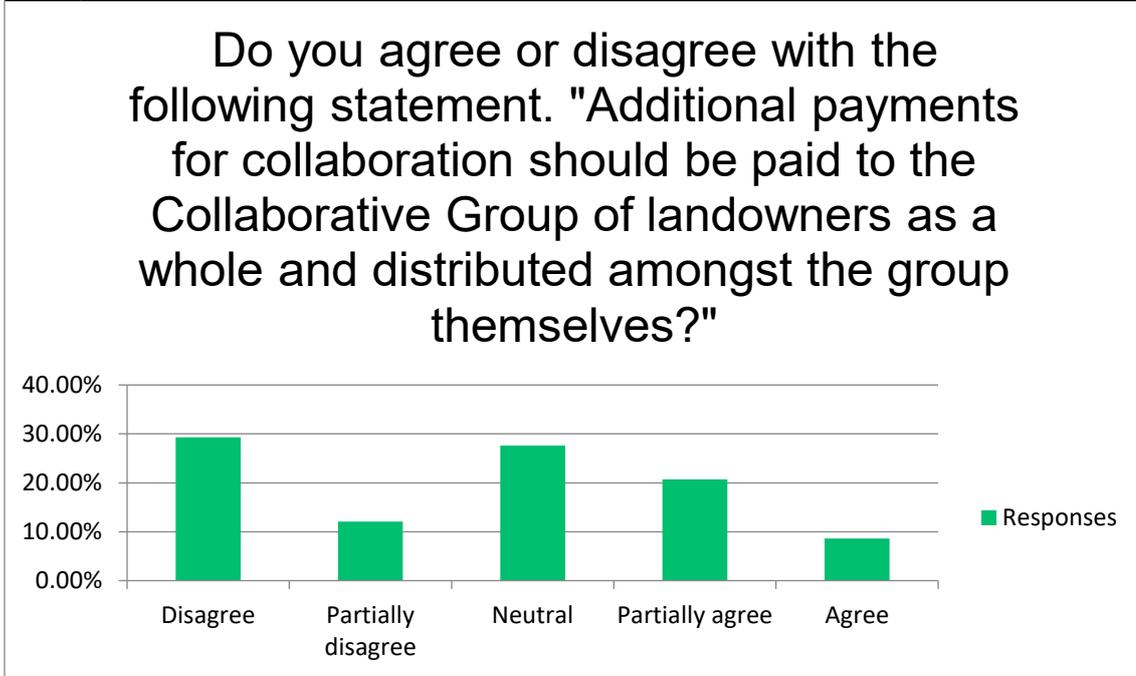


	Financial support should be paid within the schemes parameters to fund the cost of any work to sustain the environmental collaboration.
	What happens if one member of the group fails to meet objectives
	As mentioned earlier, nature doesn't recognise results. It can be a harsh master. A cold May was followed by the beast from the East the following spring and had devastating effects on brood survival and bird numbers.
	As said previously, there is so much negativity and anger directed towards land owners who take payments, and never complete the environmental work, or do it poorly. I would agree to pay land owners up front before completing the work if there was more enforcement / checks when the work is actually completed.
	Successful delivery of measurable objectives may not ALL be within the landowner's control

All deliverables should be subject to independent audit. 10% of all grants should be earmarked for this and paid to qualified professionals. Self assessment should not be an option.
if collaborating then there should be a reward and not necessarily just results based as one party might hold back the others
Conservation is life or death for some species
On the basis that some 'collaborators' will not deliver, not everyone should be penalised.
the outcomes from collaboration would need to be demonstrably greater than the sum of the individual farm actions
Stick as well as carrot required
Good in principle for milestones but measurable objectives could prove difficult.
I am unsure of the justification for making payments simply for collaborating.
It depends upon the language, milestones and objectives is OK, outcomes is not as it creates complexity and risk particularly if species specific.
Traditionally independent businesses coming together, and then being penalised as a whole because of the failures of one of the party could led to very negative outcomes.
Maybe the payments could be paid retrospectively or phased during the lifetime of an agreement following successful collaboration rather than as an upfront payment
Yes some people are all talk and no action. Managers completing there work should not be penalised, by the failures of others.
The payments should be based on intent, not on delivery of objectives which might not be delivered (for a wide variety of reasons beyond the control of the participants).
Some farms/areas/habitats will take longer to achieve objectives through no fault of landowner, but would still be valuable area included in scheme.
Depends who sets the milestones and measurable objectives, some large landowners/ stakeholders may want to set the bar higher than many smaller landowners can achieve to discourage them from participating and thus leaving them with a bigger slice of the funds available.
Payment on delivery will be the incentive in the first instance.
People should be paid on results not intention.
There may be a case to incentivise results but there will also always be external factors which determine results e.g weather
Almost impossible to administer. Some landowners will have better results than others with the same input. Could also become competitive
So long as the milestones are realistic and measurable
Delivery might not be in the hands of landowners. e.g. Climate change. Drought and flooding
Got to be paid on achievements
As soon as it is measured it becomes an over riding objective which will remove diversity and the ability to vary and area to suit its location rather than the measurement.
There will be occasions where the collective endeavours fail to materialise. Extreme weather drought& flood by way of example which are outside groups control should not result in them failing to receive payments. 68

	See my comments above
	you have to collaborate to get the collaboration payment. depends what the measurable objectives are as to whether that is a condition
	Same as 19.

21	Do you agree or disagree with the following statement. "Additional payments for collaboration should be paid to the Collaborative Group of landowners as a whole and distributed amongst the group themselves?"
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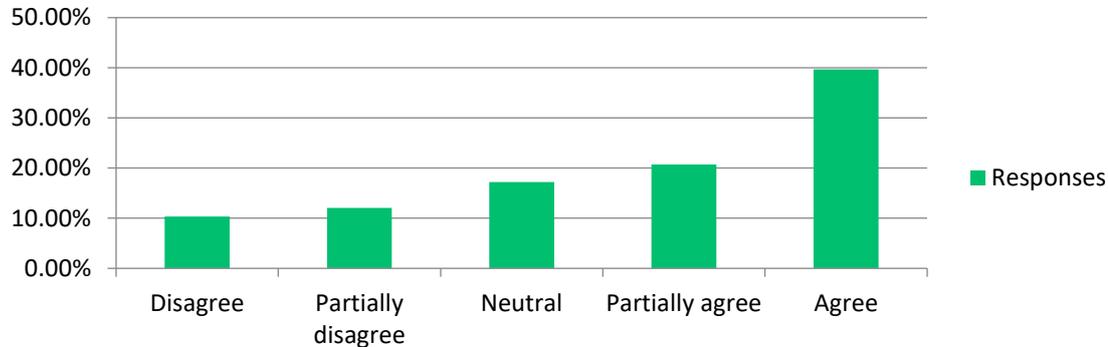


	Any payments should be made to individual participating farmers based on their improvements. This would avoid collaborative farmer's falling out over any payments .
	Each member should receive separate payment
	The group should have an administrator.
	In the perfect world I would agree to the above statement, but I fear this could get very messy. I think it is important for either NE or the RPA to handle the distribution of money.
	Some landowners within a Collaborative Group may choose to achieve more deliverables than others so they MAY not all be equal.
	Collaboration in the Broads will not be possible in a meaningful way unless and until the key issue of water QUANTITY (ie abstraction) is recognised. Tellingly this questionnaire doesn't even refer to it !
	Not really considered this
	Payments need to be made directly to the farmer
	It gives some 'ownership'/responsibility to the group. Is it practical?
	Recipe for disputes within the group
	Hard to do fairly. Would prefer that some judgement of individual compliance/success is made to distribute payments based on results not just being part of a collaborative group
	Structure would need to be agreed by the group at the outset.

	As above.
	Payment should be based on costs incurred
	More administration and possibly division. Payments should reside with the authority.
	This depends on how the payment is structured. It could become complicated or biased if based on land area, and a set rate payment for collaboration irrespective of landownership might be more attractive to landowners with smaller landholdings but would be easier to administer if paid into a Collaborative account.
	Should be direct into farmers pocket, or at least distributed by NE or FWAG, based on completion of agreed work.
	There needs to be an agreed formula for payment. Group whim might not concur with the intent or result of individual participants.
	So long as it is equally distributed due to involvement and level of contribution
	depends on the administration costs involved distributing the payments amongst the group themselves.
	Hectarage payments are the fair way.
	This will result in resentment and undermine the collaboration as some will do most of the work and others will cruise.
	I do agree but in reality, how would this work, who would make these decisions? lot of work and potentially lots of arguments!
	Although everyone should be paid at the same rate so would this create an extra admin layer
	It should be divided and paid direct to avoid disagreements
	That's difficult to answer as it will depend on participants and on the ground relationships (Trust)
	Managing a group takes time
	no view
	Same as 19 & 20

22	Do you agree or disagree with the following statement. "Collaboration on Predator Control should attract a bonus payment where land managers are also delivering options for Breeding Waders?"
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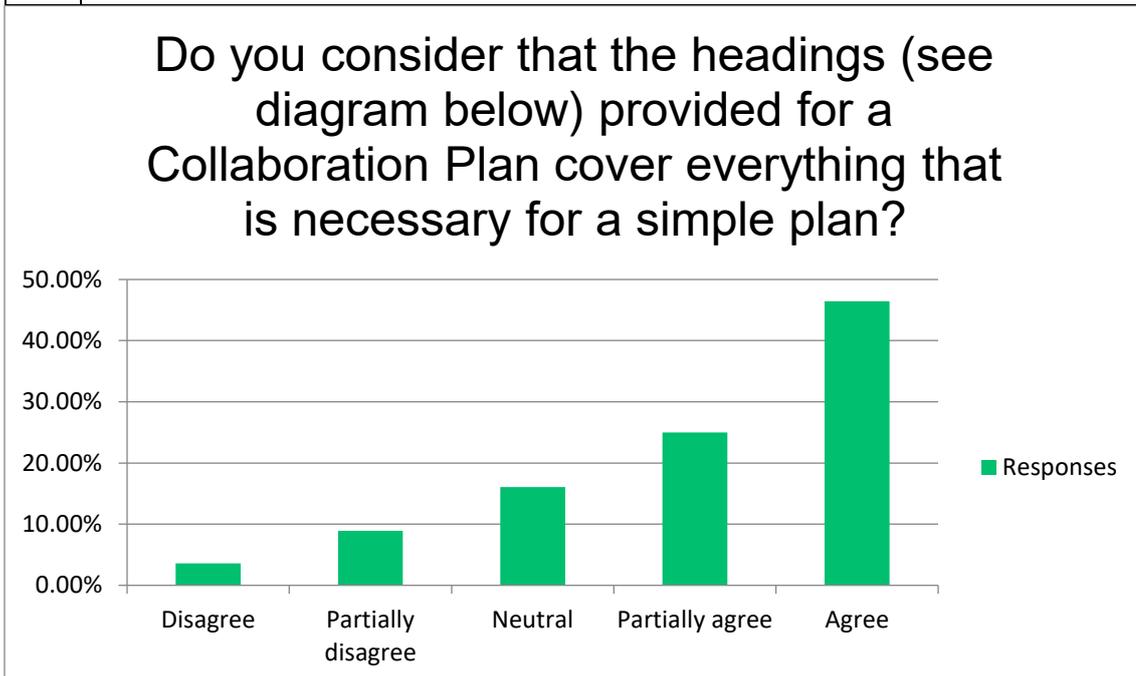
Do you agree or disagree with the following statement. "Collaboration on Predator Control should attract a bonus payment where land managers are also delivering options for Breeding Waders?"



Predator control collaboration (particularly foxes) would be enhanced by additional bonus payments .
Effort should give reward
The public and media don't always understand predator control.
Having worked with gamekeepers in the past, I think there is no shortage of people in Norfolk who would undertake predator control free of charge. Depending on the type of predator control, I think a flat rate payment would provide extra motivation. If there was money available for bonus payments, I would rather see this go towards proper surveying of predator populations in comparison to the populations of breeding waders.
Predator control is fundamental to the successful raising of chicks from the nest.
This is an incidental issue on which collaboration should be possible.
Needs clarity on what is being provided
To work most effectively Predator Control needs to be across a whole area. But, some landowners are not keen to cede control.
Yes. So long as definition of "predator" is clear and penalties applied where the law is broken (ie. for illegal killing and/or disturbance of raptors)
I don't know how much management is required!
The payment should be for delivering options for Breeding Waders. Collaboration may be one of the ways to do that.
This is dependent on breeding success. All the prescriptions met and yet the results are always skewed by predation, which should be the simplest of actions to complete.
Predator control is an intrinsic part of the suite of management protocols needed when managing for breeding waders. However it needs to be carried out in an exemplary manner, using modern techniques. This approach may be new and different for many landowners and to influence a change of approach may need some financial incentive, especially where external contractors might need to be employed or modern equipment needed e.g. thermal imagers, modern Larsen traps and to cover the time element involved in management and oversight.

	What predators are you talking about? But yes some landowners spend hour catching corvids, foxing etc, others don't bother, or they let someone play at trapping etc.
	Predator control is essential for successful wader breeding. Not all habitat within a collaborative group may be suitable for wader nesting. However, there will be varying opinions on what constitutes a "predator".
	It would need to have be determined on the level of control, the environmental habitat, level of need. A measure of impact may need to be considered
	Predator control is key to wader breeding success and needs to be clearly rewarded.
	difficult to answer as this is too much of an open question. what type of predator control, which predators, how is it carried out, why is it carried out, at what time of year is it carried out, at what level and frequency is it carried out. Ig additional financial support is needed to ensure high quality predator control is carried out directly aimed at the appropriate time of year and the species which are causing a problem I fully agree. if it was all year-round predator control for, on all species even if there was no evidence that they were impacting on breeding birds I disagree.
	Predator control is absolutely vital otherwise any habitat management is a waste of time and money
	Makes sense to hound things up
	Predators can travel in from surrounding areas
	This needs to have proven evidence of completion.
	I do not know enough about this to comment
	modest payment -done well is a very successful tool. it is resource intensive however
	I do not know enough about this to comment
	If you are paid to 'produce' breeding waders then predator control is an essential part of the process and I see no reason for extra payments.

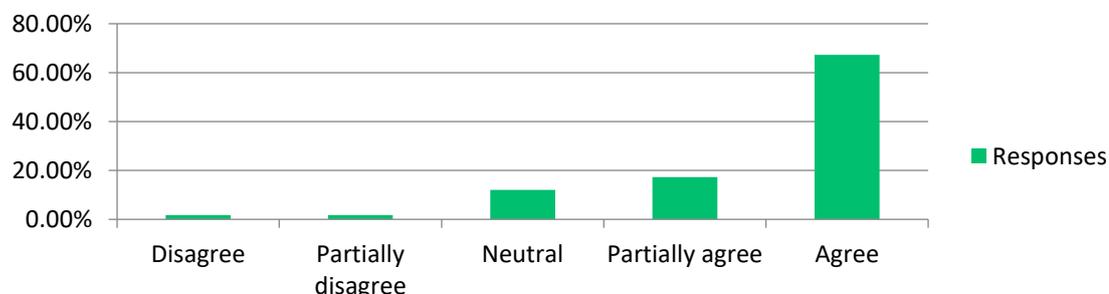
23	Do you consider that the headings (see diagram below) provided for a Collaboration Plan cover everything that is necessary for a simple plan?
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	Mutual collaboration with neighbouring /participating farmers must rely on open evidence of holdings, margins and specific objectives , which will be supported by knowledge of landholdings, coordinated predator numbers . These defined objectives will reinforce commitment and long term planning objectives.
	No mention of responsibility and method or timescales, risk assessment and or recording data
	As headings I think these are fine, giving clear steps with a clear outcome.
	The Collaborative Plan Headings are showing a love of bureaucracy and form filling. Actions will speak louder than words.
	It is revealing that throughout the questionnaire there is no reference to the most important issue for sustaining the future of a wetland of which the Broads is the UK's best, that is water QUANTITY.
	Looks simple and practical. Group Members should be updated periodically with predator activity + results of control.
	Assume parallel plans would cover other aspects such as habitat management
	As above.
	Agreement is partial as the language has switched from objectives to outcomes.
	There are some subtle actions that will need to be covered e.g. control of predators will have a beneficial impact on all ground nesting birds, predator control isn't just carried out by gamekeepers, private contractors are used. Specific targets for species would be more useful rather than a general statement indicating some form of increase - an increase of 1 breeding pair with fledged young may not be significant, so working towards a number of pairs/ha might be a better measure
	Getting gamekeepers to talk in my experience is like getting blood out of a stone. They need to be less competitive, and talk to each other. However if they are doing their job they should be carrying out all necessary predator control. There is a massive difference between part time and full-time keepers as well. The problem comes from un-keepered land.
	"Game keeping records" have in the past been manipulated and used by organisations to produce fake news propaganda for financial / media gain, this part of the plan will be very difficult to police
	You need to include (a) Funding or budget (b) a map (c) who will do what (assuming the work is not equally distributed) (d) a timetable for different actions. Most of this can be wrapped up in a single table under Actions - call it an Action Plan.
	the objectives need to be more outcome based. ie example objective is about controlling predator to improve breeding success. This objective should be to improve breeding wader success, action should be to identify predator carrying causing low success, use appropriate methods to control.
	Add regular liaison between land managers
	Makes it nice and neat just like my wet meadows
	should be a feedback loop review, adjust on evidence. share the learning
	In not all circumstances is the term " game keeper " necessarily appropriate, habitat managers with varying skill sets and training are as important to these tasks
	I do not think this applies to reed & sedge cutters

24	A short written plan to aid with collaboration could be necessary as depicted in the presentation and diagram above. Do you agree or disagree that a plan is needed to support a collaborative approach?
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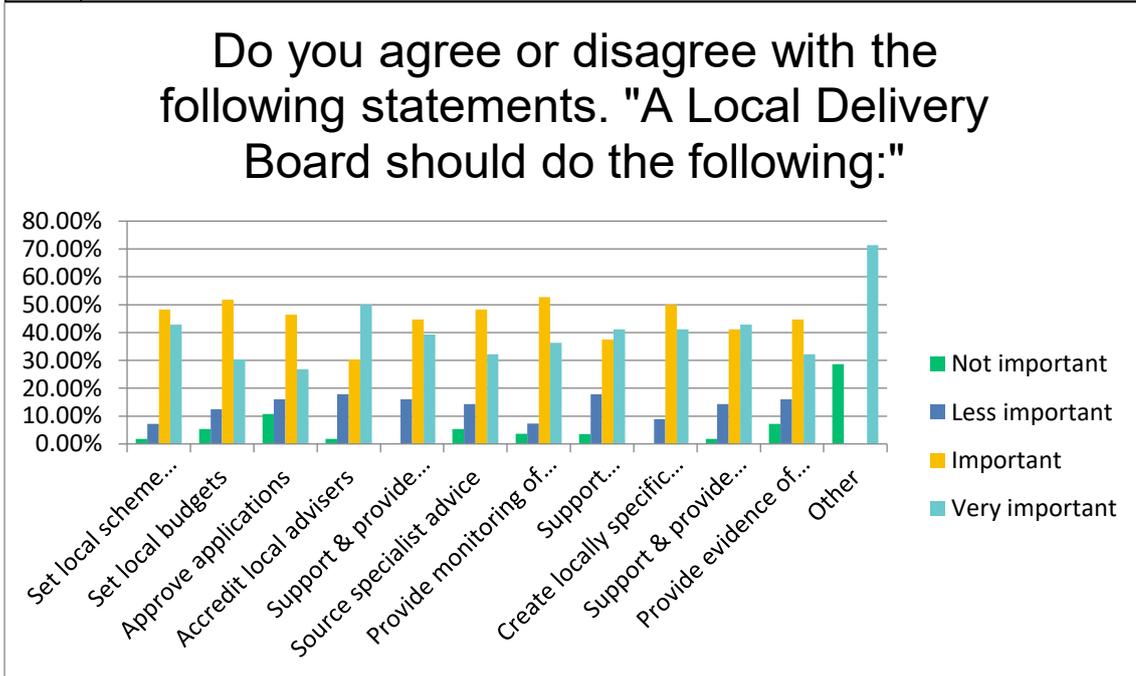
A short written plan to aid with collaboration could be necessary as depicted in the presentation and diagram above. Do you agree or disagree that a plan is needed to support a collaborative approach?



A short written plan will focus the defined objectives of collaborative team work to underpin commitment to long term objectives.
Its essential
All members must be aware in writing what they have set out to achieve in their collaborative approach.
I definitely agree that a plan is needed to support a collaborative approach, to provide much more information. Such a plan would eventually need to be tailored to that specific group of land owners, as every area is different.
Any plan needs to be simple, workable and deliver results. The old EAS scheme worked but it was scrapped and replaced by other more complex schemes which have not delivered the outcomes and have eroded trust between the farming communities and the delivery agencies.
If the present volume of water abstraction for the public water supply, agriculture and other industrial uses continues it will be impossible to manage successfully the wetland tiers envisaged for reedbed and fenland management. The issue can't be ducked ! It is a precondition for any plan.
This may be a way to do it but local circumstances may dictate other ways.
It would be helpful in order to clarify the process.
A plan is necessary to create target milestones .
Essential for individual landowners to understand and value the commitment they are making and to appreciate the outcomes and outputs expected of them and the group
But lots on flexibility within the plan to suit different working methods
Please see details supplied for question 23
You need something short clear and written down. Its also important for accountability both among the collaborating partners and because its public money. If they are put of by having to read and make a plan, they are not interested enough.
it would effectively be the 'contract' that everyone signed up to and would held accountable too.
Everyone needs to know exactly what's expected of then.

	It means that all partners are aware of their responsibilities
	A plan is essential - formatting a plan to all look the same and then meet measurable targets is not.
	having term of ref /MOU important in the event the wheels fall off the relationship/s and people needing to be reminded of whats been sign up to, 10yrs is a long time over which change is certain
	It is always important in any collaboration that a clear description of aims and obligations and opt outs is agreed
	Same as 23

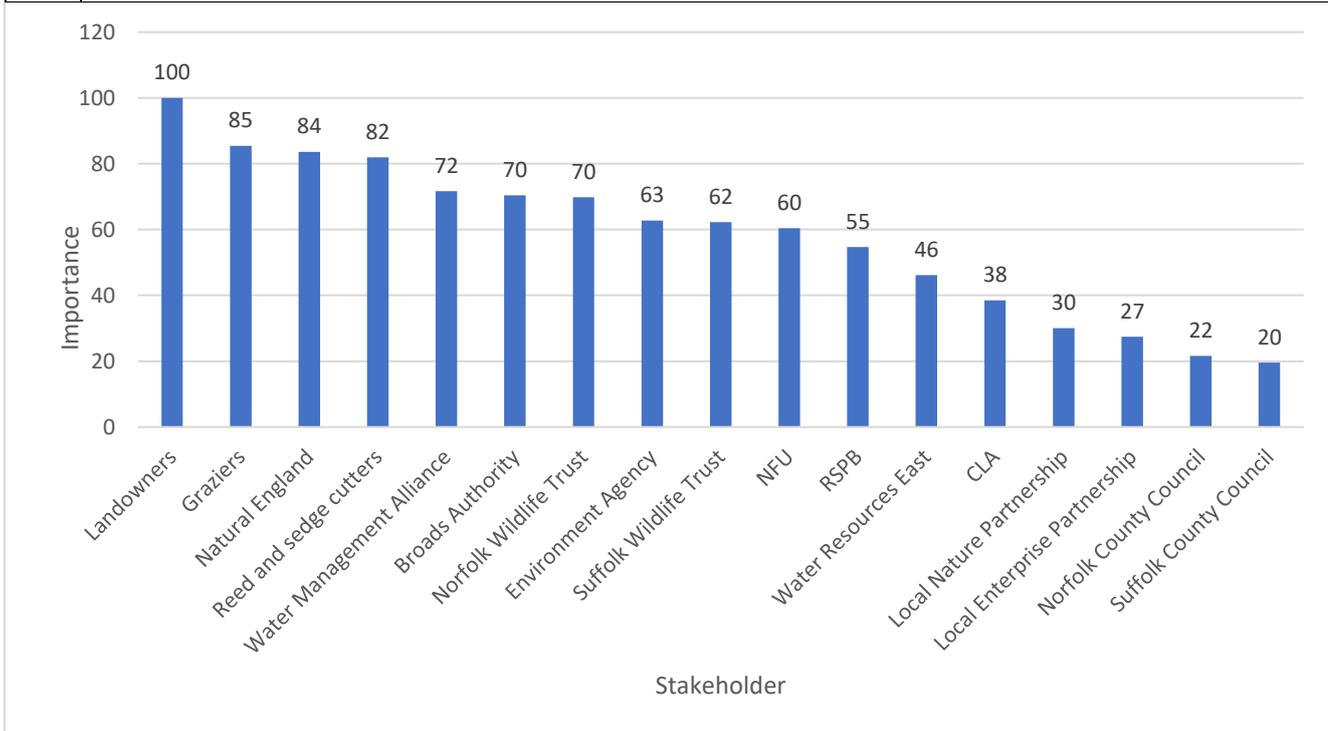
25 Do you agree or disagree with the following statements. "A Local Delivery Board should do the following:"



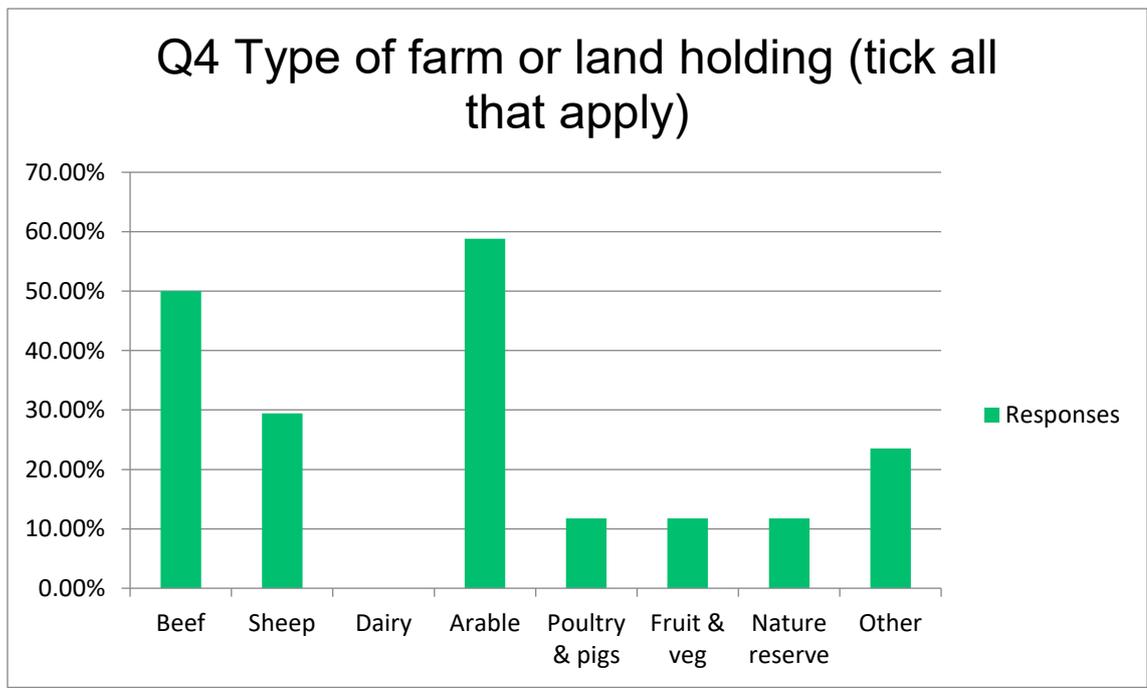
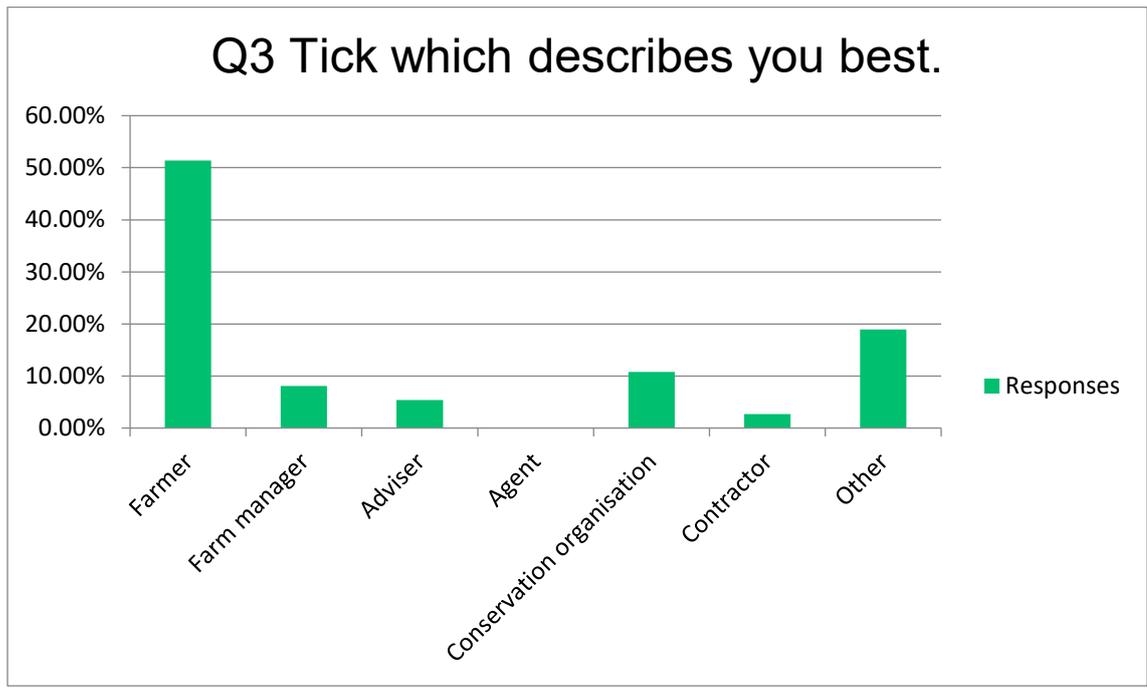
	It all depends on the make up of a Local Delivery Board. Get it wrong and people will not join or eventually leave.
	I do not agree with the concept of A Local Delivery Board.
	The implication is that by talking you will reach consensus. Because of the strong vested interests in water abstraction in the Broads this won't produce results unless that issue is first recognised and addressed. Water Resources East is a good example ie a talking shop
	I do not know enough of this concept to answer these questions. I think I would rather be given the tools to do the job on our holding than be told what to do by others.
	The question as phrased suggests Local Delivery Boards will exist in the future. Has that decision been made, if not then this approach is presumptive and any answers to the questions posed would only have value if the context of an alternative system were described i.e. how would the scheme and collaboration be managed if there were no Delivery Boards?
	Correct people need to be on the board, not the same old people, with the correct surname!!!. Practical people with working knowledge, and understanding.
	Each local group should be monitored and managed by a neutral body or person within the group

	I think I was meant to agree with all those so is that OK. Danger is the local delivery board becomes another cost rather than a distributor of benefit.
	The Board could do all as very important but would need full funding etc. There is a risk that existing good relationship are lost though.
	Communicate with local residents.

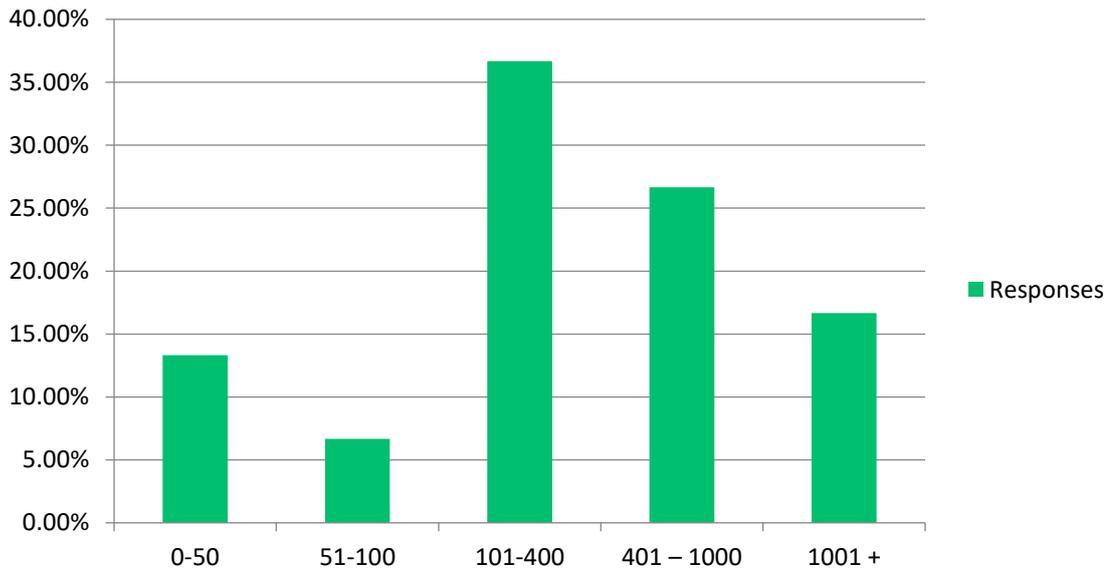
26 Which of the following stakeholders would be required for a Local Delivery Board to work effectively?



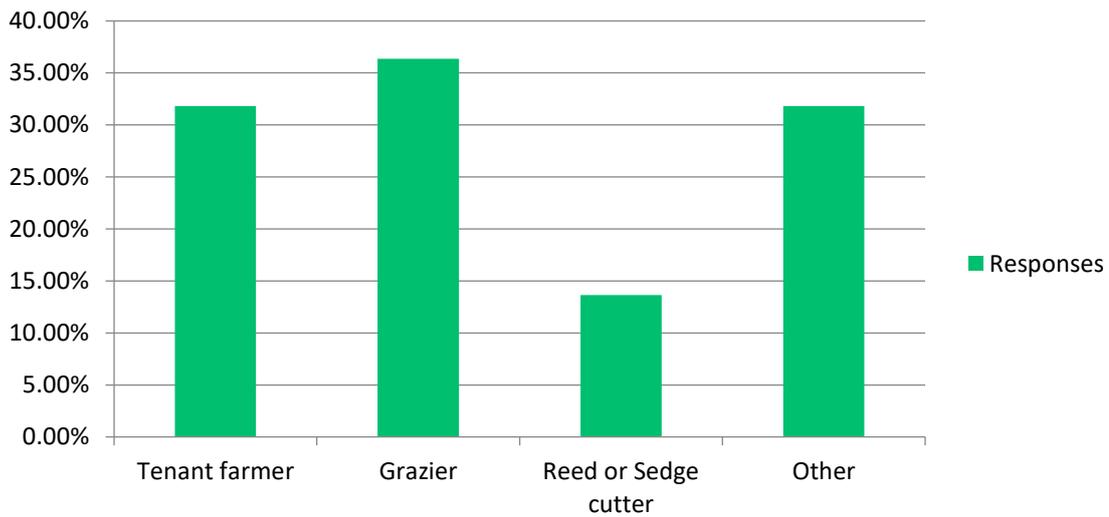
Survey 2 - Interventions, payments, and monitoring and verification



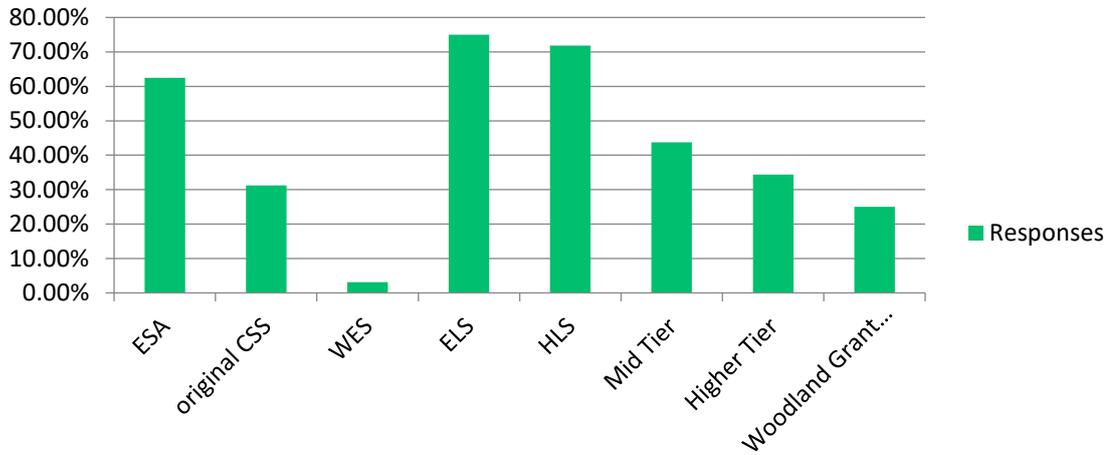
Q5 Size of farm of land holding (ha)



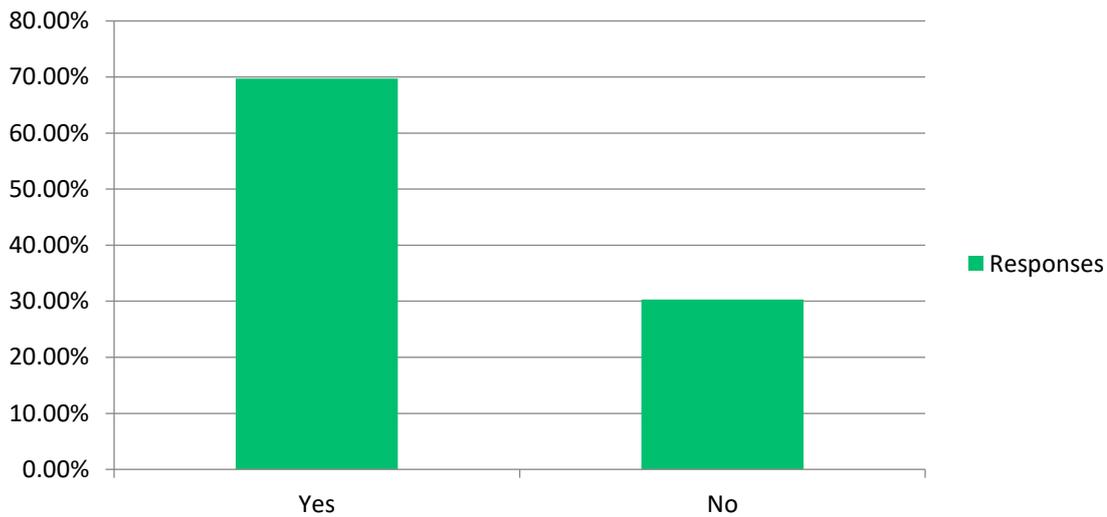
Q6 Please tick if any of these apply to you



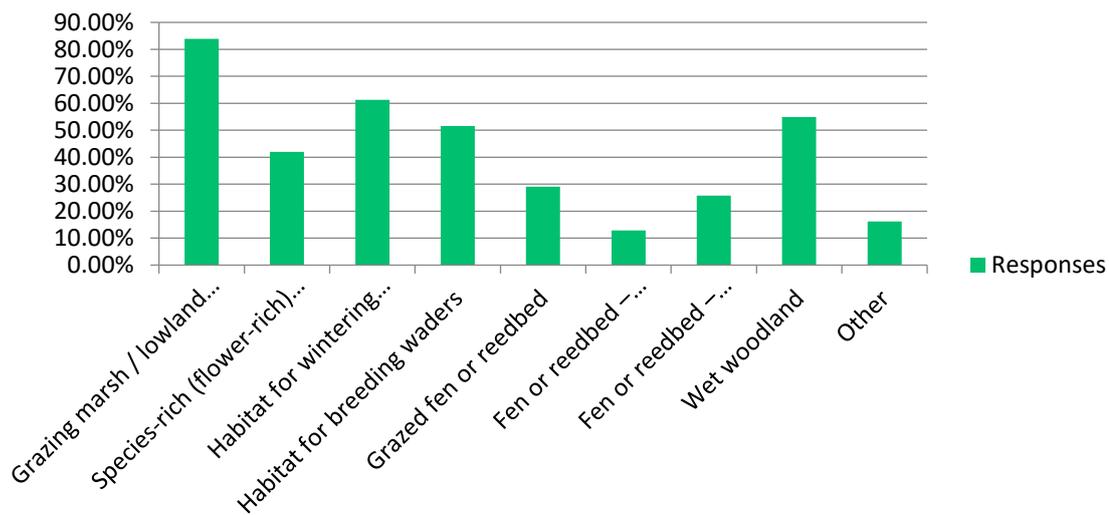
Q7 Which of the following agri-environment schemes have you been involved in? (tick all that apply)



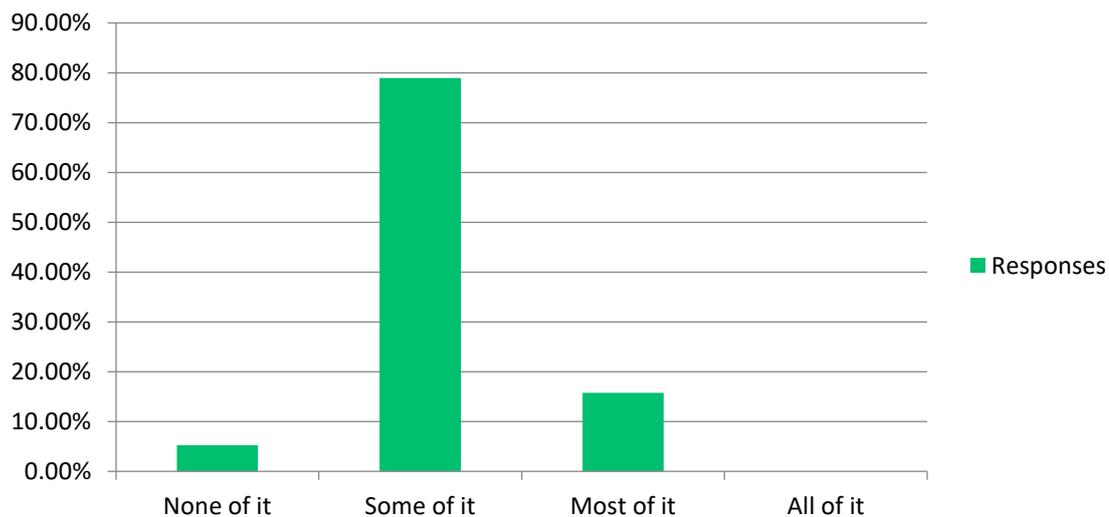
Q8 Do you have a live agri-environment agreement?



Q10 Which habitats do you currently manage? (tick all that apply)

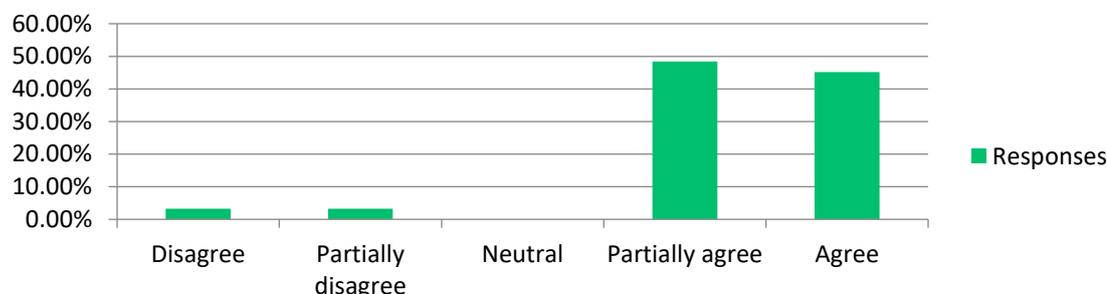


Q11 How much of this information presented was new to you?



12 Do you agree or disagree with the following statement? "The draft Tier Structure adequately captures the land management interventions needed to manage grassland, fen and reedbed habitats in the Broads."

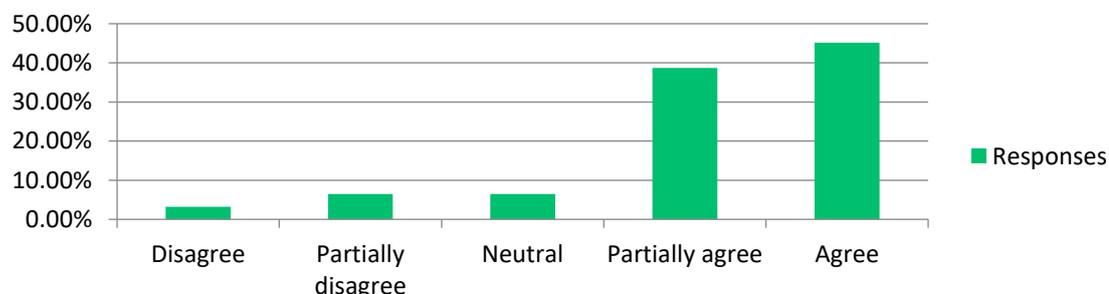
Do you agree or disagree with the following statement? "The draft Tier Structure adequately captures the land management interventions needed to manage grassland, fen and reedbed habitats in the Broads."



	The key is flexibility to be able to move up or down the tiers to find what is achievable.
	It captures the best bits from previous schemes. There should be something for everyone
	This is a simple yet progressive tier structure which captures all the necessary requirements for environmental enhancement, and when linked to good advice will help farmers to achieve the required outcomes
	I agree that you have adequately captured the land management interventions needed to manage grassland, fen and reedbed. I think much more specific, tailored management will be required for different land owners, but that's further down the line.
	detailed information including specific enhancements submitted separately to AK and KT
	I would like to have a better understanding of how the breeding wader supplement would work a little concerned that is portrayed as a supplement and not an option in its own right. think management action this could be difficult to achieve properly.
	It is essential that the Broads has its own scheme as it is a unique environment and is under threat.
	At last an attempt to revert back to a scheme that is specific to the Broads not only how it is farmed and/or managed to benefit wildlife to at least in part reflect the importance of protecting/enhancing the landscape aspect (in fact much like the old ESA scheme)
	Most of the Tier structures all ready exist under ELS / HLS options and have for the last 2 decades or longer but according to RSPB data / press releases the number of waders is still in serious decline so how will keeping the same options reverse this perceived decline using RSPB data?.
	Spraying weeds should be permitted. I normally go round grass fields in early Summer with a knapsack sprayer probably using less that 1 lit of Pas & Tor across all the area. This has been particularly useful way of controlling Himalayan Balsam on newly purchased marshes. It does not prevent over grazing in the winter on grass field se5t back from protected sites but where run off water reaches protected sites. The reed beds must be used to clean/polish water in the catchment as there is nowhere else. Water on -water off regardless of the quality of water. We've seen too much stagnant acid water during the recent dry weather which has resulted in beetle loss from sites. Water on-water off flushes reed beds and gets rid of stagnant acid water
	No mention of preference for low carbon and sustainable management.
	Suggested comments for fen meadow in Wetland Cutting Supplement apply equally for species rich fen. Likely interventions for WCS - might be worth elaborating on what sensitive burning means e.g. no standing burn, burning arisings on trays and ash removed
	Beginning to be too complicated

13	Do you agree or disagree with the following statement. "The options and interventions set out in the draft Tier Structure will provide priority public goods in the Broads." (Suggested public goods can be found on page 4 of the draft tier structure).
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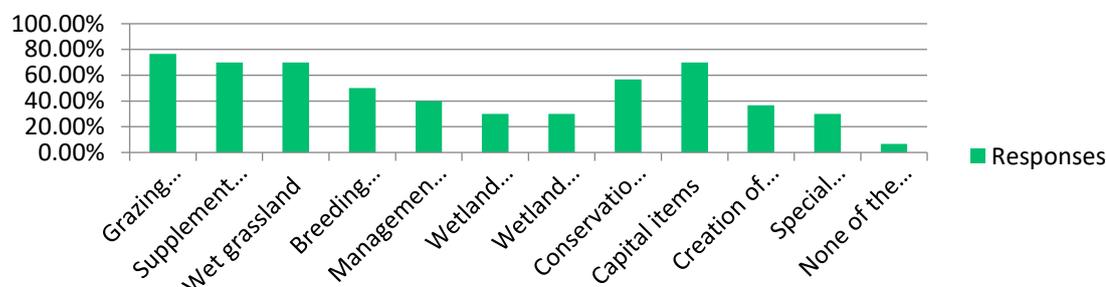
Do you agree or disagree with the following statement. "The options and interventions set out in the draft Tier Structure will provide priority public goods in the Broads." (Suggested public goods can be found on page 4 of the draft tier...



	It would be good to see the impact of carbon sequestration within the broads grazing habitats.
	All reasonable targets and statements, not all grazing marshes the same, varying from wide expanses to narrow valleys requiring different management systems.
	The none fencing of ditches could lead to reduced water quality
	Clean water is paramount with all that resource then provides and this scheme, if properly funded will greatly help to keep our water clean and even get improvement
	Yes I think a very wide range of public goods have been listed, many of them of high priority.
	detailed information including specific enhancements submitted separately to AK and KT
	In general yes but see comments related to previous question.
	There needs to be more focus on water, the key component of a wetland system like the Broads .Quality is relevant but so too is Quantity which is too often downplayed because of the extensive vested interests in abstraction.
	Potentially but as with the existing schemes will depend on their being sufficient assessment of outcomes so that the new scheme is not just seen as a source of income. On the back of that will be the need to have sufficient access to advice to help achieve deliverables.
	it would take a substantial payments to deliver some of the outcomes, but if the money is there they can be delivered.
	There is scant mention of food production /security in this draft surly this is a major issue at present
	A Public Good would be to use the reed beds to clean/polish the water. I don't agree with many of the public goods stated in page 4 Where are air & soil? and waste? Not enough on water.
	Still no agreement in the Broads on what is "good" or "bad" water quality with no agreement between Natural England and the Environment Agency. We are in a state of confusion!
	They should do, but as ever this can only be validated once the scheme is up and running.
	It should help people realistically meet targets
	Need to recognise that grazed grassland is a significant carbon sink also

14	Looking at the detailed descriptions in the draft Tier Structure, which option(s) would you be interested in applying for? Tick all that apply. Then please explain the reasons for your interest in applying for these options in the comment box.
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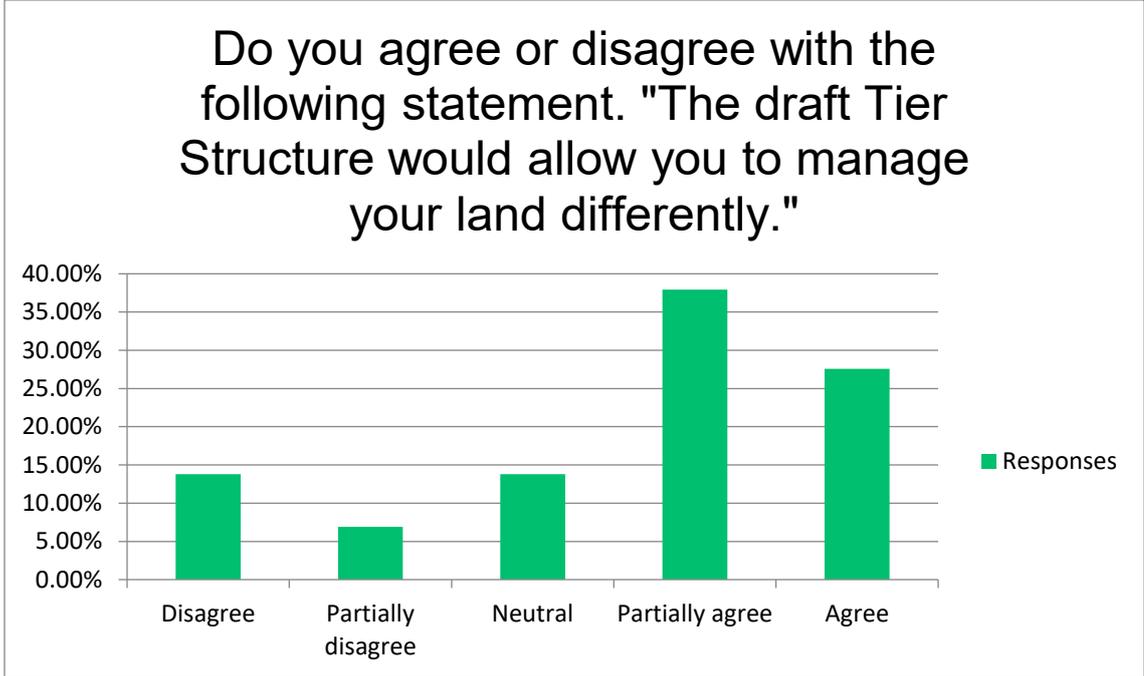
Looking at the detailed descriptions in the draft Tier Structure, which option(s) would you be interested in applying for? Tick all that apply. Then please explain the reasons for your interest in applying for these options in the comment box.



I would love to do a big bold project but would need to have some sort of compensation to offset the reduction of grazing for my cattle.
Why no supplement for breeding waders on arable land? Lapwing, Redshank and Oystercatchers plus Skylarks seem to like nesting on arable land, they nest on summer fallow and with good local predator control they can be very successful.
Potential to look at some wet grassland creation and arable reversion.
Think I would need capital grants to achieve higher tiers need to now if these grants will be 100%
I am in a river valley but have some wet meadows, some species rich meadows and some meadow which are just that a meadow, but all are important as a whole. we could look at special projects that enhance some habitats, but need the detailed advice and guidance to achieve them.
These are options that we have applied for in the past under Countryside Stewardship / Higher Level Stewardship. Such options still apply to PLACE, particularly the wetland cutting supplement, and management of fens and reedbeds, both being vital in maintaining the sites biodiversity, and well proven to be very effective. Capital items will always be vital, for example Broad dredging, dyke dredging, or scrub control.
a mixture of options would allow me to farm the land more efficiently
all of these are viable options for the range of habitats that we manage
would help financially to manage sssi and grazing marshes
All our land is currently managed primarily for wildlife. I haven't ticked breeding wader supplement as although we have breeding Lapwing and Redshank (almost the only ones in our part of the valley) it is unlikely that we have a large enough holding to qualify. We also have existing wet woodland (alder carr) so not really a special project if the is relates to creation of wet woodland.
finical reward for owning and managing to deliver on public goods.
our greatest success for lapwing breeding is on our arable conservation options we have on marshes where we have kept the arable status in place, a blanket grass land approach is not always the best option?
Substantial payments for flooding grassland upstream of towns and cities. This is a public good
I don't own any land thus cannot benefit from any of these
I have not selected arable reversion option as I have reverted all possible plots in earlier ESA scheme. I would wish to attempt the breeding wader option but fear IDB and BFAP factors has made this more difficult and a review of feasibility would be necessary.
As an Adviser one need all of these options to fit with different enterprises
I have concluded that neither Graziers nor Reed Cutters will get anything from this project.

Special projects not checked as this is opportunistic and based on land purchase. All other options are directly relevant to our existing management actions, at vary scales.

15 Do you agree or disagree with the following statement. "The draft Tier Structure would allow you to manage your land differently."



It maintains & continues what I am doing in my current HLS, however without the restriction of prescribed dates.

It's already managed extensively for HLS

As a tenant with normal business outgoings either I have to farm intensively with increased stocking, fertiliser and all plant protection products, or intensively farm for conservation with reduced agricultural activity through extensification. The choice is yours

I think it will allow us to continue to manage and enhance the reserve as we have been for many years, but I can see how it would vastly benefit neighbouring land owners.

disagree but only as we are already managing our land using the full range of options.

Sensibly the proposed structure is based on the existing schemes which by and large have worked for us.

The ability to achieve highly local-specific land management goals has been one of the biggest issues with the current schemes. This sounds so much better/more logical

yes if the payment rates are acceptable

I would intend to carry on managing the land in a similar manner to today. But there are opportunities for improved and enhanced practices too.

We have achieved success using our ELS / HLS options so why would I want to manage my land differently, or will we have to change what is working just for the sake of change.

Yes, but I think I know what needs to be done and I don't need to be told what to do.

I cannot see it will make any difference to reed and sedge cutting other than lining the pockets of those who do not do any management work.

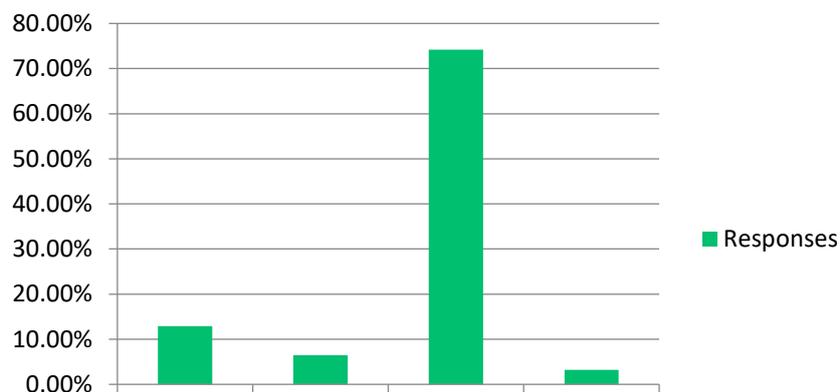
We may not want to manage our land differently but may want to adapt our management to enhance habitats and populations of species. The question seems to be asking whether our change in management would be significant, which in our case it wouldn't unless new land was purchased and the decision was made to convert to a new habitat. Under this scenario the draft tier structure seems to fulfil the objective of managing differently, subject to site specific needs and management objectives

It hopefully allows some site specific adjustments to the prescriptions. And is less rigid

We have been managing our marshland like this for years

16 Which method of payment rate calculation do you think would be most effective?

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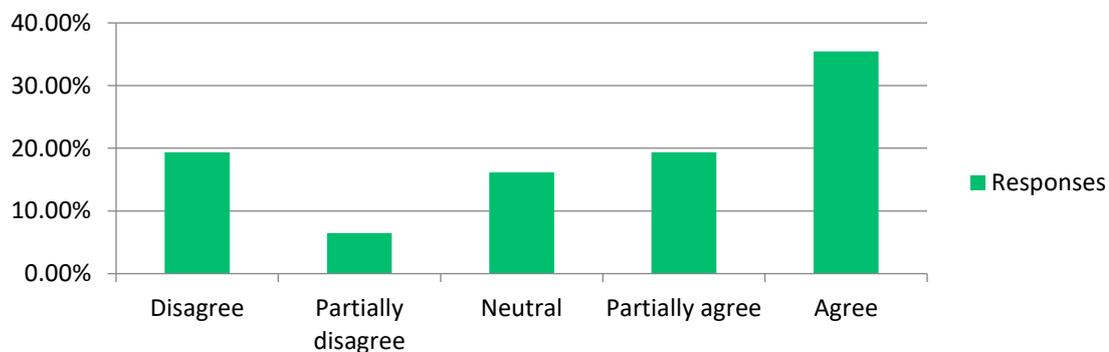
The cost of the management by valuing the results and outcomes as a public good (this is the way current scheme payments are calculated)

need to have costs recovered, the results and outcomes to be a bonus on top.
Is income foregone actually a step forward in paying for public good..... carbon sequestration, habitat management and improvement for target species found locally!?
a - this is a cost zero option. You don't actually make any money out of it so not sure what the motivator is. It must be more profitable than carrying on as usual otherwise why would anyone do it.
Option (a) as basis with (b) as an incentive to improve.
Don't want a one size fits all
The values achieved have to match the intensive approach to farming and if you go the last mile to create better habitat that should be rewarded, it is a public good. the contracts do need to be long enough to work well though
a) has worked well in the past (in my opinion), but as stated in survey 1, more checks are required to make sure land owners are completing work to the level required. I would like to see outcomes valued, however this would take much time and effort, as the same values cannot be applied to every piece of land.
option c would be the ideal but would be very difficult to deal with administratively, but appreciate that is not what is being tested here.
b. is what the public is really interested in and is not subject to the potential for manipulation which a might offer.
Despite the difficulties of payments based on results without some form of evaluation there will always be some land managers who will minimise effort to maximise returns. If not directly measurable then at least an evaluation of the level of effort or commitment on the ground should be made.
c) plus a profit, otherwise what is the point, i may as direct my limited time resources in to something profitable. if the public want these outcomes they will need to pay.
Perhaps this encompasses the objectives of the scheme most completely.
There are at present major differences with the payments, funding and tax exemptions made to different land owners who are achieving the same results in conservation this needs to be addressed to encourage base farmers, tenants and smaller land owners to join these schemes
Reed bed management should be paid on improving water quality. Poor management= no payment. This would promote active management from landowners rather than sit back and collect payments. Those doing the work eg graziers should receive more of the money. The quality of reeds produced is an indication of reed bed management. Acid water removes reed wax=no payment. Sold reeds for thatching= premium paid to reed cutter=self regulating system.

Public goods provided by the Scheme
Not really applicable to people who cut reed & sedge as they will not receive anything.
Need some recognition of basic interventions, which may provide limited public goods benefits, but for more involved, complex and developmental interventions aimed at achieving specific outcomes recognition of success needs to be factored in
I'd agree with being rewarded for achievements
b) would not work as there would not be the resources to fund monitoring

17 Do you agree or disagree with the following statement. "Part of the land management payment should be directed to the person doing the management, for instance the grazier or reedcutter."

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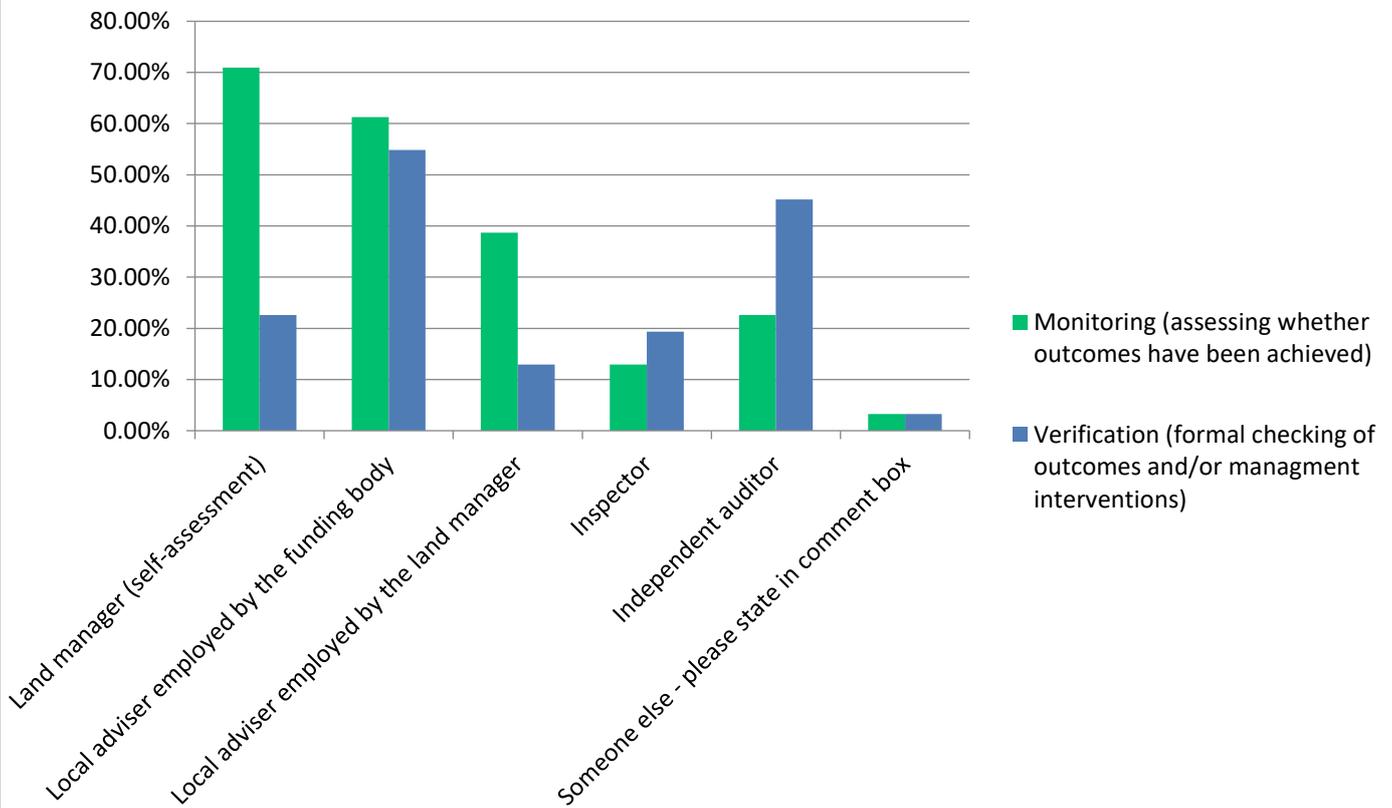


Where would be the motivation to do it if you as a grazier or reedcutter get the hassle of working within the likely restrictions and the land owner gets the payment?
The success of any improvement will be dependent on the person responsible for the management.
Land ownership these days could be anyone or any institution, this payment needs to primarily go to the practitioner. in some instances where structural change occurs to the land for the long term the landowner has to be engaged.
I think it would be incredible to be able to provide some additional payments to the people actually doing the work, as well as the land owner who has agreed to be in the scheme. Many graziers or conservation contractors work tirelessly and deserve an additional financial incentive.
Without graziers, it would be unmanageable. Current environments were created by graziers
completely support this, however how this is done, either by reduced grazing rents though proper licences/fbt's, them claiming BPS while it exists could be up for discussion.
The correct economic route is through the owner. No doubt reed cutters would like a subsidy but that would be wide open to manipulation.
While I can see the benefits of this I can also see that this could cause issues where there is a disagreement between the grazier/reedcutter over who has contributed to both a successful or unsuccessful outcome.
i think there potential to distort (negatively) the market by paying direct.
The landowner should be responsible - i.e. just one source is accountable. The landowner needs to build a relationship with the grazier by looking after him fairly. Not sure on reedcutters - not my area.
Currently only the owner or tenant can claim. No payments for horses used as grass cutters. Reed cutters need to have much more input in reed bed management.
I feel that any payment to reed cutters should be for extra work ie path cutting or fen restoration work as the reed cutting should pay for itself

	We know this will not happen with those landowners who currently pocket everything including those who have no work carried out on their land !
	Recognition of appropriate management is needed especially if this involves a change from current management, which may take some time to adapt to. It would also help overcome some situations where for example graziers are driving water level management of a landholding based on their presumption that dry grassland is better than wet, thereby limiting public goods, and within a wider landscape adversely affecting more integrated management of water levels
	Ensures fairness
	Depends on the agreement with the grazier. We do not charge rent in exchange for the grazier's management

19 Who should be responsible for monitoring and verification? You can tick more than one box for each column. Please explain your answer.

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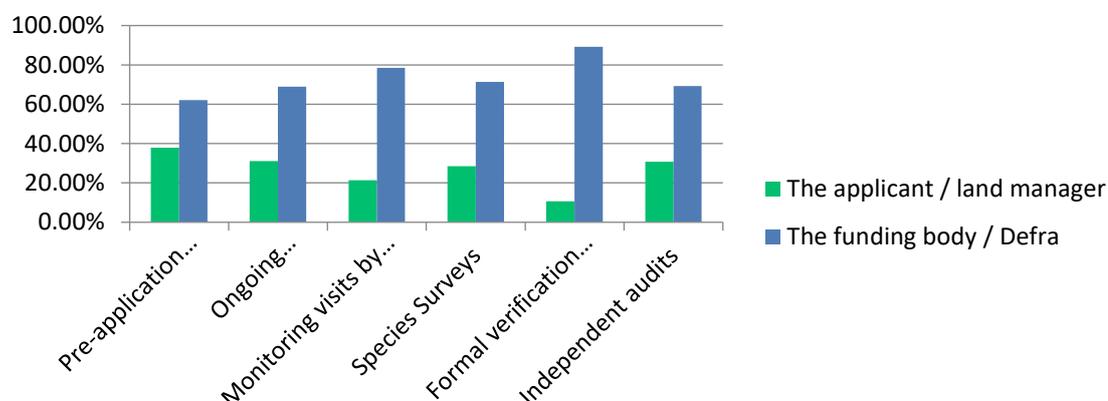


	By having a local funding body adviser doing the inspections you have a friendly face, hopefully, built a rapport, and be more willing to take advice from to enhance what you are doing and correct any shortcomings.
	Land managers and their advisers should be able to monitor targets and outcomes but there needs to be verification from the funding body to create even standards.
	Two is enough
	I think any monitoring or verification needs to be independent from the land manager, preferably an employee of the funding body.
	Monitoring and verification must be undertaken only by people who understand the unique landscape, and who are involved from the beginning. Government office based auditors are clueless

	I do think land managers could do the monitoring themselves. but appreciate some might not have the time and would prefer to get others to do it. However I don't feel they should be paid, at least not by the individual landowner. Verification needs to be done independently and there needs to be some form of 'fine' if there is clear attempts of inflating what is actually being delivered on the ground. this also need enforcing. This is why it needs to be an independent.
	The taxpayer needs to know he/she is getting what he/she has paid for. 10% of all grants should be earmarked for a professional audit by a qualified professional of which there are enough. Self assessment doesn't work and will be the preferred option of the self interested.
	As public funds are at stake verification can't really be by the land manager while monitoring can be by land manager or adviser employed by him with perhaps selective monitoring by the funded local adviser in the main targeting complex schemes or those where there is concern about compliance (or history of such)
	to get continuity assessing/verification should be done by an independent person or local adviser.
	I think it is preferable if the advisor role is separate from the inspector/independent auditor for the formal checking. Though inspector/auditor should be able to get a general update on the land management position from the advisor.
	Funding for monitoring and verification to be funded/ paid as part of the agreement package
	Make the scheme as simple as possible with minimal checking. RPA are the accountable body for delivering payments so they would probably want to check a proportion. However a species may not be present at inspection.
	The success of this scheme is around Broads Bespoke and the monitoring and verification ought to be local, to include the agreement owner in the monitoring element. If the scheme is to provide landscape wide environmental improvement the advice must be of consistent quality, the variable in the scheme is the land managers others engaged ought to provide quality advice. An advisor employed by the land manager does not guarantee quality and could be a charter for commercial organisations to provide the service. Sourcing by the funding body will I am sure include minimum criteria for potential advisors. The word inspector conjures up the wrong image for historical reasons, independent auditor sounds better dependent on the definition of independent.
	The Scheme should pay the landowner to employ accredited Adviser
	Preferable someone who is neutral and from outside the area.
	Inspector may be needed in cases of non-compliance or dispute
	There should be a certain amount of trust in this.

20	Who should pay for the following potential aspects of advice provision, monitoring and verification? Please explain your answer.
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Who should pay for the following potential aspects of advice provision, monitoring and verification? Please explain your answer.



<p>Sorry to dump this on DEFRA and funding bodies. There could be cost-sharing on surveys, independent audits, and ongoing advice. Funding going into a communal pot to be used appropriately by a landowner/grazier group, especially in collaborated schemes.</p>
<p>I wanted to put both for the first 2 and last 2 questions.... shared cost</p>
<p>If all the land owner is getting is income foregone plus management costs incurred then any of the above costs will make being in the scheme less profitable than not being in it.</p>
<p>The applicant should pay for initial advice on the potential of any scheme but this should be recouped once successful</p>
<p>The advice should be part of the scheme and fully costed in Advice needs to be relevant to the scheme it does not want to be a consultants charter.</p>
<p>I think most of it should be covered under the umbrella of the scheme. Payments for various options, for example Wetland Cutting Supplement, could be at a slightly lower rate to cover the cost of surveys / visits by advisors</p>
<p>pre application advice should be part of the package that you get as you start to apply. this needs to be independent, from an experienced advisor who understand the farming operation as well as the management requirements of the different options. If this was the applicant there is risk they would go for the cheapest option which could mean the chose options were more aimed at financial benefits than conservation outcomes. anything that is needed as part of delivering the agreement should be born by the landowner as part of that cost. how that was paid for could be either from the landowners pocket or from a local Management Board who had access to independent, professional specialist advice. specialist survey is a difficult one to answer as it all depends at what time they were needed, at the application stage probably the funding body but during the management phase by the landowner.</p>
<p>Basic economics suggests that the landowner needs to be responsible for paying for services relating to his/her land. An independent audit is essential is vital to ensure that the public is getting what it's paid for. 10% of all grants should be specifically earmarked for this.</p>
<p>independent audits not needed if advisers overseeing !!</p>
<p>Pretty arbitrary! You could argue all should be down to the land manager or funding body. Presumably if all funded then the cost would in one way or another be reflected in the levels of payment available (assuming there is a total budget for payments and "running costs"). Maybe that is the fairest/easiest way to administer with a better chance of all management functions being carried out satisfactorily.</p>
<p>this depends on the rates you are paying for the different options, if they are high enough the applicant can pay.</p>

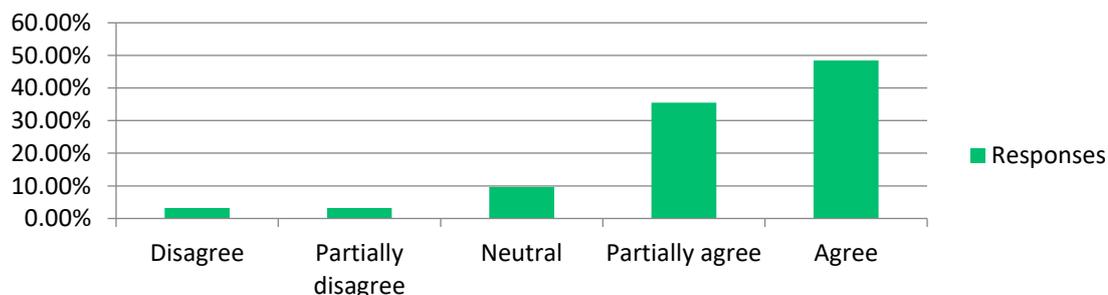
Same answer as for question 19
If the whole point of this scheme is improving soil, air & water, water quality is key to the scheme's success and to the rare species success. Just check the water quality- its a know figure and could be treated as a target for failing schemes.
Have no opinion on this
Land manager payment for advice could be a potential blockage to seeking advice. The land manager payment for monitoring, surveys, verification and audit would need to be determined at the agreement offer stage to ensure transparency and this process could disengage some applicants.
These are expensive items and an agreement holder must have confidence that the costs out-way the income
The current monitoring does not work. It needs to be done independently.
Answers are based on the premise that set rates would applied for advice provision and payment for options covers cost. Independent audits and formal verification would be to assess scheme viability, structure, success at the scheme level, not the landholding level.
Depends of level of funding

21. Rank the most important aspects of advice provision, monitoring and verification. (1 is most important and 5 is least important)

	1	2	3	4	5	6	Total	Score
Pre-application advice	58.62% 17	20.69% 6	3.45% 1	10.34% 3	6.90% 2	0.00% 0	29	5.14
Ongoing management advice	14.29% 4	35.71% 10	28.57% 8	7.14% 2	3.57% 1	10.71% 3	28	4.18
Monitoring visits by an adviser	0.00% 0	25.93% 7	37.04% 10	33.33% 9	3.70% 1	0.00% 0	27	3.85
Species Surveys	10.71% 3	14.29% 4	14.29% 4	28.57% 8	25.00% 7	7.14% 2	28	3.36
Formal verification of outcomes and/or management interventions	10.00% 3	6.67% 2	13.33% 4	16.67% 5	43.33% 13	10.00% 3	30	2.93
Independent audits	11.11% 3	0.00% 0	11.11% 3	3.70% 1	14.81% 4	59.26% 16	27	2.11
							Answered	30
							Skipped	16

22 In discussions with land managers, we identified a need for better knowledge of breeding wader habitat management, to help achieve the outcomes. We have proposed that land managers undertaking breeding wader management should attend an annual 'Breeding Waders Knowledge Exchange' session, to share experiences with other land managers and learn about 'best practice'. Do you agree or disagree with this requirement?

In discussions with land managers, we identified a need for better knowledge of breeding wader habitat management, to help achieve the outcomes. We have proposed that land managers undertaking breeding wader management should...



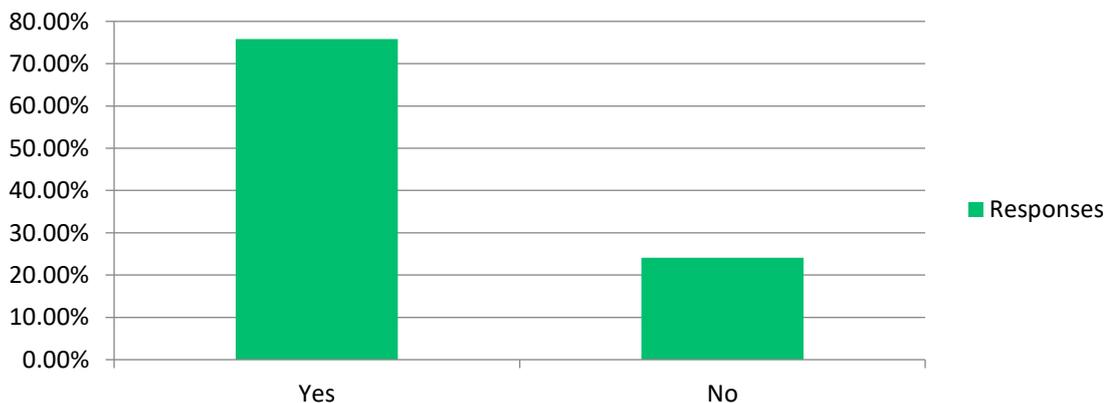
We need to learn from others, what works and does not work.

Hmm

This will be a cost to them, will it be funded?

	I have very little knowledge of this
	if you have breeding waders, not all the area is appropriate.
	Makes sense as not every land manager necessarily knows much about breeding waders, their habitat requirements etc. I am unsure if this would need to be annual, or once or twice throughout a scheme, with one at the start.
	This is an important as part of delivery. why should this be just breeding waders? to really effectively deliver wintering waterfowl you also need knowledge ie water management, impacts of wildfowling, sward management. to get the best it is not a case of taking the cows off and hoping it is going to rain.
	100% agree
	would we be paid to receive training? or is our time given up for free?
	Should be beneficial all round.
	This advice can be better achieved by independent "ongoing management advice" as listed in previous questions
	One could do all the work required and the birds don't breed on a site because of something outside the farmer's control
	Make it a condition otherwise few will bother to attend.
	Management principles are for the most part known, but adaptation and application of new management techniques would require this information to be imparted. Really useful two way process to check understanding, share experience, describe how barriers which presented themselves were successfully overcome and forum to request further advice
	It's important to information share and discuss what worked and didn't
	Could be useful
23	Are there other options or aspects of land management that you think require a regular 'Knowledge Exchange Session' to help achieve the outcomes?

Are there other options or aspects of land management that you think require a regular 'Knowledge Exchange Session' to help achieve the outcomes?



	Cost benchmarking, veterinary workshops (wormer use), agronomy and grassland nutrition workshops
	There always will be....
	All of the options
	Knowledge exchange is the basis of all land management systems.
	Weed control
	an annual seminar, either virtual or real to help instill a sense of community could be beneficial
	Knowledge exchange sessions would be incredibly helpful for any land management option for those wishing to learn more, share experiences, and learn from land owners with similar options.
	fen management and fen ecology
	Predator knowledge, weed knowledge, Grassland management, livestock management

Knowledge exchange is good in its own right
i think we can benefit from Knowledge ex, even if it is as casual as an annual farm walk on an applicant's farm.
Perhaps predator control.
Waders and the bird population have been the be all and end all with regards conservation in the broads area for decades is it not time for other species and fona get equal status
Water quality leaving sites. It also helps rank agreement holders so we can see who knows what they are doing.
Would be good to share fen management options across organisations
This is essential in the collaborative projects, it is important in a landscape wide scheme to ensure environmental connectivity, working in isolation will lessen the likelihood of successful outcomes.
Predator control
How to manage a reed & sedge bed sustainably.
Water level management in fens. Management for specific plant and invertebrate species, species reintroductions coupled to ongoing management actions and any changes needed, scheme revisions which may impact
Species rich fen



Broads ELMS Test and Trial – Interventions and Payments

Interventions and payments – notes from land manager focus groups and 1:1 discussions

Final version

Written by: Katherine Trehane

Sent to: all attendees (names removed)

Comments and further suggested changes to the Draft Tier Structure were received from: Names removed.

Dates of meetings and attendees

All meetings were led by Katherine Trehane (NE).

Date	Consultees	Delivery group attendees / other	Version of the draft tier structure discussed*
18/02/2020	Farmer group 1: 3 farmers	Katherine Trehane (NE), Mike Edwards (FWAG)	V1
20/02/2020	Farmer group 2: 2 farmers	Katherine Trehane (NE), Rob Wise (NFU), Emma Quick (NE)	V1
24/02/2020	Conservation land managers: 7 attendees	Katherine Trehane (NE), Mike Edwards (FWAG), Rob Wise (NFU), Andrea Kelly (BA)	V1
28/02/2020	Farmer group 3 (Waveney): 5 farmers, 1 adviser	Katherine Trehane (NE)	V2
12/03/2020	Land manager 1:1	Katherine Trehane (NE)	V3
13/03/2020	Farmer group 4: 2 farmers	Katherine Trehane (NE), Mike Edwards (FWAG)	V3
28/04/2020	Land manager group 2: 2 land managers, 1 ecologist/consultant, 1 agent/consultant	Mike Edwards (FWAG), Andrea Kelly (NE)	V3

**The draft tier structure is a working document so changes were made throughout the consultation process. Version 4 was sent to all consultees for any further comments on 6th April, 2020, together with these notes.*

1) Do you agree broadly with the Tier structure and options / supplements?

Farmer group 1

Yes, broadly. The options and structure aren't dramatically different to previous schemes but that's ok. We only need to create something fundamentally different if the existing system is broken. Proposed structure takes the ESA Tier concept and adds a veneer of the best bits from future schemes.

Use Special Projects for particularly tricky situations which need a more innovative form of management. BUT need to better manage what we've got first, before we create more habitat.

Ditches – need a second tier for people with really good ditches to move into (extensification, no fertilisers, etc). These could go into the species-rich option if applicants are prepared to accept the additional restrictions in that option (e.g. later cutting date). Would need to ensure outcomes are clear – clay marshes with excellent ditches won't achieve a diverse sward.

Farmer group 2

Tiered structure is good – important to engage more people at the basic level to start with. Should be reassuring for those that fear that they won't be able to farm with the new scheme. Need to get everyone on board – landowner, farmer and grazier.

Ditches – the small-field supplement under HLS was good as it compensated for people with a high ratio of ditch to marsh. Need a supplement for those with a long length of ditch. Supportive of Farmer group 1's comments on needing enhanced payments for those with good ditches.

Conservation land managers

Basic tier gives everyone the opportunity to come in, which is good. Need to make sure that payments for this aren't TOO high – disincentive to move up through the tiers.

Water resource management is a theme which runs throughout the scheme and needs recognition. *[ME: this could be covered by collaboration payments.]* Need to do a prioritisation exercise first to agree what options should / could go where based on existing Water Level Management Plans (WLMPs). Problem: these are very out of date and only cover SSSIs. Need updating / expanding.

Suggest a minimum viable area for the Breeding Wader supplement (better chance of breeding success) – smaller land holdings would have to collaborate with neighbours to get into this option.

Need a wet woodland option, now that payments are for public goods.

Need a basic payment for length of ditch and supplement for those of high env value.

Farmer group 3 (Waveney)

Not supportive of the proposed Tier structure. Too prescriptive. Too much like HLS/CS. Shouldn't try to replicate the ideal 'nature reserve' management across the whole area.

Need to avoid being too piecemeal. Look at the whole farm – what are the aspirations for management? Should identify the natural assets and issues/constraints and write a plan for each farm.

One person wasn't keen on the word 'option', but others saw this as meaning that you have a choice.

[Follow-up e-mail from one of these farmers 6/4/20, after seeing the revised Tier Structure (v4): I think the basic suggested format is a good start.]

Land manager 1:1

The draft tier structure is on the right track. Keep the best bits from previous schemes – scrub the rest. Not against wet woodland being added to the scheme.

Farmer group 4

Broadly ok with the tier structure as long as payment rates are adequate – see Q5. Try to get the whole thing on 2 sides of A4 (like ESA prescriptions). Gives flexibility to put most land into the landscape tier, with blocks of habitat tier in the more interesting / wetter areas.

The tier structure suggests that we're aiming to continue with habitat management in broadly the same way as we have before. Theoretical question - should the Broads stay like this forever?

Land manager group 2 (their own notes)

In principle this is a sensible and realistic approach. In our view there should be the following clear underlying principles :

- 3.1 A clear statement of objectives at the outset.
- 3.2 The establishment of an independent baseline line from which success can be properly measured and assessed .The absence of such a baseline has made the benefits from previous environmentally based schemes unverifiable and therefore open to criticism.
- 3.3 The need for an independent audit of results (see comments against Q7).
- 3.4 The new ELMS scheme should build on the areas of success from previous schemes especially the ESA. The ideas drafted in [the draft Tier Structure] seem to reflect the best practice from earlier schemes.
- 3.5 We believe that SSSI's and adjacent land should be covered by a separate scheme to be entirely administered by NE rather than the RPA, allowing a more detailed approach to be taken.

To a large extent the HLS/CS schemes for the Broads have worked and it is reassuring that Katherine in her paper appears to have used them as a basis for her discussion draft. There is no need to “throw the baby out with the bathwater,”. It is recommended that the Broads be covered by a separate tiered scheme but with applicants able to apply for the basic ELMS offer in addition to the Broads scheme.

The boundaries of eligible areas need to be flexible enough to allow areas of adjacent upland to be included in the scheme so that the problem of diffuse pollution and run off can be covered under the scheme and recognising that many Broads graziers also have upland parcels of land which are cropped and thus produce materials which can be used for grazing operation, such as straw. Options on adjacent land might cover reduced fertiliser inputs, including a switch from wheat to barley; spring-rather than autumn growing of cereals, reversion to low input/no input grassland, 20m wide margins against watercourses, pollen and nectar mixes, wild bird food, uncultivated headlands, existing adjacent grassland options covering low/no input options but to be paid at a level equivalent to a reversion option less an allowance for establishment.

It is envisaged that Tier 2 ELMS options should include:

- Grassland – no and low input, breeding waders, overwintering waders, species rich grass, hay making supplement, variations to allow winter grazing with safeguards to ensure only very limited poaching, allowance of some supplementary feeding, field corners/rough areas, small patches of scrub allowed(no more than 5%) but not mandatory, paid at the same rate, rare breed supplement.
- Woodland : non-intervention, managed wet woodland
- Watercourses : appropriate water level management, ponds and open water
- Fen management : supplement for cutting
- Invertebrate management supplement
- Scrub management
- Arable reversion to grassland
- Capital works : sympathetic dyke restoration, water control etc.

It is accepted that there is a place for larger schemes as currently envisaged for Tier 3. It is understood that this tier be largely designed for landscape-scale enhancements (eg the Halvergate Marshes, the North Norfolk Coast etc) for example, establishing sufficient areas of habitat type to encourage wildlife and environmental improvement on a massive scale, such as might be delivered by returning the whole of Halvergate to grassland and saltmarsh. In this regard collaboration between neighbouring landowners is very important and should rightly be incorporated into the scheme.

2) Do you agree broadly with the outcomes and likely interventions – any glaring errors or omissions?

Tracked changes made in the Draft Tier Structure. Additional notes/rationale for changes below.

Farmer group 1

Some ditches need to be fenced, particularly on peat – animal welfare. Technological advances may enable ditches to be left unfenced in future (GPS collars on livestock). *[KT suggestion: capital funding for future innovations.]*

Fertilisers / farmyard manure – need site-based flexibility. The use of these is often part of a system so need pragmatism (some fertiliser on hay / silage fields allows extensification elsewhere).

Farmer group 2

Broadly, yes. Need flexibility to change interventions if not working. Broad-scale ‘derogations’ may be needed.

Basic tier - add in an outcome for uncut areas / woodland edge habitat / ‘untidy areas’. See also the comments under question 3.

Conservation land managers

KT pointed out that Habitat for Waders and Wildfowl (since re-named ‘Wet Grassland’) is more aspirational than old ESA Tier 2 / HLS options as it requires that water levels are actively managed in winter, instead of just capturing rainfall in surface features. There was broad agreement for this *[KT: implications probably need more detailed discussion with WLMA]*. BUT need to make sure that people in this option don’t allow increased wildfowling, as they will have a lot more birds. Not saying NO to wildfowling, but need a Defra-level discussion on how to determine what is genuinely sustainable wildfowling.

Could have a ‘No wildfowling supplement’ – increased payment through collaboration with others across an area. BUT shooting will increase around the outside. Need a baseline restriction on the option.

Farmer group 3 (Waveney)

Options need to be available on a part-field basis. Need to accommodate edge habitats / successional areas (scrub/reed) – don’t exclude these from payments.

Boundary ditches may need to be fenced – disease control.

Need flexibility. Don’t try to decide from the outset exactly what you’ll do for the next 5 years. This results in completely inappropriate options/prescriptions.

Outcomes = artificial aspirations / more reasons for an inspector to fail you. Should decide what you’ve got and what management to do, and let nature decide what outcomes you get. Results in higher biodiversity as everywhere is different (peat marshes V clay marshes).

Need description of habitats present on a farm and what you are trying to achieve (indicators of success).

Cluster farm groups - outcomes need to be individual – you should not be penalised for someone else's failure. Have individual aspirations and group aspirations.

Predator management should not be a requirement of the scheme – should be allowed and encouraged but don't mention it in writing (public perception). Predator fencing = good idea (increasing badger population). Need deer fencing for wet woodland.

[Follow-up e-mail from one of these farmers 6/4/20, after seeing the revised Tier Structure (v4): I think the basic suggested format is a good start. However, I would be reluctant to see any ban on shooting as such a lot of unpaid conservation work is done on farms with shoots. Also, wildfowling does give a motivation for good water quality.]

Land manager 1:1

Supportive of the annual information sharing event as a requirement of the breeding wader supplement – land managers should want to go anyway – show commitment. No extra payment for this.

Supportive of minimum area threshold for the breeding wader supplement – not fair to pay for this if it's not going to work. This will encourage collaboration.

Wildfowling doesn't fit well with the scheme. Doesn't sit comfortably with a public money for public goods approach. Discussion needs to be had over how/if wildfowling fits in the new regime. Conflicts with nature conservation. Suggest that the wet grassland and breeding wader options shouldn't have any wildfowling of any kind. Not sure about the basic grazing marsh option. Keep some land separate for traditional wildfowling. Definitely no commercial shooting.

Predator control is needed to achieve environmental outcomes. He appreciates the concern about public perception of this, but we need to take charge and develop a reasonable and practical approach. Educate the public.

Each agreement needs a maintenance plan for ditches and footdrains/scrapes – review this periodically, as required.

Farmer group 4

Need to allow some fertiliser on basic grazing marsh option, as currently struggling to finish animals after they come off the marsh. Plus need enough silage for winter feed. Suggest 80-90kg/ha N with a buffer strip to protect ditches. Manures – not very practical. Apply in the autumn.

Recommend that each agreement has a ditch management plan (reviewed annually).

Predator control is a taboo but it is the reality of the situation.

Avermectins – need a minimum of one worm/fluke treatment while on the marsh. Organic farmers test first but this is labour intensive. Expensive to do a post mortem / blood test. Restricting

ivermectins is a nice thing to do but might not be practical. Is it really an issue? Farmers have been using ivermectins for years.

[Follow-up comments 9/7/20 from one of these farmers after reading the veterinary advice at the end of this document:

Currently use one injectable flukicide when cattle come off the marsh, plus pour-on wormers throughout the season. Used to do additional oral drench for fluke but no longer need to. Pour-on is cheaper than injectable and labour costs are much lower. Testing for worms was the only reason they didn't go organic – too labour intensive. Unworkable for large systems. No crushes on the marsh. Big risk not worming – cattle come off marsh skinny.

This farmer grazes an RSPB reserve, and the reserve manager commented that he is not concerned about their graziers' worming systems in terms of impacts on invertebrate food availability for birds. See also SWT comments on ivermectins on page 23.]

Land manager group 2

Various suggestions were provided on a copy of the draft Tier Structure. Some of these were incorporated into the final version, but some were a little too detailed – these should be considered if the Tier Structure is developed further in future.

3) How prescriptive should the likely interventions be? e.g. do we need an earliest cutting date for basic grazing marsh?

Tracked changes made in the Draft Tier Structure. Additional notes/rationale for changes below.

Farmer group 1

We do need some prescribed management – farmers don't always know what is best for wildlife. Need quality advice from ecologist to guide you and fine-tune the management to your land. Prescribed management needs to be necessary to achieve the outcomes – otherwise why have the prescription? [*On this basis, we agreed to remove the cutting date from the basic grassland option, but keep dates for the waders and wildfowl, and species-rich grassland options (since combined into 'wet grassland').*]

Horse-grazing is a hot topic for many in the Broads, but mainly because the animal charities pay inflated grazing rents and push up the price for the traditional graziers. Shouldn't say 'no horse grazing', but should limit stocking densities and timing of horse grazing for certain options.

LU/ha/year should be a guide – not prescribed. Applies to whole grazed area.

Allow creep feeding for calf condition and welfare. KT asked if we need to restrict supplementary feeding at all. Consultees thought we should leave the basic requirement in there as a safeguard. Need a facility for blanket 'derogations' to allow supplementary feeding (and other variations from standard management) in extreme weather conditions. [*KT: local management board could issue these?*]

Need some guidelines on ditch maintenance in upper river valleys where gravel bottoms provide spawning habitat for fish – do not deepen ditches? Also need the facility to create in-channel features, meanders, etc – capital item / special project?

No objection to the proposed restrictions on avermectin-based wormers, but need to recognise that avermectins are important for resistance prevention – use at end of season and not when cattle are on the marsh. Develop alternative worming strategy with a vet. Alternatives are more costly (e.g. vaccinate for lungworm) – payment rates need to reflect this. Worm risk is not that high in extensive systems (low stocking rate).

Farmer group 2

Don't mind prescriptions if they are concise – give a framework for management. Need to make it clear what applicants will be assessed against. Prescriptions should deliver outcomes. Farmers like guidelines / structure. If you take the Queen's shilling, you need to follow the rules.

Talk to vet about avermectin restrictions (recommended Ben Crowter or Tom Hume, Westover Vets). Herd Health Plans for Red Tractor accreditation include a worming strategy so avermectin restrictions could be built into that. Most farmers do want to use fewer inputs in general, but there is always the fear of changing and getting it wrong – impact on herd health and profits.

[SEE NOTES FROM CONVERSATION WITH BEN CROWTER AT THE END OF THIS DOCUMENT – as a result of this discussion, KT amended the wording in the draft tier structure v4 to recommend that land managers follow an alternative worming strategy for 'cattle' (not 'livestock'). The question remains as to whether this should be a basic requirement for all tiers, or just the Habitat tier?].

Horses – OK in 'basic' but not in 'better'. Don't want to preclude conservation grazing with ponies. Shouldn't be eligible for supplements. No Livestock Unit for horses – makes it hard to restrict stocking rates. Could list horse breeds that would be acceptable?

Artificial fertiliser – could state this is only allowed where taking forage.

Conservation land managers

If we have no prescriptions, only outcomes, then how do you measure these? Big issues with self-assessment – needs simplification. How do you police / verify this?

Supportive of prescriptions where they are needed to achieve the objectives. We know that some habitats do better with certain forms of management, e.g. which stock type for breeding wader marshes. Shouldn't allow sheep on species-rich meadows (graze out the wildflowers).

Farmer group 3 (Waveney)

HLS/CS – constrained by dates. Need to build a culture where farmers are trusted. [KT pointed out that the proposed basic grazing marsh option does not specify any dates.]

Do need to have some rules. Management doesn't have to be proactive. Should just have some basic requirements for the grazing marsh / river valley grassland option (one person commented that he was happy with those on the basic grazing marsh option v2).

Upper river valleys should have naturally functioning water levels. Water levels no more than 45cm below marsh level won't always be achievable.

Land manager 1:1

Doesn't mind the concept of 'prescriptions' although it is certainly not a positive word. 'Guidance'? Too weak? Need something legal and definite. 'Interventions' suggests an element of improvement but he is not overly keen on this term. Suggested 'instructions' – perhaps a bit more appealing, but still carries the necessary authority. Whatever term you use, need to inspect against these.

Not keen on self-regulation. Always fails. Money needs to be seen to be going to the right place.

Farmer group 4

Prescriptions / interventions are fine but derogations will sometimes be needed.

4) Various questions on grazing supplements, the wetland cutting supplement and capital items – see those pages in the Draft Tier Structure document (v1).

Tracked changes made in the Draft Tier Structure. Additional notes/rationale for changes below.

Farmer group 1 (not discussed)

Farmer group 2

Grazing supplements: One person supportive of a native breeds supplement in the Broads scheme, but the other would like this to be part of a wider ELMS offer. Is there any difference in carbon impact of grazing with native V traditional breeds (could Andrea Kelly commission a study??). Supportive of a conservation grazing supplement.

Conservation land managers

Wetland cutting supplement: How do we direct payments to cutters? Landowner could pay royalty to cutter for every bundle of reed (reverse of the current situation).

Distinction between commercial and conservation cutting – hard to determine exactly how much commercial cutting will be done (seasonal variations). Need the flexibility to switch from one to the other each year. One person said that we should treat commercial and conservation cutting the same, and the payment should go to the cutter.

Supportive of capital items for reed cutting.

KT asked what the group thought about making the cutting supplement into a capital item. Response: could work but need flexibility – not set amounts each year. 3 quotes every year = big admin burden. Standard rate preferred – would have to differentiate between commercial and conservation cutting (note problem with this above).

Payments to cutters and graziers could distort the rental market – landowners / agents will just put the price up. Need to talk to land agents about this.

Reed bed management could be looked at over a larger area – management plan and provide a mixture of cutting regimes from commercial to conservation.

Supportive of a Conservation Grazing supplement. Not keen on native breeds – too restrictive. Need to be able to change stock/grazier in response to availability.

Farmer group 3 (Waveney)

Paying grazing supplement to graziers will only distort the market / grazing rents. The negotiation should be between the landowner and the grazier. Graziers aren't interested in the land - won't invest in the site. Prefer the idea of a 'difficult site' supplement instead of conservation grazing supplement (for small fields, etc).

Land manager 1:1

Not keen on directing payments to graziers. Two people getting the payments = complicated. One person needs to be in charge. Landowners need to look after graziers – may need to pay them.

KT asked if we should be doing something to address situations where the landowner charges too much for the grazing and the grazier doesn't comply with the restrictions of the scheme (as they need/want to maximise their income from the land)? Response: the market should control this. If the rent is too expensive, don't take the land! Landowners should charge a fair amount and get the grazier on side to manage the land correctly. The inspection regime needs to have teeth in order to regulate this – not the adviser (advice and inspection = separate roles). Those who are doing things properly should welcome this.

Keen that the scheme supports the reed and sedge cutters.

Farmer group 4

The future is not looking good for lowland livestock producers. May pull out of livestock altogether. Graziers provide a grazing service – need an income from this. Some graziers have asked to be paid but landowners say no. Other graziers will step in and take the grazing in the short term so landowners still have the upper hand. Likely to come out in the wash eventually.

Owner of grazing animals should get payments. If the landowner wants to charge a rent then you can decide if you want to pay or not.

Could have a grazing supplement for all options which should go to the grazier, but also need the option payment to be substantially reduced if landowners choose not to graze.

5) Which outcomes could be subject to bonus payments for achievement of certain levels of outcome? (Plus other comments on payments.)

Farmer group 1

Not keen on this – adds complexity. Should be expected to achieve the outcomes as a requirement of the base payment. Regular review with trusted adviser. Give land manager the chance to improve management, but if that doesn't happen then don't pay them. If the original scheme was ill-conceived then change it.

Information-sharing, collaboration and an element of competitiveness between land managers should help achieve results. *[ME explained the idea of a programme of ~~training~~ information sharing events for land managers – obligatory for those doing breeding wader management to attend an annual event; optional for other tiers – could get a bonus payment for attending. Like NEROSO points.]*

Must achieve outcomes in order to move up through the Tiers.

Payments need to be index-linked to keep pace with market changes – long-term management is needed to achieve outcomes.

Farmer group 2

Long and interesting conversation but ultimately came to the same conclusion as Farmer group 1. Like the idea of outcome-based payments but how do you measure and verify? Potentially very time consuming. Results aren't instant – would need self-assessment over a period of time. Self-assessment could put people off.

Core outcomes = plants in ditches; waders fledging chicks. Need to accept that you won't always achieve the top payments. Need an ecological assessment beforehand that sets out realistic targets for a holding.

Conservation land managers

Monitor habitat characteristics not species. Need to monitor species at a broader- scale to assess the effectiveness of the scheme as a whole – not at a field/holding level.

Most people can assess sward condition and water levels. Initial feedback from the RSPB Test and Trial indicates that farmers are comfortable with the concept of self-assessment, although this is not yet tested in the field. Self-measurement of basic interventions should be possible.

Fens – how do you know if they've not been managed? Need to provide evidence that management has been done (e.g. cutting map). Expect outcomes to be achieved for the base payment. Time frame for achieving outcomes may exceed the lifetime of the agreement.

Breeding wader supplement – should be mandatory to monitor predators. BUT RSPB concerns – this isn't easy – which predators do you monitor? When and how? Could be onerous.

Farmer group 3 (Waveney)

Not discussed. This group were not keen on having set outcomes.

Land manager 1:1

Should be required to achieve outcomes in order to receive payments – not keen on bonuses for habitat outcomes. Settle on a target at the outset and manage accordingly. Inspect.

Not keen on bonus payments for birds. If you're managing the land correctly then the species should come anyway.

Land managers should pay for a breeding wader survey every year.

Farmer group 4

Scheme restrictions reduce output (lower live weight gain and reduced stocking density) – need to be paid accordingly. Currently struggling to finish cattle – extensively-managed grazing marshes aren't providing enough feed during the summer.

Stocking densities: these farmers average around 0.75 - 1 LU/ha. If they weren't in a scheme they would graze at 1.5-2 LU/ha (with increased inputs).

Viability of lowland grazing is currently very poor. Selling beef at 40p/kilo less than the cost of production.

Outcome-based payments will be difficult to implement. Land managers may not be in control of these, e.g. water levels often managed by the IDB. What happens in a very dry summer? Prefer a payment rate based on management costs.

Could have bonus payments for certain important things (locally-tailored) but would generally expect land managers to deliver outcomes for the option base payment.

Collaboration payments could be outcome-based.

6) If we were short of money, how would we prioritise between applications for the various Tiers / options?

Farmer group 1

Not keen on this question. Very difficult to answer. Definitely prioritise good management over creation of new habitat. Focus on water quality first as this is key for floodplain habitats. Therefore achieving landscape-scale coverage of basic options would be more important than expensive creation projects. Attract alternative sources of funding for the latter – tourist levy / Net Gain / carbon credits.

Could use a map of priority options/tiers across the Broads and use that to prioritise – schemes go ahead if they meet the priorities for their holding.

Farmer group 2

Prioritise continuity of management – keep people in agreement. Reward those that did good things before. Prioritise based on quality of habitat, e.g. good ditches, presence of rare species. Needs to be an impartial decision.

Get everyone in basic tier first. Don't want to see big nature reserves sucking up all the money, BUT they are delivering outcomes!

Conservation land managers

Need a mapping exercise to determine priorities. Feasibility study first – which options can go where? Mapping determines eligibility for the option. Key principles should be passed through the Local Management Board. More support for this than a scoring exercise.

Farmer group 3 (Waveney)

Very concerned about this question. The scheme MUST be properly funded – nationally. Don't cherry pick areas.

Farmers should not be competing with nature reserves for funding. Conservation orgs have access to other grants, membership fees and volunteer labour.

Need continuity from start to finish – don't move the goalposts (HLS scoring threshold went up and down).

Should definitely not have a size-based scoring / prioritisation process. Avoid ELS point scoring exercise. Middle ground between ELS and HLS – people who fell into this missed out and could have delivered more.

Prioritise collaborative groups – small and large farms can all get in. But should recognise that large estates can deliver more on their own than the average farmer and often go above the minimum standards.

Money may run out but collaborative efforts may well continue. Being in a scheme isn't for everyone.

KT mentioned some ideas from previous groups, e.g. prioritise getting everyone into basic tier first?
Response - If basic is too basic then you're wasting your money.

Need recognition of those who are improving water quality. KT asked if it should be a requirement to do appropriate options on your arable as well as floodplain land. Mixed response – should be a whole farm scheme but making it a requirement to do arable options might be too complicated. How do you know what will really address water quality? Suggestion of a Natural Capital Asset Report – what's vulnerable, what are the risks? Leading to a soil management plan.

Land manager 1:1

Need to stop grassland being ploughed up so get people into the basic level first.

Prioritise applications which link to existing agreements to increase the scale (more efficient and effective).

Supportive of geographical prioritisation. Should monitor land use change against this. (Should do this for individual agreements too – annual review of what has changed.)

Farmer group 4

Design the scheme based on the pot of money you have. Make % reductions to all payment rates if the money available decreases (akin to 'financial discipline' for BPS).

7) Do you have any ideas as to how the interventions could be monitored and verified?

Farmer group 1

Farmers are farmers, not ecologists. They want to do it well but need good advice from an ecologist. Trusted advisers should be employed by the funding body (people who understand the environment and not just the rule book). They should help land managers to sign up to the appropriate tier for their land and review success. Advisers assess outcome delivery on a periodic basis (formerly set out) and give a score. Take out things that aren't working, or encourage applicant to extend their management or upgrade within the tiers.

Give training so that land managers can self-monitor (good practice) but official monitoring and verification should be done by the funded advisers.

Who pays for this? It's got to come out of the funding pot, otherwise we have no control over the quality of advice and monitoring.

Farmer group 2

Paid advisers should monitor. Conduct a review visit → make recommendations → revisit in XX months/years → check improvement. Monitoring must be linked to advice.

Nice to have access to a pool of advisers with different expertise.

Who pays? The scheme is spending public money so a public agency should oversee monitoring, verification and advice. Monitoring should be paid for by the scheme. Have an allocation of X days advice per agreement.

Conservation land managers

Not much time to discuss this. Concerns about self-assessment were raised during Question 3. Are people really going to admit to missing targets? Risk of self-inflation of achievements.

Self-assessment is already used for some aspects of the IDB's management, e.g. water vole returns.

Farmer group 3 (Waveney)

Not specifically discussed but see comments on Advice below.

Funding body / funded advisers should stop trying to catch you out.

Land manager 1:1

We need discipline – make sure that advisory / monitoring visits do happen and are properly conducted (NE aftercare always slips when time/resources are tight).

Need to inspect regularly. This must be a separate role to advice provision. Clear distinction between advisers and inspectors / auditors. Adviser could provide info to the auditor – practical experience.

Funding body should employ the auditor for consistency.

Farmer group 4

Case officer / adviser should design the agreement with the land manager. Meet once/twice per year. Adviser should do the monitoring and verification. Need accreditation. Advisers shouldn't be paid for by the land manager, in order to avoid any conflict of interest.

Land manager group 2 (their notes)

3.3 The need for an independent audit of results. Realistically NE has neither the role nor the resources to do this. It is suggested that any grant above a certain sum be made conditional on 10% being allocated for an independent environmental audit by a qualified professional of whom there are a good number. Auditing would provide an opportunity to correct/amend schemes where faults are found. Independent inspection rather than a RPA inspection might make the scheme more acceptable to farmers. Not only would this provide real evidence of success or otherwise but it would encourage a cross fertilisation of ideas to encourage best practice. Set against that, it would be very important to be sure that the 'independent inspectors' genuinely are independent. It is recommended that NE be given responsibility for drawing up a list of approved 'independent

inspectors'. Farm assurance schemes like Red Tractor could also play a part as they already have an effective role in monitoring farm practises.

8) Ideas for new terms to replace 'Basic' and 'Better' – keeping the idea of a Tier structure.

	Basic	Better
Farmer group 1	Landscape Tier (predominantly aimed at clean water)	Habitat Tier
Farmer group 2	Entry level / base level	Performance level / boost level / advanced level 2 votes for Enhanced level
Land manager 1:1	Broads Landscape Tier	Broads Habitat Tier

Thoughts on collaboration

Conservation land managers

Collaborative schemes must be simple to join – not just help applicants to access higher payments but also reduce the admin burden by collaborating (especially for smaller farmers).

Collaborative water level management: what happens if one farmer in the middle of a block of land doesn't want to hold higher levels? At the moment, the IDB have to maintain a lower level system for them. Can't dictate that everyone takes up higher levels – need to make the incentives attractive enough to encourage uptake.

Other ideas for collaboration:

- Mink control (including reporting)
- Non-native species control, e.g. Himalayan Balsam
- Carbon storage (water provision)

WATER is the main priority for collaboration.

(Notes from Mike Edwards)

- Broadland Beef and collaborative branding of products.
- WLMA – demonstrates good collaboration
- At what stage of the process do you collaborate and over what
- Key collaboration can be over water – quantity & quality – 31 IDB boards in the Broads Authority area.

Farmer group 3 (Waveney)

Can't be penalised for not achieving outcomes through a collaborative scheme.

Collaboration payment for predator and deer control is a bad idea – too controversial. PR nightmare (need to get the public on board with the scheme).

Collaboration is more important on the arable – water and soil management, machinery sharing, hedge networks. You need to be better off in a cluster – collaboration has to result in increased payments. Shouldn't be a requirement to be adjacent to other farmers in a cluster – you will always have some people who don't want to join (although there is growing interest in collaboration, as shown by the adviser's experience). The biggest change in public goods will be on the arable.

Tim Schofield (Suffolk FWAG) provides advice / facilitation for 2 farm clusters – the Waveney group and the Hundred Landscape Project. The latter focuses on the catchments of the Waveney and the Hundred rivers, and utilises funding from EA's Water Sensitive Farming pot. The focus is on the arable, in particular measures that increase soil organic matter. Land audit on each farm. This group are potentially very keen to get involved with a national pilot and would like to hear details of this – KT to feed this into Defra.

Land manager 1:1

Not against payments to tie people into management across a geographical area. Big advantages. Needs to be funded to incentivise this. Supportive of a collaborative approach to predator management – need everyone to do it properly.

Farmer group 4

Collaboration is worth looking at. Currently share machinery. Not a bad idea to work together on certain things, but not sure how it would work in practice. Supportive of collaboration for predator control and water level management. Could have an outcome-based payment for collaboration.

(Notes from Mike Edwards)

- Water resources and abstraction are a key issue.
- There is a requirement for it to be a whole farm scheme
- Good idea around buffering & connectivity measure on arable land around sensitive sites.
- Could look at extensive grazing between numerous landowners.

Land manager group 2 (their notes)

It is interesting that Defra is emphasising the need for collaboration and even suggesting making Tier 2 grants conditional on collaboration.

Currently unless the underlying problems are addressed the conflicts of interest outlined in para 2 above make this impractical for all but minor issues like pest control. [*Para 2 refers to conflicts between food production and the environment, and the need for the precautionary principle in decision making.*] This is highlighted by the present position in the Broads where there are essentially two key environmental issues :

- i. Fen management which the extensive ELMS consultation is seeking to cover by proposing linking grants to “collaboration” presumably in an attempt to agree mutual objectives and
- ii. Water management (including groundwater /rainwater balance, runoffs and salinity), arguably the most important issue for wetlands like the Broads..

As far as ii. is concerned it is no exaggeration to say that if the present volume of water abstraction for the public water supply, agriculture and other industrial use continues it will be impossible to manage successfully the wetland tiers envisaged for reedbed and fenland management. The introduction of these tiers will be a waste of resources unless the problem of abstraction is properly recognised and resolved. In this realistically one must recognise that in many cases there will be a conflict of interest between farm irrigation and conservation which cannot simply be resolved by “collaboration,” hard decisions and choices will have to be made.

Yet there is no forum in which water issues are discussed so there is no collaboration and no attempt to agree mutual objectives at present. “Collaboration” in any form as Defra is seeking with its ELMS proposals, needs to start with this vital topic which is too important to be left to the EA as is now happening in practice. We would be pleased to participate in such a forum. It is critical that such a forum not be dominated by the farming interest which today is too often the case in Norfolk. It would also help to designate an existing body for the task and in this respect the Broads Authority is the obvious candidate.

Thoughts on advice and a land management board (in addition to comments at Q7)

Conservation land managers

(Notes from Mike Edwards)

- Role of local management board to secure long-term investments
- Identification of key areas of arable land not in a scheme.
- Prioritisation of breeding wader target areas.
- Targeting & prioritisation must be done locally with local knowledge.

Farmer group 3 (Waveney)

Re. advice for farm clusters / collaborative groups: they would be prepared to pay a bit for an adviser BUT there is more chance of getting people into the group if the adviser is funded.

One person said that initial advice on setting up a scheme should be paid for. Thereafter, he would be prepared to pay for it. Would prefer to employ his own adviser.

Important for scheme funding to go to farms not into the advice network. BUT the group also commented that the funding body needs to provide advisers that are properly resourced to do their job (unlike the current NE situation). These bring the benefit of a range of experience from different farms. Reassuring. Firm but fair = good. Farmers respect this.

The managing / funding body should be accessible – NOT a faceless system / phone line.

Land manager 1:1

Need good advisers who have enough time to spend on this (NE currently too stretched). He would be prepared to pay for an adviser.

Group of advisers employed by a local management board sounds reasonable. Happy for advisers to be employed by Defra or a local board, as long as they're good. Need to have people with experience (i.e. NE advisers) on the board – knowledge and credibility.

Farmer group 4

(Notes from Mike Edwards)

- Support the local board – need to be able to influence it.
- Need timely decision making especially around capital spend and items.

Land manager group 2 (their notes)

The success of this scheme will, to a significant extent, be assessed by its take-up. It is therefore important that farmers have access to and the support of qualified advice which is able to help them enter the scheme and subsequently resolve problems as and when they arise. A strengthened Norfolk FWAG is well suited to provide this service.

Other comments / over-arching points

Farmer group 1

Agreement length? 10 year scheme with 5 year review / potentially longer for habitat creation. AE payments give stability in a time of intense change in agriculture.

Farmer group 2

When does creation become management? Suggestion that 10 years should be long enough. Agreement length needs to be appropriate to the degree of change.

Public and educational access needs to be available [*KT: we assume this will be part of the wider ELMS offer*].

Need to emphasise the carbon benefits of the Broads scheme to 'sell it' to Defra.

Conservation land managers

Big water management infrastructure (such as pump upgrades / replacements) needs funding in order for collaborative water level management to work (Defra / EA funding is running low).

We need a national, Defra-level discussion on what constitutes sustainable wildfowling. Increasing wildfowl populations is a key outcome of the scheme, but more birds often results in more shooting and inflated shooting rents. How do we set an acceptable baseline level of traditional wildfowling and how do we ensure compliance with this (the landowner is often not in control)?

Need to consider what evidence might be required to show compliance at both a coarse and fine scale. [*KT: this isn't currently a question we're exploring as part of the Broads T&T.*]

Farmer group 3 (Waveney)

Moving from ESA to HLS, many grazing marshes did not fit. [KT: *the basic grazing marsh option in the Draft Tier Structure aims to address this concern.*]

Defra absolutely MUST sort the payment system out or ELMS will not work.

The RPA call centre is a nightmare. Can't get answers. Advisers are very nervous to put people into schemes. This MUST change.

Need simple paperwork.

Agreement length: 10 year scheme with 5 year break clause would be good, with the ability to change this at 10 years and/or renew for additional years – keep the scheme going. Needs to be financially attractive for the whole 10 years to underpin the business.

Need to end the process of re-mapping field parcels and making minute changes to measurements!

These are changing times – farmers need to be able to adapt their businesses during the life of the scheme. “You can't go green if you're in the red.” Pressure on the livestock industry is a big threat to the Norfolk and Suffolk Broads (climate change perception of beef, veganism, etc).

Need to recognise the value of small farm shoots – habitat management, vermin control. Can increase lapwing breeding success.

Public money for public goods – how will this be perceived by the public? “Right to roam”?? Permissive access is good in the right place – needs funding.

Land manager 1:1

[By e-mail] “There is not enough positive PR for the ‘wild’ and low intensity cattle grazing on the Broads grassland – emphasising all the environmental benefits to ‘the Public’. Perhaps ‘the Broads’ could get a bit more joined up on this objective, there is so much to offer and make a good story – and we could get the reed cutters in there too. An approach like this might have more impact and benefit for everyone with the right co-ordination.”

Farmer group 4

Agreement length: minimum of 5 years.

Payment process: Pay 6 monthly or annually and stick to the schedule. Need certainty of payments. Don't let inspections hold this up. Fruit and Veg Regime – claim 80% up front during the year, with 20% paid after a check at the end of the year. ELMS – could pay 75%-80% by direct debit, with a final payment at the end of the year.

Productivity grants: Defra should look at the Agritech grant scheme – works really well, simple and effective.

ELMS has to be a whole farm scheme. The hinterland outside the floodplain is important.

What impact will cropping changes have (thinking about the removal of abstraction licences)?

Land manager group 2

Scheme needs to incentivise the long-term management of land. Current system pays for habitat creation (e.g. arable reversion) only for this to go back to arable after 10 years due to the lack of an appropriate follow-on option. Need flexibility in long-term options.

(Their notes) Unfortunately the RPA presently has a very poor reputation with most parties because of its lack of the relevant expertise and its inability to respond to even the simplest questions. Its failure to pay present farm subsidies in a disciplined and timely way is putting stress on farm cash flows and would simply not be accepted in the commercial world.

Restricted use of avermectin-based wormers – discussion with Ben Crowter ([Westover Vets](#)) 16/03/2020

N.B. these are Katherine Trehane's notes from the phone call with Ben. Ben is happy to give advice to anyone who is interested or has concerns.

Cattle

It is extremely simple to follow a worming regime which avoids the use of avermectins while cattle are out on the marshes. It shouldn't be necessary to give a worming treatment in the summer within extensive grazing operations. Obviously there will be exceptions but he finds this to be true the vast majority of the time.

Reducing the use of wormers is important for the responsible use of medications, quite apart from environmental reasons. Farmers should be monitoring (fecal egg counts) and only treating where necessary.

The alternatives to avermectins are, by and large, just as effective, but susceptibility profiles are spatially variable. There is very little resistance to worming products in cattle parasites. Flukicides are not avermectin-based and some will kill round worms.

The alternatives to avermectins are often cheaper as they are more old-fashioned. However, they are always oral treatments, so the labour cost in administering these may be higher than for drenches.

Sheep

Avoiding avermectins is much more difficult for sheep. They are much more susceptible to round worms and spread their droppings around more, so exposure is higher. Smaller animals – worms have a greater impact.

Wormer overuse has led to increased resistance to multiple classes of product, making it very difficult to restrict avermectin use.

Are avermectins really a problem?

Apart from the comment about responsible use of medications, it is very commonly observed that dung doesn't decompose after animals have been wormed. The dung is either toxic to invertebrates or somehow unpalatable to them. Regardless, there must be an impact on invertebrate populations. Ben doesn't know how long the effects of avermectins last in the dung.

He commented that administering avermectins by injection, instead of drenches, could reduce the environmental impact of avermectins and is a much more efficient way to use the product. The concentration of the product in drenches is 5 times that of injections, implying that 4 out of 5 molecules do not make it into the body of the animal and could be washed off. The product is lethal to bugs on the body of the animal when it is applied, so is probably lethal to invertebrates on the ground as well.

Comments from Suffolk Wildlife Trust 15/4/20

Definitely no worming of livestock when on Marsh – I think the only way to tell if they have been wormed or not though is via a urine sample or blood test so rather hard to enforce

Allow time for graziers to do the right thing i.e. get grazing licences out so they at least have a chance to adhere to withdrawal period as below, and talk to them, how often are they actually worming for example? What products do they use and are they aware of the implications of using such? Very few livestock owners actually over worm I have found due to the cost and time involved, the biggest culprits of using avermectin based wormers to excess are horse owners i.e. riding schools, livery yards etc.

Stock Type	Application Regime	Dung contamination period after treatment
Cattle	Single dose of injection	49 days
	Single dose of pour-on	31 days
	Injection or pour-on in a 3, 8, 13-day program	105 days
	Slow release bolus	170 days
Sheep	Single oral drench	14 days
	Single injection	37 days
Horses	Single oral syringe	34 days

- The table above is the meat withdrawal period for a general Ivermectin based wormer, the theory being that the highest levels of chemical will be expelled from the animal in the dung within that period (this was something I discussed with our vet many years ago). Several tests and trials have been conducted on how long the chemical actually persists in dung but no concrete facts have been established so far, although some studies are suggesting that small levels can still be found in the dung from a treated animal up to three months after dosing
- The vet is completely right ref why the use of pour-on in cattle is so popular – they are by far the easiest to use, if you have a steady group of animals you can just wander amongst them, treating as you go, no need to gather/use a crush etc which you would have to in order to jab or drench
- The main challenge as I see it is that the only cattle pour on available on the market are avermectin based ones. There is a huge gap in the industry for a pour on wormer of another class
- A degree of acceptance should be applied regarding the use of wormers in livestock, particularly in breeding herds
- Generally speaking, there will be an uncontaminated dung source in the same area (albeit not as appetising or plentiful as fresh cow pat by any means), be it deer, rabbit, foxes or similar. It is also very rare for anyone to “blanket” worm a group of cattle or sheep

My comments on the vet discussion in green, I am obviously not a vet so these comments are really FYI only, based on my experiences and conversations over the years with livestock owners and our own vets. I am certainly not saying he is wrong and I am right by any means!

- **Restricted use of avermectin-based wormers – discussion with Ben Crowter ([Westover Vets](#)) 16/03/2020**
- *N.B. these are Katherine Trehane's notes from the phone call with Ben. Ben is happy to give advice to anyone who is interested or has concerns.*
- **Cattle**
- It is extremely simple to follow a worming regime which avoids the use of avermectins while cattle are out on the marshes. It shouldn't be necessary to give a worming treatment in the summer within extensive grazing operations. **Agree.** Obviously there will be exceptions but he finds this to be true the vast majority of the time. **Agree.**
- Reducing the use of wormers is important for the responsible use of medications, quite apart from environmental reasons. Farmers should be monitoring (fecal egg counts) and only treating where necessary. **I know of a few large sheep farmers and several horse owners that do this but no cattle farmers – fairly time consuming to do and results can be variable depending on factors such as how fresh the dung is, delay in getting it tested, weather conditions, where exactly you take the sample from in the cow pat etc (all information given to me by our vet when I looked into this in detail). The sample also has to be taking to the vet and a fee is charged for testing, although I think nowadays this can be done by an independent company by post as well. Also the presence of tapeworms do not show up in a FEC, although the effect of these on the cattle's condition is minimal compared to roundworms**
- The alternatives to avermectins are, by and large, just as effective, but susceptibility profiles are spatially variable. There is very little resistance to worming products in cattle parasites. **Which in itself show that they are not being used unnecessarily in the cattle industry.** Flukicides are not avermectin-based and some will kill round worms. **And are normally used in Autumn as per the life cycle of Fluke**
-
- The alternatives to avermectins are often cheaper as they are more old-fashioned. However, they are always oral treatments, so the labour cost in administering these may be higher than for drenches **(pour on, a topical method of applying medication, a drench is an oral method).**
- **Sheep**
-
- Avoiding avermectins is much more difficult for sheep. They are much more susceptible to round worms and spread their droppings around more, so exposure is higher. Smaller animals – worms have a greater impact. **If an animal has a worm burden, it has a worm burden, regardless of size**
-
- Wormer overuse has led to increased resistance to multiple classes of product, making it very difficult to restrict avermectin use. **Not in our system and with our breed of sheep luckily!**
-
- **Are avermectins really a problem?**

-
- Apart from the comment about responsible use of medications, it is very commonly observed that dung doesn't decompose after animals have been wormed. I must admit that I have noticed this in some of our ponies that most definitely haven't been wormed with Ivermectin, it would be worth considering that another factor is involved in this instance, what I'm not sure. The dung is either toxic to invertebrates or somehow unpalatable to them. Regardless, there must be an impact on invertebrate populations. Ben doesn't know how long the effects of avermectins last in the dung. I don't really think anyone does

-
- He commented that administering avermectins by injection, instead of drenches (pour on?), could reduce the environmental impact of avermectins and is a much more efficient way to use the product. Once again, a more time and labour intensive way of treating internal and external parasites than both a pour on and a drench and the only injectable wormer I know of is a avermectin so not much of a win in my eyes. Not all people would be confident in administering (risk of abscesses, correct disposal of sharps, storage etc). I do think sometimes vets have a eye on their own pockets in this regard, obviously they would be the ones called out to administer if the owner wasn't confident. The concentration of the product in drenches is 5 times that of injections, I think that would actually depend on the type of product used, different strengths are available, especially in the injection form implying that 4 out of 5 molecules do not make it into the body of the animal and could be washed off. The product is lethal to bugs on the body of the animal when it is applied, so is probably lethal to invertebrates on the ground as well. A pour-on (or drench in sheep) will always have a lower meat withdrawal period and therefore I would say dung withdrawal period than an injectable version although certainly Ben the vet has a point regarding ground splashes and toxicity to inverts in direct contact with the cattle. Although in practise it is quite hard to get it on the ground and if you follow best practises (don't use on wet animals or when rain is forecast in the next 24 hours I think) the ground impact of this type should be minimal

o avermectins when on marsh in any tiers plus a buffer time period between application and release at xx days?



Broads ELMS Test and Trial – Interventions and Payments

Notes from consultation meeting with Broads Reed and Sedge Cutters Association (BRASCA) - 4th March 2020

Final version

Written by: Katherine Trehane

Sent to: all attendees below (to BRASCA members via Paul Eldridge and Richard Starling)

Comments received from: Andrea Kelly

Attendees

BRASCA: 7 members (names removed)

Delivery group: Andrea Kelly (BA), Rob Wise (NFU), Mike Edwards (FWAG), Katherine Trehane (NE)

General discussion on the state of the reed and sedge industry / cutting in the Broads

Reed production is declining dramatically. Latest stats show that only 1-2% of the reed used in the UK is grown domestically. Particular problems with managing smaller sites, and where agents administer the agreements – cutters are not paid adequately. Couple this with a lack of monitoring / verification of the agri-environment schemes and you get neglect of sites and lack of required management. Landowners are getting away with it. Some are supposed to do 50% commercial cutting but don't. There is too much emphasis on conservation cutting. Need to increase the area of commercial cutting (sustainable, low carbon), but accept that this won't be practical or desirable everywhere (could aim for 50:50?). Private landowners are the future.

1) Do you agree **broadly** with the Tier structure and options / supplements – in particular the fen/reedbed options?

We didn't talk about this specifically, but several comments are relevant and changes have been made to the draft tier structure accordingly.

- BRASCA members are supportive of the 'creation' element of the scheme – opportunity to create reedbeds on marginal grassland. Purpose-built reedbeds would be viable for commercial cutters – wouldn't need support for their routine cutting operations.

- Supportive of ditch management as an intervention. Some ditches need cleaning more often than others and in different ways - difficult to specify a rotation or exact method. KT suggested a requirement to draw up a ditch management plan for each site in liaison with the cutter.
- Reed ronds need to qualify as they are producing public goods (not widely supported under HLS).
- Ronds need footdrains to prevent stagnation [KT: footdrains are on the capital items list].
- Shouldn't have options which require minimal effort – no incentive to do more. Payments need to be proportional to the level of input. One member commented that the fen/reedbed option shouldn't be available without the cutting or grazing supplement [KT: there may be sites where scrub rogue-ing and ditch management is all that is required for conservation reasons so I do think we need some flexibility on this].
- No grazing in commercial sedgebeds. Get the right supplement in the right place – either grazing or cutting, not both on the same area.
- Need definition of 'poor water quality' – EA and NE standards differ.
- Need to get away from burning on tin [KT: BA protocols are more pragmatic about burning than older HLS prescriptions; more recent prescriptions reflect this].
- Cutting dates: cutters already have NE agreement to start cutting sedge as soon as reed has finished on larger beds (over 5 acres). Have to do a site survey before to check for nesting birds. KT suggested that the timing of cutting should be agreed with the SSSI/scheme adviser and cutter (site specific).
- Payments to graziers: landlord/agent will just put the rent up. Best to direct money to cutters at other times, e.g. BA provide ring fenced budget for cutters for other contracts at different times.
- Cutters need to take part in the application process (inform ditch management regime and cutting rotations).

2) How could we ensure that payments for fen/reedbed cutting a) get through to the cutters and b) result in the desired cutting rotations being achieved?

Landowners are prepared to pay cutters for scrub clearance, but if they have to pay them for cutting reed then they will charge a royalty for the bundles. BA do currently pay cutters directly for conservation work, but not commercial cutting. The important thing is to maintain an income throughout the year. If cutting is a capital item then landowners will charge a royalty.

Commercial cutting should command a higher payment rate than conservation cutting. Payment could be based on the number of bundles. BUT this depends what the conservation cutting is for - where there are particular rare species (e.g. fen orchid), a lower payment rate for conservation cutting would be a problem.

There was support for distinguishing between 'restoration' cutting and 'conservation' cutting, and for paying more for restoration. A package of restoration payments plus infrastructure grants would be beneficial. After restoration, beds should go into commercial management – need to remove the incentive to keep doing 'restoration' cuts AKA conservation cutting. Note that a second restoration cut may sometimes be needed. Would need to closely monitor adherence to cutting plans.

Q. Public money for public goods – why should we pay more for commercial/restoration cutting?
A. Because fresh, regularly cut reed filters water more effectively and improves water quality.
Sustainable local product – not imported, low carbon footprint.

3) Thoughts on the capital items relevant to fen cutting – specialist equipment, training, etc.

Very supportive of infrastructure grants (tracks to help get reed off the marsh, covered dressing areas, etc) – landowner would need to apply for these.

Machinery sharing doesn't work – machines come back ruined. Cutter would need to apply for machinery grants - use these across multiple sites. They need to be responsible for maintenance. Grants should be related to the cost of the item and amount of work done. Cutter provides evidence of what is being cut with the machine (quantity, location).

Training grants – should be able to train people from outside the Broads. Could create a reed and sedge cutting training hub in the Broads (AK).

4) Are there benefits to reed cutters and/or landowners with reedbeds collaborating over their management (i.e. across multiple sites / land holdings)? What things might help collaboration?

Yes – water level management and ditch management needs to be done across multiple (connected) sites.

5) Is there a need for landowners to have a greater understanding of the management of fen and reedbeds?

Yes!

6) Do you have any ideas as to how the interventions could be monitored and verified?

What is done now under existing schemes doesn't work. Need a different system/process. Trusted advisers could monitor on a catchment basis and report back to a body overseeing the Broads area. Advisers need to be paid for by the funding body and employed for the whole term of the agreement.

People doing the work (e.g. cutters) could provide information to help with verification, e.g. areas cut and number of bundles of reed/sedge.

Cutting maps are needed for monitoring/verification.



Broads ELMS Test and Trial – Interventions and Payments

Notes from consultation meeting with British Reed Growers Association (BRGA) 10th March 2020

Final version

Written by: Katherine Trehane

Sent to: all attendees below (to BRGA members via Ian Lonsdale)

Comments received from: Andrea Kelly, Ian Lonsdale (the notes align with his).

Attendees

BRGA: 10 members (names removed)

Delivery group: Andrea Kelly (BA), Katherine Trehane (NE)

General comments

Pressure on government to repeal the Habitats Regs and remove the precautionary principle is a big threat to wetland habitats (vulnerable to abstraction). EA report emphasises the importance of flushing in rivers – need adequate water supply. There needs to be a good baseline to understand environmental change.

The importance of the area for tourism and public enjoyment should be recognised.

1) Do you agree **broadly** with the Tier structure and options / supplements – in particular the fen/reedbed options?

Generally, yes. One member said it looks quite complicated. There was agreement that it probably needs to be (complex / variable habitats). Another commented that he could understand the options after a quick read – the lay out is fine. One person liked seeing the outcomes on the same piece of paper. Another said that the concept of Tiers, options and supplements is correct - not one-size-fits-all; landowners are already familiar with this approach. No complaints about HLS – sometimes too prescriptive but generally works.

Need to have access to maintenance grants after doing capital works, e.g. maintenance of newly created ponds. Must sign up to manage fens/reedbeds after doing scrub clearance and avoid extensive and potentially damaging scrub removal.

Outcomes are important – promotes understanding. We shouldn't shy away from this. Achievement of outcomes needs to be independently audited.

One member said that we need suitable options on the arable land to help provide for wetland species, e.g. 'bad arable' (e.g. leaving fields after potato harvest for cranes to feed; sacrificial wheat to feed geese). Another member commented that this is too complicated – landowners should do this anyway. Focus on public goods and pay for those (wetlands).

Predator control supplement? No – do mink control as part of the option management. Not supportive of capital items for this as mink rafts aren't expensive and should be part of the maintenance payment.

On other options there was a question about why landowners can't winter graze on breeding wader option in current schemes. [KT – there is no restriction on winter grazing in the new version proposed in the draft tier structure.]

2) How could we ensure that payments for fen/reedbed cutting a) get through to the cutters and b) result in the desired cutting rotations being achieved?

We discussed the conclusions from the meeting with BRASCA, who are largely supportive of paying more for commercial cutting, and would like specific grants for 'restoration' cutting (to commercial beds). This didn't have much support from the BRGA members.

Restoration cutting = difficult to monitor. Commercial cutting is cost neutral (cutters take the crop), so the payment rate should be higher for conservation cutting, it should come down to achieving public goods. Landowners should pay cutters for restoration cutting. If landowners pay more for restoration/conservation cutting then cutters will have a reasonable income. The scheme should not get involved in the landowner-contractor relationship.

Could have 2 rates: higher conservation rate (use for restoration too) and a lower commercial rate. BUT this is more complicated. The members were generally in favour of a flat rate for the cutting supplement, although one commented that he could understand why you might pay more for restoration.

Broads tourism is worth more than agriculture and relies on a healthy, unique environment. This is a public good which reed growers provide. There is no difference between commercial and conservation cutting from a public goods / tourism perspective.

Capital item for cutting? Not supported. Prefer a supplement (annual/revenue payment), but should only pay for the area that is actually cut each year, not the whole area in a rotation.

Need to ensure that the fen/reedbed base payment covers scrub control and ditch maintenance.

3) Thoughts on the capital items relevant to fen cutting – specialist equipment, training, etc.

Not discussed, but one BRGA member previously suggested the infrastructure grants (to help get reed / fen products off sites). The HLS capital item for tracks helped with that in the past.

4) Are there benefits to reed cutters and/or landowners with reedbeds collaborating over their management (i.e. across multiple sites / land holdings)? What things might help collaboration?

Should aim for cross border cooperation but this doesn't always work. What if someone in a group doesn't do their bit? Complicated. Collaboration shouldn't be mandatory, but could work in some situations, i.e. where there is common interest / collaborate on specific things.

One member suggested that collaboration already occurs within the IDB units and this could be a basis for collaboration.

Funding should go to the third party who runs the group or does the collaborative management (e.g. a facilitator) – not to the landowners.

Collaboration for predator (mink) control? Not hugely supportive. One member said it would be difficult but we should aim for it. Another thought that it is better not to collaborate through the ELMS, due to high risk of not getting collaboration at all 'recipe for doing nothing'. Better to collaborate via other initiatives such as the Norfolk Mink Project.

5) Is there a need for landowners to have a greater understanding of the management of fen and reedbeds?

Not discussed.

6) Do you have any ideas as to how the interventions could be monitored and verified?

Scheme should pay for the landowner to employ an independent auditor. They should check that cutting has been done. Could use drones.

Payments for advice should be made within the scheme.

Comments on the idea of a Local Management Board

All stakeholders / bodies in the Broads need to have a basic understanding of, and agreement on, the needs of Broads habitats before you can have an effective Board.

Broads Environment Land Management (ELM) scheme

TEST AND TRIAL

Tier Structure



October 2020

This is a theoretical scheme design which has been used as a tool to seek the views of farmers and land managers on the outcomes and interventions for habitat management in the Broads and river valleys. There is no guarantee that it would be used for the ELM scheme. The suggested Tier Structure will be submitted to Defra with the recommendation that this is considered as a national ELM scheme pilot.

The draft Tier Structure has been discussed with around 40 Broads farmers and land managers and changes have been made to accommodate their suggestions.

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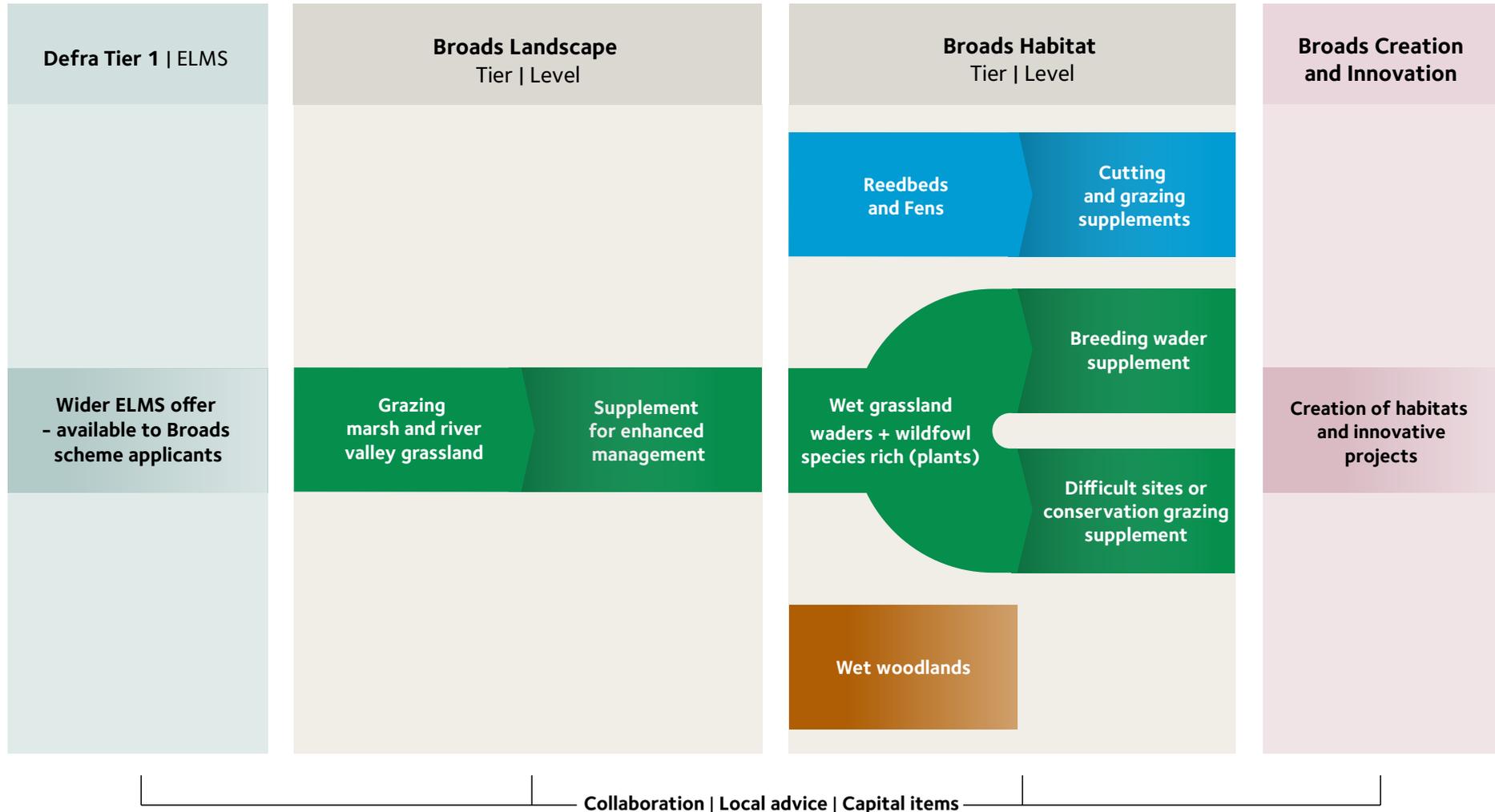
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Norfolk and Suffolk has over 27% more arable farmland than the average for England but around 15% less grassland, making the extensively-managed grasslands of the Broads and river valleys locally important. Photo: James Bass

Tier Structure - overview



This theoretical scheme design has been used as a tool to seek the views of farmers and land managers on the outcomes and interventions for habitat management in the Broads and river valleys.

Key principles and assumptions

- Scheme design is focussed on the floodplain – our core Broads habitats – whilst recognising the importance of the surrounding land, particularly where it facilitates the management of the core habitats.
- Applicants can choose from the options in the Broads scheme PLUS those in the wider ELM scheme offer (arable options, water protection options, public access, etc.).
- Flexibility to move up/down through the Tiers, and to add/remove supplements – during the lifetime of the agreement.
- The grazing marsh/river valley grassland option should be accessible to all who wish to provide a basic level of public goods on their floodplain grassland.
- Move away from historical prescriptions which don't achieve outcomes, such as certain date restrictions, whilst maintaining basic compliance standards.
- As a general rule, the agreements should be flexible enough to allow for seasonal variations, but 'derogations' may be needed where agreement-holders need to make temporary changes to their management for good reasons (e.g. thistle control). The over-seeing authority, local delivery board and/or local advisers should be able to issue simple and responsive blanket 'derogations' for all agreement-holders in exceptional circumstances, such as extreme weather conditions.
- The habitats, species and management operations may be subject to regulations, designations, other legislation or sources of funding. The Tier Structure does not go into detail on these.
- Payments could be made up of an area-based payment and a linear amount based on the length of ditch. We are investigating the idea of bonus payments for the achievement of certain outcomes but this has not had much support to date.
- Applicants will need access to knowledgeable and trusted local advisers who can help tailor the scheme to the holding.
- The application process should be straightforward and easily completed. The Tier Structure does not go into detail on this.

Please note that wet woodland has been added to the overview diagram in response to land manager feedback but there has not been time to add any further detail at this stage.

The main public goods provided by the Scheme

One of Defra's visions for the ELM scheme is that it will 'reward public goods with public money'. Defra has defined public goods as things that benefit more than just the recipient and cannot be rewarded by the market alone. The following summarises the public goods that could be provided in the Broads.

Fens and reedbeds

- Clean and plentiful water.
- Clean air.
- Carbon storage in peat.
- Iconic species such as swallowtail butterfly, bittern, European crane, otter, marsh harrier.
- Nationally/internationally-important wetland habitats.
- Nationally/internationally-important plant and invertebrate populations.
- Flood storage capacity.
- Rare and iconic wetland landscapes.
- Traditional and new/novel industries producing sustainable local products (e.g. reed and sedge for thatching, biofuel and biomass, and typha for construction).
- Benefits to wellbeing and mental health from experiencing a 'wild' and nature-rich environment.
- Genetic diversity – native livestock breeds.

Habitat creation (additional benefits over and above those provided by the maintenance of existing habitats)

- Cessation of carbon loss from ploughed soils.
- Stabilisation, re-wetting and building of peat resulting in increased carbon storage.
- Improved water quality from reduced inputs and permanent vegetation cover (e.g. reedbed filtration).
- Improved soil health through permanent vegetation cover.
- Re-creation of habitat transitions.
- Increased resilience to climate change.
- Water storage.
- Increased biodiversity.
- Increased pollinators.
- Potential improvements to air quality through arable reversion / cessation of fertiliser inputs.

Grassland

- Clean and plentiful water.
- Clean air.
- Food plants for pollinators.
- Iconic species (such as otter, brown hare, Norfolk Hawker dragonfly, barn owl, snipe, lapwing and skeins of geese).
- Nationally-important grassland habitats, particularly Coastal and Floodplain Grazing Marsh.
- Nationally/internationally-important populations of aquatic plants and invertebrates in ditches.
- Nationally/internationally-important populations of wintering wildfowl and breeding waders.
- Carbon storage in peat/uncultivated soils.
- Iconic, open, pastoral landscape, supporting low intensity, grass-fed beef and lamb production.
- Flood storage capacity.
- Genetic diversity – native livestock.

Additional public goods from collaborative projects

- More efficient use of water resources across the landscape.
- Reduced run-off and improved water quality.



The Broads headwater rivers and Trinity Broads provide drinking water for people

Photo: Tom Barrett

How the Tier Structure could work in practice

- Applicants build a Land Management Plan for their holding, incorporating options and supplements from the Broads Tier Structure together with aspects of the wider ELM scheme offer.
- Land managers follow the Basic Requirements detailed below, and carry out the interventions detailed under each option, in order to achieve the agreed outcomes.
- Where land managers apply for a Supplement, they manage their land in accordance with both the base option and the supplement, e.g. wet grassland with the breeding wader supplement.
- Interventions and outcomes will need to be tailored for the holding. For instance, the wet grassland option can be used on both species-rich (plant rich) peat marshes and species-poor clay marshes with populations of wintering wildfowl, so the management and outcomes may be different.
- Land managers may also apply for capital items to support and enhance their habitat management.
- Land managers may choose to move up through the tiers if they have achieved the outcomes of their existing option(s) and wish to do more.

Basic Requirements

- No ploughing, cultivating or reseeding without prior approval.
- Weed and rush control on grassland by cutting, spot treatment and weed wiping only.
- Herbicide use in fens / reedbeds restricted to stump treatment and foliar application to control scrub.
- Supplementary feeding restricted to mineral licks and creep feeders moved regularly.
- No introduction of additional species without prior approval.
- Do not deepen or reprofile ditches without prior approval.

ASSUMPTIONS: Baseline ELM scheme requirements or regulations will restrict damaging activities such as overgrazing, excessive poaching, spreading or dumping of waste products, herbicide and nutrient application close to ditches, scrub removal in the bird breeding season, etc.



Much of the iconic Broads landscape has never been ploughed. Photo: James Bass

Grazing marsh and river valley grassland (Broads Landscape Tier)

Open, extensively-managed, winter-wet grassland in the floodplain, with healthy ditches and watercourses.



Halvergate Marshes is at the centre of seven river valley grass marsh landscapes. Photo: Mike Page

Aims/outcomes

- Open grassland with low scrub cover.
- Varied sward height and structure. Some uncut/'untidy' areas, particularly next to woodland/scrub.
- Water levels sufficient for ditches to act as 'wet fences'.
- Open, unshaded ditches with good water quality, supporting a range of aquatic plants, fish and invertebrates.
- Low cover of injurious weeds and nettles.
- No more than moderate cover of soft and hard rush (non-jointed rushes).
- Wet conditions over winter.
- Open landscape: ditches unfenced where practical, gates with wings.
- Invasive non-native plant species are absent or rare, e.g. Himalayan balsam, Japanese knotweed, *Crassula helmsii*.
- If SSSI, achieving or working towards favourable condition status.



Ditches are home to rare water plants such as water soldier. Photo: Katherine Trehane

Likely interventions

- Restricted use of artificial fertiliser and manures (80–90kg N/ha? – only where cut for hay?). Buffer ditches.*
- Management by grazing and/or cutting.
- Ditch maintenance on a 3 to 8 year rotation, during autumn/winter, leaving one bank (or other sections) untouched. Follow a ditch management plan – reviewed annually / as required.
- Scrub / tree management along ditches and watercourses.

**Alternatively, we could say 'no fertilisers and manures' and set payment rates accordingly to compensate for reduced yields.*

Supplement for enhanced management

Reduced inputs and higher water levels to enhance water quality, ditches and grassland habitats.

Likely interventions

- No application of fertilisers or manures.
- Water levels no more than 45cm below marsh level throughout the year.
- Follow an alternative worming strategy, avoiding the use of avermectins while cattle are on the marsh (see veterinary advice on page 17).

NOTE: Some farmers have major concerns about the practicalities of this. Needs further work before we make this a scheme requirement.

Wet grassland (Broads Habitat Tier)

Specific management for over-wintering waders and wildfowl, and species-rich wet grassland habitats.



Fen meadows on peat soils support over 400 plant species, including orchids. Photo: Andrea Kelly

Aims/outcomes

- Open grassland with [zero/less than 5%] in-field scrub cover.
- A suitable sward height for the target plant/bird species.
- Water levels no lower than 30cm below marsh level during the summer, and high enough to provide over [10/20%] standing water on clay marshes through the winter months (managed water levels).
- High cover of wildflowers on peat soils; plants allowed to flower during the summer.
- Waders and wildfowl are feeding and/or roosting.
- Open, unshaded ditches with good water quality, supporting a range of aquatic plants, fish and invertebrates.
- Less than 5% cover of injurious weeds and nettles, and less than 20% cover of soft and hard rush (non-jointed rushes).
- Open landscape: ditches unfenced (where practical), gates with wings.
- Invasive non-native plant species are absent e.g. Himalayan balsam, Japanese knotweed, *Crassula helmsii*.
- If SSSI, achieving or working towards favourable condition status.



Wintering birds, such as pochard, provide a Broads wildlife spectacle. Photo: Nick Upton/2020Vision

Likely interventions

- Management by grazing with cattle/ sheep OR
- Cutting and removal after 30th June (15th July for species-rich fields). Aftermath grazing.
- Low stock numbers (preferably cattle) on species-rich peat marshes in spring/early summer to allow plants to flower.
- No application of fertilisers or manures.
- Cutting, flail topping or weed wiping of dense rushes.
- Late-season topping/more intensive grazing if needed to achieve the target sward height.
- Ditch maintenance on a 3 to 8 year rotation, during autumn/winter, leaving one bank or other sections untouched. Follow a ditch management plan – reviewed annually/as required.
- Active water level management and/or allowing seasonal inundation.
- Restricted recreational activities, including wildfowling, to reduce disturbance. [*No wildfowling at all? Supplementary payment?*]
- Scrub/tree management along ditches and watercourses.
- Follow an alternative worming strategy, avoiding the use of avermectins while cattle are on the marsh (see veterinary advice on page 17).

NOTE: Outcomes and interventions aimed at breeding waders would be covered by adding the appropriate supplement.

Breeding wader supplement (Broads Habitat Tier)

A supplement on the 'wet grassland' option, providing specific management for breeding waders. *Could be subject to a minimum area threshold – land managers could collaborate with neighbours to achieve this.*



Lapwing breed on the marshes and overwinter in their thousands. Photo: Ian Robinson

Aims/outcomes

(Additional to the wet grassland outcomes, or superseding them where breeding wader outcomes are more demanding.)

- Open grassland with no scrub cover.
- Short swards in spring – average of 5-15cm in April and May, but with some tussocks for redshank nests.
- Footdrains, scrapes and low areas are reliably wet/muddy through June and into early July.
- Waders are nesting and successfully fledging chicks.
- Less than 10% cover of soft and hard rush (non-jointed rushes).



Footdrains provide young chicks with invertebrate food. Photo: Katherine Trehane

NOTE: Lapwing and redshank are the main breeding species. Interventions and outcomes would need to be adapted for breeding snipe.

Likely interventions

(Additional to the wet grassland interventions, or superseding them where breeding wader management is more demanding.)

- Management by grazing with cattle from April/May and cattle or sheep from July. Fields must not be shut up for hay/silage.
- Grazing with low numbers of calm cattle while nests are present, to reduce the risk of trampling (as a guide, 0.75-1 LU/ha from April – June).
- No mechanical operations 15th March - 15th July.
- Weed wiping of dense rushes.
- Late-season topping or intensive grazing if needed to achieve short swards in spring.
- Manage water levels to provide flooded in-field features (Feb to May) and allow gradual draw down (May to July).
- Maintenance of scrapes and footdrains. Follow a maintenance plan – reviewed annually/as required.
- Conduct a breeding wader survey every spring.
- Follow a predator management strategy to improve breeding success (opportunity for collaboration).
- Attend a 'knowledge-sharing/best practice' event annually with other land managers doing this option.

Management of fens and reedbeds (Broads Habitat Tier)

Open reedbed, fen and fen meadow with patchy, scattered scrub and healthy ditches and watercourses.



Mosaic of sustainably managed species rich fen and reedbeds are a hotspot for rarities such as the swallowtail butterfly. Photo: Mike Page

Aims/outcomes*

- Diverse range of wetland plant species.
- Less than 5% cover of undesirable species, such as nettles and brambles.
- Invasive non-native plant species are absent e.g. Himalayan balsam, *Crassula helmsii*.
- Suitable hydrological conditions for the plant communities present (site specific).
- Scattered scrub within the fen (no more than 5% cover) and/or in blocks around the edges providing habitat for birds and invertebrates.
- 'Soft edge' or 'ecotone' e.g. scrub with varied age structure on fen edge grading into wet woodland.
- Ditches with good water quality, supporting a range of aquatic plants, fish and invertebrates.
- Open water (from shallow pools to deeper areas providing feeding habitat for species such as bittern).
- If SSSI, achieving or working towards favourable condition status.

* Adding the cutting or grazing supplements will help land managers achieve these outcomes.

Bittern need large areas with some cut reeds and open water for feeding. Photo: Jackie Dent

Likely interventions

(Cutting or grazing would be covered by the relevant supplement.)

- Scrub removal in winter to maintain the target scrub levels.
- Rotational management of scrub edge.
- Disposal of arisings off the fen or by sensitive burning.
- Naturally-functioning hydrological conditions are generally preferred but water level management may be required in some circumstances.
- Do not allow poor quality water (definition needed) to empty into fens and reedbeds, where this is within the control of the landowner.
- Follow a ditch/dyke maintenance plan, agreed in liaison with your SSSI/scheme adviser and any commercial cutters operating on the site.
- Rotational management of pools.
- Possible management of terrestrial predators (particularly mink), to protect ground-nesting birds and water vole.



Wetland cutting supplement (Broads Habitat Tier)

A supplement on the 'Management of reedbeds and fens' option, facilitating the cutting of fen/reedbed vegetation on a suitable rotation.



Sedge beds are excellent for wildlife and provide a local product that captures carbon. Photo: Tom Barrett

Outcomes

(Additional to 'Management of reedbeds and fens' outcomes, or superseding them where the cutting supplement outcomes are more demanding.)

- Varied habitat structure – areas of shorter and taller vegetation, and tussocks present.
- Diverse plant communities and rare/uncommon species associated with regularly cut fen vegetation.
- Habitat for ground nesting birds in cut areas (e.g. bittern, crane, marsh harrier).
- Low cover/depth of litter.
- Low frequency of common reed in fen meadows.
- Fen meadow vegetation typically less than 0.5m high.



Cranes are secretive birds which are easily disturbed, they feed their young in the cut areas created by reed cutters. Photo: Nick Upton

Likely interventions

(Additional to 'Management of reedbeds and fens' interventions)

- Follow a cutting plan agreed in liaison with your SSSI/scheme adviser and cutter(s) – the timing of cutting may need to be reviewed annually based on the location of nesting birds.
- Harvesting of reed and sedge where desirable and practical. Alternatively, the reuse or disposal of arisings off the fen or by sensitive burning.



Photo: Julian Claxton

Wetland grazing supplement (Broads Habitat Tier)

A supplement on the 'Management of reedbeds and fens' option, facilitating the grazing of fens and reedbeds.



Hardy breeds of cows or ponies prevent trees and scrub taking over reedbeds. Photo: Katherine Trehane

Outcomes

(Additional to 'Management of reedbeds and fens' outcomes, or superseding them where the grazing supplement outcomes are more demanding)

- Varied habitat structure – areas of shorter and taller vegetation, and tussocks present.
- Diverse plant communities and rare/uncommon species associated with regularly grazed fen vegetation.
- Low cover of litter.
- Low frequency of common reed in fen meadows.
- Fen meadow vegetation typically less than 0.5m high.



Foraging of cattle in fen and reedbed create interesting places for wildlife.

Photo: David Tipling/2020Vision

Likely interventions

(Additional to 'Management of reedbeds and fens' interventions)

- Extensive grazing – timings and stocking rates likely to be site specific owing to differing habitat needs. Commercial sedge beds should not be grazed.
- Follow an alternative worming strategy, avoiding the use of avermectins while cattle are on the fens and reedbeds.



Swallowtail caterpillar relies on the rare milk parsley plant. Photo: Tom Barrett

Conservation grazing or Difficult sites supplement (Broads Habitat Tier)

Supplement for grazing/managing particularly difficult sites (e.g. inaccessible sites, sward has very poor nutritional value, very limited grazing period, etc.). *Could be subject to a grazing management plan which sets out the outcomes (required sward height, structure, etc.). Payments are only made if these are achieved.*



Some wetland sites are difficult to graze, but the benefits for wildlife and low carbon management are significant. Photo: James Bass

Capital items (available in all Tiers)

Payments for specific capital works to facilitate habitat management and upgrades through the Tiers. Available throughout the agreement term, as 2-3 year Capital Works Plans.

Should include ditch creation/restoration, creating in-channel features/meanders, water control structures, wind pumps, invasive species control (e.g. mink rafts; control of invasive plant species), creation of footdrains and scrapes, ponds (not limited to max. 1ha), livestock management infrastructure, anti-predator fencing, scrub and tree removal, feasibility studies/implementation plans (including Water Level Management Plans), reed and sedgebed 'restoration cutting', purchase of specialist equipment, specialist training (e.g. reed cutting apprenticeships), infrastructure to enable reed/sedge harvesting (e.g. tracks and covered dressing areas), technical innovations (e.g. invisible fencing / GPS collars for livestock, GPS trackers to aid monitoring).

Capital items should only be available as part of a wider agreement, unless a contractor is applying for equipment to use on multiple Broads sites, e.g. grants for reed cutting equipment.*

There should be a requirement to sign up for ongoing maintenance of a habitat following restoration (e.g. after clearing scrub or creating a pond).

Could fund the replacement of existing structures where they have reached the end of their life, e.g. culverts, fences? (Notwithstanding the requirement to maintain capital items.)

Collaboration

Potential for a collaborative approach to capital items / contracted-in services. Collaboration bonus for buying specialist equipment as a collective and sharing use?

*Other grant schemes

Reed and sedge cutters should be eligible for grants to buy equipment needed to carry out commercial and conservation cutting. New entrants into farming may need capital funding for items like cattle crushes. These aspects may fit better in the Productivity Scheme than the ELM scheme.

Creation of grassland habitats (Creation and Innovation)

Reversion from arable to one of the grassland options. Could be a phased process, reverting to Landscape Tier grassland first, followed by upgrades to Habitat Tier at a later date.



Grassland farming can provide greater environmental services than arable farming. Photo: Julian Claxton

Outcomes

- As per the grassland habitat options.
- Where reverting to basic grazing marsh/ river valley grassland, the addition of legumes/wildflowers (UK provenance) to the sward will increase benefits for invertebrates and associated species.
- Water levels can be held higher, potentially at a landscape scale, with associated benefits for waders and wildfowl.



Creation of wet areas, such as marsh footdrains, scrapes and ponds attract wildlife and store water. Photo: Kevin Simmonds

Likely interventions

- Amelioration of any compaction issues.
- Establishment of grass/wildflower sward (exact components and method will depend on the soil type, target habitat, intended management, etc.).
- Regular topping in first/second growing season (or more intensive grazing).
- Development of water level management plan (capital item) and liaison with neighbours, and IDB/EA (where proposing to raise water levels).

May require a feasibility study/implementation plan which could be covered by a capital item. Please assume that ditch works, water control structures, livestock infrastructure and creation of scrapes/footdrains would also be covered by separate capital funding.

Special projects (Creation and Innovation)

Innovative projects such as the creation of fen/reedbed/wet woodland, Natural Flood Management or 'Making Space for Water', river restoration, 're-wilding', catch dyke projects, turf pond creation.



Creation of reedbed helps capture carbon, filter water and provide habitat for species such as swallowtail butterflies, bittern and crane. Photo: Peter Han

Would need to be supported by feasibility studies/implementation plans and other capital items.

Applicants would be expected to put forward a detailed proposal and costings for consideration by the local delivery board or funding body.

Funding from other sources, such as water and carbon storage funds, could be blended in with the ELM scheme funding.



Broads partnership projects create large areas of freshwater wetlands that provide multiple public benefits by storing water and carbon, providing wildlife habitat and wonderful places to visit.

Photo: Mike Page



Additional areas for swallowtail butterflies are needed if the species is to be resilient to the impacts of climate change and sea level rise.

Photo: Jackie Dent

Restricted use of avermectin-based wormers

– discussion with Ben Crowter (Westover Vets) 16/03/2020

Notes taken by Katherine Trehane

Cattle

Ben believes that it is extremely simple to follow a worming regime which avoids the use of avermectins while cattle are out on the marshes. It shouldn't be necessary to give a worming treatment in the summer within extensive grazing operations. Obviously there will be exceptions but he finds this to be true the vast majority of the time.

Reducing the use of wormers is important for the responsible use of medications, quite apart from environmental reasons. Farmers should be monitoring (faecal egg counts) and only treating where necessary.

The alternatives to avermectins are, by and large, just as effective, but susceptibility profiles are spatially variable. There is very little resistance to worming products in cattle parasites. Flukicides are not avermectin-based and some will kill round worms.

The alternatives to avermectins are often cheaper as they are more old-fashioned. However, they are always oral treatments, so the labour cost in administering these may be higher than for pour on products.

Sheep

Avoiding avermectins is much more difficult for sheep. They are much more susceptible to round worms and spread their droppings around more, so exposure is higher. Smaller animals – worms have a greater impact.

Wormer overuse has led to increased resistance to multiple classes of product, making it very difficult to restrict avermectin use.

Are avermectins really a problem?

Apart from the comment about responsible use of medications, it is very commonly observed that dung doesn't decompose after animals have been wormed. The dung is either toxic to invertebrates or somehow unpalatable to them. Regardless, there must be an impact on invertebrate populations. Ben doesn't know how long the effects of avermectins last in the dung.

He commented that administering avermectins by injection, instead of pour-on products, could reduce the environmental impact of avermectins and is a much more efficient way to use them. The concentration of the product in pour-on products is 5 times that of injections, implying that 4 out of 5 molecules do not make it into the body of the animal and could be washed off. The product is lethal to bugs on the body of the animal when it is applied, so is probably lethal to invertebrates on the ground as well.

We probably need to look at existing research on the impact of avermectins on invertebrate fauna, and possibly carry out some specific research to see if they have any knock-on impacts on birds, before we implement avermectin restrictions as a scheme requirement.



Broads ELMS Test and Trial – Self-assessment of fen habitat outcomes

Notes from a practical test exercise with the British Reed Growers Association (BRGA) and Norfolk Wildlife Trust (NWT), Woodbastwick Marshes, 10th March 2020

Draft version 1

Written by: Katherine Trehane

Sent to: Andrea Kelly

Comments received from:

Attendees

BRGA and NWT: 6 BRGA members and 3 NWT staff (names removed)

Delivery group and NE staff: Andrea Kelly* (BA), Katherine Trehane (NE), Rick Southwood (NE)

*also a participant in the exercises

This exercise contributes to the following Test and Trial questions:

Defra Thematic ELMS Priorities

Land Management Plans

- How will we monitor and verify that scheme participants are delivering the public goods they have signed up to deliver?
- Will we require a combination of approaches depending on the public good or type of participant?

Broads Test and Trial objectives

Objective 3:

- How will we monitor and verify that scheme participants are delivering the public goods they have signed up to deliver?
- What are the mechanisms that the local management board will require of advisers and scheme participants?

Summary and key learning points

We carried out a simple practical exercise to test the self-assessment of fen outcomes. This was a short, one-off test, so did not produce statistical results, but gave an indication of the potential for self-assessment in wetland habitats. 10 participants, all of whom own or manage fens and reedbeds in the Broads, but who have a differing levels of ecological knowledge, completed two exercises designed to test their ability to measure and assess fen outcomes or variables.

Our participants enjoyed the test and would be willing to carry out self-assessment on their own land. However, there was very little consistency in the results achieved. Some of this resulted from confusion over the exercise, which could be addressed through better instructions and training, but some was a result of subjectivity which is impossible to eliminate completely. Even the participants who are conservation professionals came up with different results to NE (who set the task), so this is an issue regardless of technical knowledge.

Key learning points:

- Wetland habitats are complex and variable so coming up with a list of standard outcomes to assess is very difficult. Site-specific outcomes are likely to be needed in most cases.
- Self-assessment could be a useful tool for improving land manager understanding of their fen habitats, resulting in better management.
- Self-assessment needs to be accompanied by detailed, face to face training, even for conservation professionals, in order to produce more consistent results.
- Self-assessment is unlikely to be accurate enough for formal monitoring of wetland habitats.
- Formal monitoring should be done by accredited advisers following standard methodology, especially if results-based payments are introduced.
- Additional monitoring, such as species surveys, is likely to be needed for wetland habitats.

Introduction

Defra have indicated that there may be an element of results-based payments for Tier 2 of ELMS, and that self-assessment may play a role in this. Several Test and Trials are looking at this, including the RSPB project which is looking at self-assessment of grazing marsh habitats in the Broads. To our knowledge, nobody has considered whether self-assessment could work in wetlands. We decided to conduct a short and simple one-off test in one of our core Broads habitats: species-rich fen.

Methodology

Natural England (NE) devised a short list of fen outcomes which could be assessed in the field by land managers with varying amounts of ecological knowledge. We based this largely on the Favourable Condition Tables for the SSSI habitats on the site, as these set out targets for variables like scrub cover and vegetation height. Botanical species-richness was not included as we were conducting the test in the late winter. We added some additional criteria covering 'habitat heterogeneity'.

We tested this with members of the [British Reed Growers Association](#) and nature reserve staff from Norfolk Wildlife Trust, all of whom own or manage reedbed and fen habitats in the Broads. Some of these are experienced in ecological monitoring while others had no experience. The exercise took approximately 2.5 hours, including a short briefing.

We asked the participants to conduct two tests. Exercise A was designed to test their ability to estimate % cover of scrub – a key outcome for wetland habitats. We gave them aerial photos taken previously with a drone, showing 2 areas of fen habitat (Annex A). We also gave them some diagrams indicating what different % cover categories look like (Annex B). We then asked them to individually select the % cover category which best corresponded to the level of scrub in each photo. The NWT employees were absent for this exercise, so a small group of NE advisers were separately asked to do this test, to see if conservation professionals come up with a different result.

Exercise B explored a wider range of outcomes in the fen itself. The participants were given a recording sheet listing the outcomes (Annex C) and a short methodology (Annex D). We gave a very brief explanation of the task before sending them out to complete the survey. Delivery group and NE staff were present to help answer any queries, but we deliberately avoided giving detailed instructions.

Participants spent approximately 1 hour looking at the same 5 sample points in 2 different fen habitats – fen meadow and reed-dominated fen. On completion, we compared our results as a group. We also gathered feedback on how easy or difficult the task was, how the process could be improved, and whether self-assessment could work as a method of monitoring fen habitats.

Results and discussion

Setting fen outcomes

Because fen habitats are so variable, NE found it very difficult to produce a standard list of fen outcomes which is applicable to most fens and simple enough to be used by non-ecologists. However, the participants were able to complete the task, and the conservation practitioners commented that the list of outcomes gave a reasonable reflection of what constitutes a good fen habitat. The outcomes would probably need to be refined on a site specific basis, particularly if botanical species richness is added.

Exercise A

Table 1 shows the number of participants who chose each % cover category for the 2 photos, and which category the NE adviser who set the task selected, together with the results for the separate NE adviser group.

The variance in % cover estimates for our participants was in the region of 50% for both photos. This demonstrates that estimating % cover is hugely subjective, even when charts are available to aid the process. With the exception of the BA ecologist, the participants in this exercise were not conservation professionals, so had limited or no experience of ecological surveys. As it was winter, they found it difficult to distinguish between the scrub and the dead reeds, a problem also raised by the NE advisers who completed the task.

Table 1: results of scrub % cover estimation for participants and NE advisers

	5-10%	10-20%	20-30%	30-40%	40-50%	50-62.5%	62.5-75%
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Photo A - participants			2	NE adviser	3	2	1
Photo A – NE advisers				4	2	4	
Photo B - participants		2	3 + NE adviser	1		1	
Photo B – NE advisers		1	5	2			

The NE advisers produced a more consistent result, particularly for photo B, but there was still a variance of up to 30% in the estimates for both photos. Higher resolution photos and more detailed instructions / training are needed to produce more accurate and consistent results for both the conservation professionals and the participants.

Exercise B

Our participants enjoyed the exercise and found it interesting and instructive. They were able to complete the exercise with very little assistance, but there was confusion over some of the outcomes / variables assessed. We forgot to explain the difference between rush types beforehand, so some people incorrectly estimated the cover of soft and hard rush. This included some of the more experienced conservation practitioners.

Estimates of average vegetation height (short / medium / tall) were quite variable as some people weren't sure whether to look at the top of the vegetation or the bulk of the sward. Presence / absence of tussocks was also highly variable, reflecting different understanding of what a tussock is. Estimating the depth of litter proved particularly challenging, as some people weren't sure what constituted litter and whether to count litter which was covered by shallow water.

The only outcomes which achieved consistency in the results were % cover of undesirable species (none or very low), presence/absence of invasive species (absent from all samples) and the number of reed shoots (this involved a simple count so was much less subjective than other variables).

We did not ask the participants to assess species-richness (of plants) or presence of 'positive indicator' plant species. This is a key fen outcome which would need to be included in a refined methodology, but could be particularly difficult for land managers who are not familiar with identifying wetland plants.

Some of the issues encountered could be addressed by refining the methodology and instructions, and by giving full (face to face) training beforehand, but it would be impossible to completely remove the influence of subjectivity. The group concluded that they would like to do the assessment on their own fens or reedbeds (perhaps annually) to monitor the effects of their management and gain a better understanding of their habitats. They commented that making self-assessment a scheme requirement would help to create a more level playing field. However, they would prefer any formal assessment to be done by a trained adviser. They suggested that the assessment could be done independently every 3 years.

Full comments and suggestions for improvements can be found in Annex E.

Conclusions (set out against the Test and Trial questions)

How will we monitor and verify that scheme participants are delivering the public goods they have signed up to deliver?

Self-assessment of fen habitats could certainly build land managers' understanding, and help them to adjust their management to better achieve the objectives of their ELMS agreement. Our participants suggested that we should provide 'change points' which indicate when different management might be needed.

The scheme could make regular self-assessment a requirement, or give a financial incentive for this. However, given the variability of wetland habitats and the inevitable subjectivity in assessing the outcomes, we feel that formal monitoring and verification should be done by accredited advisers, especially if scheme payments are linked to this.

Will we require a combination of approaches depending on the public good or type of participant?

Self-assessment may be more suitable for 'simpler' habitats such as grazing marsh and river valley grassland, or for options on arable land, such as buffer strips. The complexity of wetland habitats not only makes it difficult to set measurable outcomes but also makes it very hard to monitor these in a consistent manner which is not overly scientific or time consuming. Our test shows that it is possible to devise a self-assessment process which gives an indication of habitat quality for fens but this may not be adequate for formal monitoring.

Exercise A demonstrated how much inconsistency there is between both the participants and the conservation professionals when estimating % cover of scrub. For exercise B, none of the participants came up with the same overall results as NE, despite the fact that at least 4 of the participants are conservation practitioners (including one ecologist). This demonstrates the influence of different perspectives. A self-assessment approach for fens needs to be very clearly set out and accompanied by face to face training, regardless of the level of knowledge of the participants.

What are the mechanisms that the local management board will require of advisers and scheme participants?

Land managers should be given training in self-assessment so they can undertake this, either voluntarily or as a scheme requirement. Our participants told us that the process needs to be quick, easy and repeatable. They could submit their results on a regular basis (perhaps annually) to the local management board or funding body. Accredited advisers could use the same assessment criteria to verify the land manager's findings. More in-depth monitoring (such as species surveys) may also be needed if the self-assessment process is, by its very design, quite simplistic.

Annexes

Annex A – Photos for % cover of scrub exercise

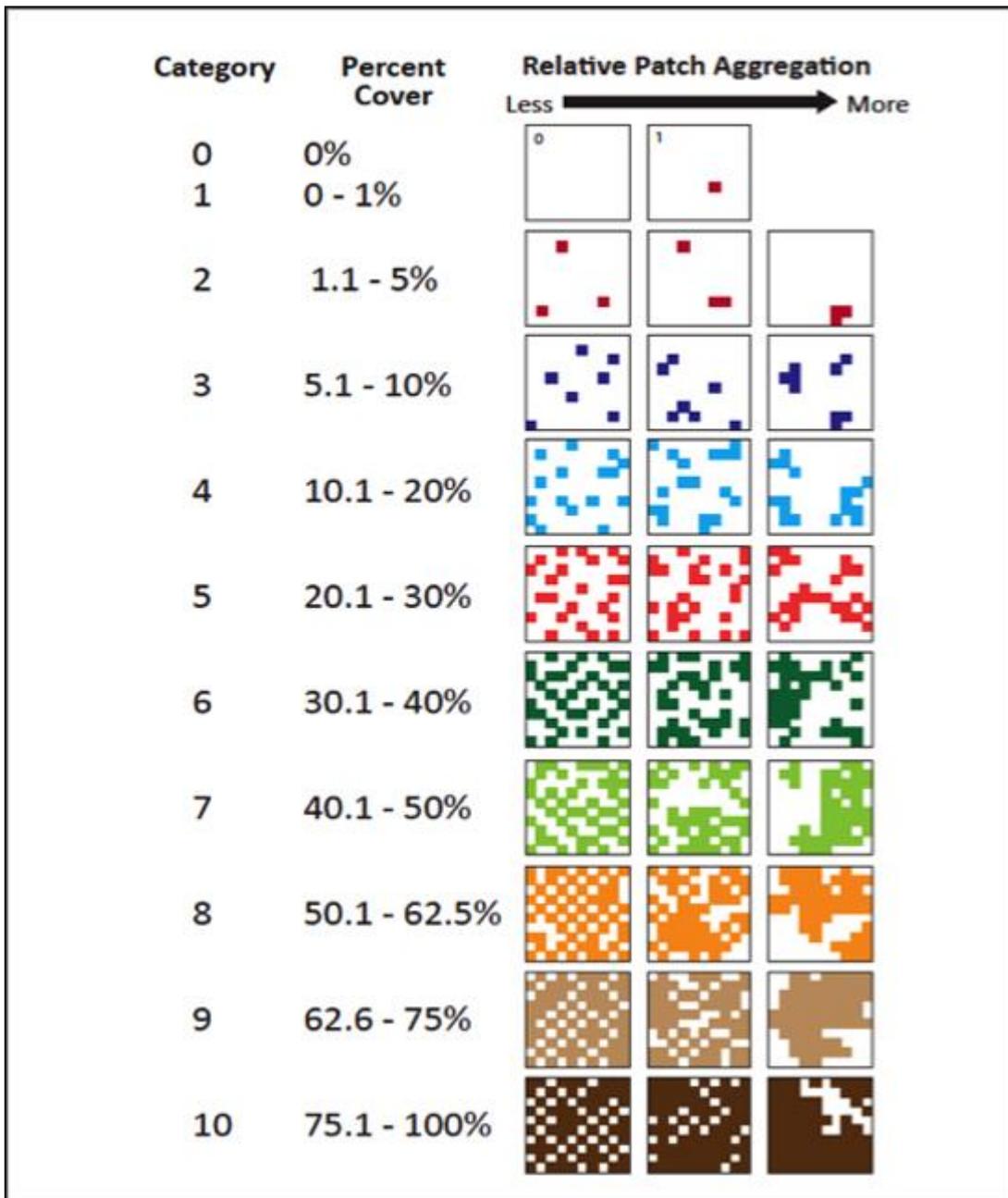
Photo A



Photo B



Annex B - % cover charts



Annex C – recording sheet used for the exercise

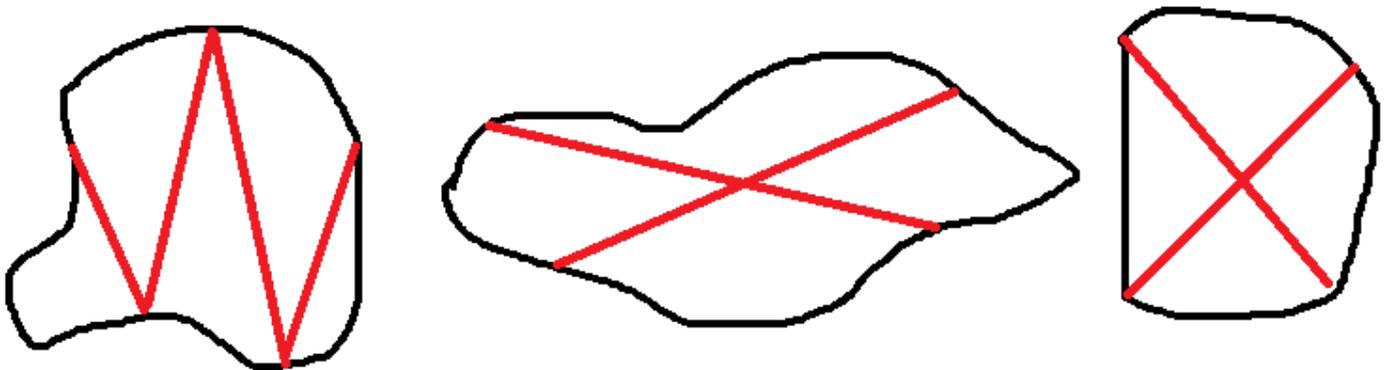
Fen attribute/outcome	Stop 1	Stop 2	Stop 3	Stop 4	Stop 5
Habitat quality - record attributes of the vegetation <u>within 2m radius</u> of each stop					
Depth of litter (accumulated dead vegetation) in cm					
No more than 5% cover of bramble, nettle, bracken, creeping thistle, spear thistle, curly dock and broad-leaved dock (record Yes if no more than 5% / No if more than 5% / Zero if there is none)					
Invasive non-native species (record presence / absence - tick or cross)					
Fen meadow attributes - record attributes of the vegetation <u>within 2m radius</u> of each stop					
No more than 80 reed shoots in the sample area (record Yes/No/ Zero if there are none)				N/A	N/A
No more than 20% cover of soft and hard rush (record Yes/No/ Zero if there is none)				N/A	N/A
Habitat heterogeneity - record attributes of the vegetation <u>within a 2m radius</u> of each stop:					
Is the vegetation in the sample area on average, a) short (below knee height); b) medium (knee to waist height); c) tall (over waist height)?					
Tussocks over 5cm high (e.g. moss tussocks, large sedges) (record presence/absence - tick or cross)					
Habitat heterogeneity - record <u>presence/absence</u> (tick or cross) of the following features within a <u>5m radius</u> of each stop :					
Deep water (over 30cm deep), e.g. ditches					
Shallow water, e.g. pools/turf ponds (less than 30cm deep)					
Unvegetated open water (in ditches/pools) - where you can see the bottom					
Open water with floating vegetation					
Open water choked with tall vegetation (swampy)					
Open water with tussocks on edge					
Open water with overhanging scrub					
Habitat heterogeneity - look around you, as far as you can see, but not beyond the boundary of the habitat unit (definition below*):					
Does it look like there is more than 5% scrub cover within the habitat unit from where you are stood? N.B. it is acceptable to record a different result from different sample points within the habitat unit. (Yes / No / Zero if there is none)					
Is there a sinuous scrub/woodland edge abutting the open fen? (Yes / no)					
Other attribute / outcomes - feel free to add any other variables which you think give an indication of fen / reedbed habitat quality					
*Habitat unit is the area of a particular type of fen habitat within a land parcel. If the parcel is entirely fen meadow then the boundary is the ditch or scrub/woodland edge. If there is fen meadow and tall herb fen / reedbed within the parcel, then treat these as separate habitat units. Dense scrub / woodland should not be treated as part of the habitat unit.					

Annex D – Methodology for assessment of fen / reedbed outcomes

The attributes / outcomes should be assessed by doing a series of stops on a planned walking route through the habitat. There should be one walk per **habitat unit**. This is defined as **the area of a particular type of fen habitat within a land parcel**. If the parcel is entirely fen meadow then the boundary of the habitat unit is the ditch or scrub / woodland edge. If there is fen meadow and tall herb fen / reedbed within the parcel, then treat these as separate habitat units. Dense scrub / woodland should not be treated as part of the habitat unit when you are assessing fen / reedbed outcomes.

FOR THE PURPOSE OF THIS EXERCISE, 5 STOPS HAVE BEEN MARKED WITH CANES (3 IN A FEN MEADOW UNIT AND 2 IN A TALL-HERB FEN UNIT), SO YOU DO NOT NEED TO SELECT A WALKING ROUTE. PLEASE DO THE 5 STOPS ONLY SO WE CAN RE-GROUP IN GOOD TIME.

- Decide on your walking route before you start. This should either be a W across the unit, from one side to the other, or a Scottish cross, as illustrated below. Try to start and finish within 5m of a ditch, if these are present on the site. Stick to the route as best you can – you may only deviate from the route if there are physical obstacles which prevent you from continuing, such as deep water, dangerous boggy ground or very dense vegetation. **DO NOT** endanger yourself by sticking doggedly to your chosen route! You can either return to your original route after you have gone round the obstacle, or decide on a new route and stick to this. Do not deviate for some particularly nice fen vegetation!



- For small units, stop at least 10 times. For larger units, stop between 10 and 20 times at your discretion. On a Scottish cross, do the same number of stops on each side of the cross (a minimum of 5 on each side). Very small units could have fewer stops but only if the habitat is very uniform.
- Don't stop on spoil banks or areas of higher ground which don't have fen / reedbed vegetation.
- At each stop, record each of the attributes listed in the recording table. The sample area is different for different variables – please follow the instructions in the recording table.
- The table specifies what to record – this may be presence/absence of a feature (tick or cross), a measurement, an answer to a question, or a % cover estimation. There is no need to record any additional information.

- Please do not record plant species – it is the wrong time of year and there isn't time on this exercise. If this approach to monitoring is adopted in future then an assessment of plant diversity will almost certainly be needed, but we aren't testing this yet.

Annex E - Full comments and suggestions for improvements

- Remove double negatives ('no more than').
- Need to be clear what constitutes scrub. Bog myrtle?
- Time of year is important for vegetation height (dies back in winter).
- Need a standard survey time (mid-July to end Aug? But what about grazing?)
- 'Sinuous edge' question was confusing and not an essential outcome. Scrub edge with variable height might be better?
- Litter depth hard to assess when under water.
- Height of vegetation – average or top of vegetation? Dead rush stands above the bulk of the sward.
- GPS the route so it can be repeated (Smartphones?).
- Trying to assess scrub cover while in the field doesn't work – you need to look from above. Drone photos? BA aerial photography?
- Describe change points which indicate when different management is needed.
- Hydrology is missing. Is it squidgy underfoot?
- Water depth as a variable?
- Habitat heterogeneity section didn't really work. Sample area needs to be bigger than 5m radius. Have a separate ditch assessment process.
- Very difficult to create a standard list of habitat heterogeneity variables that could be used on all sites, as some sites are very small and might have only one type of habitat (which is fine) while others might be much more variable. What scale should we assess this over? Probably need to look wider than the holding/site.
- Add notes section to survey form.
- Prefer adviser to do the assessment.
- Self-assess every year; independent assessment every 3 years.
- Obligation to self-assess – level playing field.

Feedback from a BRASCA member who was not a participant in the test exercise:

This assessment did not include commercial reed and sedge production and some thought into management which produces quality reed and sedge combined with some consideration for water quality & flow, access and other issues would be of benefit all round.

Environmental Land Management system (ELMs) – Broads Tests & Trials Workshop – Acle, 13th November 2019.
Preliminary Response from Broads Reed & Sedge Cutters Association (Brasca)

1. We would to thank the project delivery group for inviting Brasca, (Paul Eldridge & Richard Starling) to the Acle workshop and for the opportunity to participate in the ELMs process.

2. As expected, there were many suggestions and ideas regarding future priorities to improve the 'delivery of public goods' in the Broads. There appeared to be a good cross section of interest groups present at the workshop. The majority seemed positive that improvements could and should be made and objectives could be met.

3. The various background reports e.g. 'State of Nature - 2019', local conservation body public comments were mostly pessimistic with little mention of some of the successes achieved. The reports have been dominated by statistics showing decline of terrestrial and freshwater species in the UK and mostly point the finger at policy driven agricultural change being the most significant driver of declines. Although the workshop's purpose was to look forwards and suggest improvements perhaps some consideration should be given into what base we are building on i.e.

a). There is little mention of the impact population growth has had on biodiversity and we feel this is important in the Broads.

b). Whilst policy driven agricultural change may well have been responsible for declines in the Broads such as deep drainage schemes and arable intensification effecting water quality, a high proportion of the Broads fens, reed & sedge beds have received considerable management funding for many years now. It could, in several cases, be argued that this funding has not produced the results expected by which we refer to both environmental and social benefit. Some will say that the financial input has been too low but Brasca feels there should be a closer examination and more discussions on this.

4. Historically, the Broads reed & sedge beds have been managed by cutting/mowing to produce quality products for the UK's thatching industry. In the past, there was little or hardly any emphasis on grazing the Broads fens, reed or sedge beds. The changes in reed and sedge bed management more or less started when funding became available for 'conservation led projects' i.e. Bittern projects, ESA / Fen Tier. Before these well intentioned schemes started, the reed & sedge cutting

industry was surviving. Reed in particular was commercially cut throughout the Broads and elsewhere in the UK. On many of the Broads sites, this was and in some cases still is, the only real management which takes place. Many commercial reed beds had considerable wildlife importance especially for some rare bird populations with sedge beds being of equal importance for both birds and plants. It is no wonder that the ownership of these habitats slowly changed from private, mostly farming related to conservation bodies charge.

5. If we are to look ahead and make suggestions for, in our particular interests, the Broads reed and sedge habitats, then all interested parties should consider a gathering to agree a 'State of the Broads Reed & Sedge Habitats & Management 2020' statement. Some of the truths may be difficult but would include;

a). Approx. 85% of reed used on thatched roofs in the UK is now imported. Much of this reed is shipped considerable distances including from China. It can be argued that the decline in UK reed production has contributed to the thatching industry having no alternative but to rely on imported reed. Imported reed comes with a very high carbon footprint compared to UK reed.

b).The situation in the Broads is such that imported reed is used widely locally owing to the demand for 'Norfolk reed' far exceeding production.

c). Despite several attempts and efforts to address management problems such as access, water flow/levels, harvesting timing (sedge) many of these issues remain.

d).We are experiencing a steady decline in commercial cutting and in particular with sedge over the last 5 years. There are several reasons for this and some of which have been mentioned but the main factor is low incomes. Many Cutters have given up completely on sedge cutting and are turning to other work which gives higher income opportunities.

e).The situation with reed production is perhaps not so desperate as with sedge production, however, there is perhaps an urgent need to highlight some of the issues. For example, one problem effecting reed production is the reliance for many years on the harvesting machine BCS Reed Mower Binder known locally as the 'Olympia'. These successful machines cut and tied reed in one single operation and have been hugely popular amongst Cutters here in the Broads. Unfortunately, these machines can no longer be purchased in the UK with the Italian manufacturers (BCS) stating on their website that these machines cannot be sold in the EU. Perhaps the situation may be reviewed post Brexit but future machinery investment for reed cutting in the Broads remains difficult.

6. Looking to the future and seeking improvements will require changes. If reed and sedge cutting is to play a part in the future management of the Broads and in particular habitat enhancements on sites where Cutters work, then we have to have a system which is fairer to those who undertake the actual work, if not, then the number of Cutters will continue to fall.

As the ELMs process moves on in the Broads, we ask that all parties concerned with reed and sedge habitats meet to try to establish an agreement for the best way forward.

Richard Starling. Paul Eldridge
Brasca 17th November 2019

ELMS Collaboration Plan for Water Quality Improvements at East Ruston
Stream Catchment leading to the River Ant & Marshes SSSI and Barton Broad
SAC

Group Members

<u>Landowner Name</u>	<u>Address</u>	<u>SBI</u>	<u>Holding Size (ha)</u>	<u>Main Contact</u>
A Farmer	Home Farm		50	

Group Map

Not attached.

Objectives

To implement a range of capital works, farming technique changes and cropping changes to improve the water quality of the River Ant & Marshes SSSI and Barton Broad SAC.

The river Ant & Marshes SSSI and Barton Broad SAC are currently in unfavourable condition due to

- Poor water quality (excess Total P)
- Excessive algal biomass (chlor a)
- Impoverished aquatic flora

To deliver measurable water quality improvements at the group water sampling points. By year 5 total phosphorus as tested is <0.5mg/l at every sampling point every month.

Funding+Budget

£10k - 2021

£10k – 2022

£10k - 2023

Action Plan

To implement the following;

Action Type	Action Owner	Technical Support	Financial Support	Timeframe	Completed
Monthly water quality monitoring	Farmer A, C, D, E and F	Essex & Suffolk Water	Essex & Suffolk Water	Monthly	
Bunded and/or covered filling areas in farmyards	Farmer A and C – supported by CSFO	NE – CSFO	NE- CSFO	Jan 2021	
Buffer strips alongside watercourses (length and width)	Farmer D, E and F	NE-ELMS	NE- ELMS	Autumn 2021	
Biofilters or biobeds	Farmer E	NE – CSFO	NE – CSFO	Autumn 2021	
Cover crops (acreage)	All farmers			Annually	
Application of organic manures by injection or trailing shoe	All farmers – supported by machinery grant			Jan 2021	
Ensuring Organic manures have accurate nutrient analysis.	All farmers			Annual calibration sessions	
Controlled traffic farming and other compaction	All farmers - Event planned			October 2021	

reduction methods					
Fenced off cattle watering areas	Farmer A,C and D supported by ELMS applications			Jan 2024	
Tree planting where it might slow overland flows, increase groundwater infiltration or provide shade to watercourses.	All farmers event planned with a target to plant 5ha across the group			December 2021	
Soil and nutrient mapping to influence cultivation and fertiliser policies	All farmers - Event planned and follow-up workshops			December 2021	

Delivery Milestones

To successfully implement all of the capital works identified in the plan.

To undertake monthly water quality monitoring

Outcomes

Measurable water quality improvements at the group water sampling points leading to a <0.5mg/l of total phosphorus at every sampling point every month.

An overall improvement in the East Ruston Stream and water entering the River Ant.

Consultee Comments

[The grazing budgets] illustrate really well how we can't match the returns of the intensive sector on our low input wildlife friendly grazing regimes. They are virtually unprofitable on many low lying areas of broadland without stewardship and/ or BPS payments and this is what we are seeing with our small herd and with our neighbouring farms where livestock are decreasing in numbers and virtually being kept as a hobby.

I've been through the 5 costing scenarios & it's pretty sobering stuff. Doesn't look unrealistic either.

Overall these models work and certainly provides the direction of travel. They are not a complete enterprise costing as overheads are not included and the objective was just to demonstrate the impact of changing management regimes in the grazing period.

The Nix prices are calculated on average actual farm prices, across a wide sample of farms, and therefore should be representative.

The value of the cows and calves is the same for each system - doubt that would be true because the high output system will probably be using high value, highly productive continental breeds which will grow much faster and be worth far more but wouldn't suit the low output system.

The lowest output system (scenario C) may only work with native breeds which will do well on rough grazing. The calves produced from this system will be worth far less at weaning because they don't grow anywhere near as fast as commercial breeds. Although, when it comes to selling them deadweight the low output animals may be worth more £/kg because of the "value" added by the system (pasture fed, organic etc.).

The cull cow value is the same for each system, which if you agree that farmers would have different breeds to suit the different systems wouldn't be true.

Assuming the cull cows are the same grade so the £/kg is the same across the systems the high output breeds will be worth more because they weigh much more.

Also worth a mention that cattle prices are very low at present and long term, may well continue due to the current vegan trend/movement and the increase in importing beef arising from the pandemic panic buying by the public (although I think these have lessened to a degree now)

Rent £/Ha - I would have thought the habitat tier land would be worth a lot less than the high and reduced output land.

If you are looking at a situation where there is no BPS, then I'd expect rents to be very low or even being paid to graze.

Paddock size is very influential - small, irregular-shaped fields are more expensive to manage (time, fuel and labour).

Fields up the Wensum valley are very variable and expensive to manage.

Completely different cost structure for sheep.

Generally speaking, grazing inspection costs (livestock checks) are worked out per acre other than per hour i.e. average Marshman's fees 2019 £21/per acre (although this sometimes includes other duties too) due to the fact that the time taken can vary hugely on a day to day basis

In the notes it mentions creep feeding the high output calves to keep a higher stocking density. In my experience we never fed creep to make up for tighter grazing, it was fed to push the calves even harder. This only really works with the high output commercial breeds because they will convert the feed efficiently to build frame and muscle whereas the native breed calves would just run to fat.

Although I can see it would be required in some scenarios and would certainly appeal to graziers, I would personally steer clear of encouraging creep feeding on site – easy to forget that feeders require vehicular/tractor access/means in order to fill/move which in itself can cause to poaching/ ground damage, especially if the same access point (gate way) is used each time

Farm X: Costs here are based on a suckler beef herd where calves are sold as stores in autumn

Keep scrolling right for scenarios D and E. Yellow cells are editable.

BASELINE LOWLAND GRAZING SYSTEM			BROADS LANDSCAPE TIER			BROADS HABITAT TIER			BROADS HABITAT TIER			BROADS HABITAT TIER						
SCENARIO A. High Output baseline			SCENARIO B. Reduced Output, grazing marsh/river valley grassland			SCENARIO C. Low Output, species-rich grassland on peat			SCENARIO D. Low Output, wintering wildfowl on clay			SCENARIO E. Low Output - breeding waders on clay						
Hectares	25		Hectares	25		Hectares	25		Hectares	25		Hectares	25					
Stocking rate (LU/ha/yr)	2.4		Stocking rate (LU/ha/yr)	1.4		Stocking rate (LU/ha/yr)	0.6		Stocking rate (LU/ha/yr)	0.8		Stocking rate (LU/ha/yr)	0.8					
Cows	60		Cows	35		Cows	15		Cows	20		Cows	20					
Calf Sales	56		Calf Sales	33		Calf Sales	14		Calf Sales	19		Calf Sales	19					
Value per calve	£ 587.00		Value per calve	£ 587.00		Value per calve	£ 587.00		Value per calve	£ 587.00		Value per calve	£ 587.00					
Primary Output	£ 33,106.80		Primary Output	£ 19,312.30		Primary Output	£ 8,276.70		Primary Output	£ 11,035.60		Primary Output	£ 11,035.60					
Cull sales	6		Cull sales	3		Cull sales	1.5		Cull sales	2		Cull sales	2					
Cull value	£ 1,100.00		Cull value	£ 1,100.00		Cull value	£ 1,100.00		Cull value	£ 1,100.00		Cull value	£ 1,100.00					
Secondary Output	£ 6,600.00		Secondary Output	£ 3,300.00		Secondary Output	£ 1,650.00		Secondary Output	£ 2,200.00		Secondary Output	£ 2,200.00					
BPS, based on 2019 rate	229.53	£ 5,738.25	BPS, based on 2019 rate	229.53	£ 5,738.25	BPS, based on 2019 rate	229.53	£ 5,738.25	BPS, based on 2019 rate	229.53	£ 5,738.25	BPS, based on 2019 rate	229.53	£ 5,738.25				
Total Output	£ 45,445.05		Total Output	£ 22,612.30		Total Output	£ 9,926.70		Total Output	£ 13,235.60		Total Output	£ 13,235.60					
Variable costs per cow			Variable costs per cow			Variable costs per cow			Variable costs per cow			Variable costs per cow						
Concentrate costs per cow	£ 38.00	£ 2,280.00	Concentrate costs per cow	£ 38.00	£ 1,330.00	Concentrate costs per cow	£ 38.00	£ 570.00	Concentrate costs per cow	£ 38.00	£ 760.00	Concentrate costs per cow	£ 38.00	£ 760.00				
Concentrate costs per calf	£ 26.85	£ 1,611.00	Concentrate costs per calf	£ 10.00	£ 350.00	Concentrate costs per calf	£ 10.00	£ 150.00	Concentrate costs per calf	£ 10.00	£ 200.00	Concentrate costs per calf	£ 10.00	£ 200.00				
Vet and med	£ 28.00	£ 1,680.00	Vet and med	£ 28.00	£ 980.00	Vet and med	£ 48.00	£ 720.00	Vet and med	£ 48.00	£ 960.00	Vet and med	£ 48.00	£ 960.00				
Winter bedding	£ 43.00	£ 2,580.00	Winter bedding	£ 43.00	£ 1,505.00	Winter bedding	£ 43.00	£ 645.00	Winter bedding	£ 43.00	£ 860.00	Winter bedding	£ 43.00	£ 860.00				
Winter feed costs ⁸		£ -	Winter feed costs ⁸		£ -	Winter feed costs ⁸		£ -	Winter feed costs ⁸		£ -	Winter feed costs ⁸		£ -				
Miscellaneous ¹	£ 15.00	£ 900.00	Miscellaneous ¹	£ 15.00	£ 525.00	Miscellaneous ¹	£ 15.00	£ 225.00	Miscellaneous ¹	£ 15.00	£ 300.00	Miscellaneous ¹	£ 15.00	£ 300.00				
Replacement Heifer cost	£ 1,200.00	£ 7,200.00	Replacement Heifer cost	£ 1,200.00	£ 3,600.00	Replacement Heifer cost	£ 1,200.00	£ 1,800.00	Replacement Heifer cost	£ 1,200.00	£ 2,400.00	Replacement Heifer cost	£ 1,200.00	£ 2,400.00				
Bull Costs (1 bull) ⁹	£ 1,500.00		Bull Costs (1 bull) ⁹	£ 1,500.00		Bull Costs (1 bull) ⁹	£ 1,500.00		Bull Costs (1 bull) ⁹	£ 1,500.00		Bull Costs (1 bull) ⁹	£ 1,500.00					
Forage costs per hectare			Forage costs per hectare			Forage costs per hectare			Forage costs per hectare			Forage costs per hectare						
Fertiliser	£ 120.00	£ 3,000.00	Topping (50% of area) ²	36	38	£ 1,368.00	Topping (50% of area) ²	46	38	£ 1,748.00	Topping (50% of area) ²	10	38	£ 380.00	Topping (50% of area) ²	10	38	£ 380.00
Plant protection costs	£ 45.00	£ 1,125.00	Weed wiping (20% of area) ³	2	48	£ 96.00	Weed wiping (20% of area) ³	2	48	£ 96.00	Weed wiping (20% of area) ³	2	48	£ 96.00	Weed wiping (20% of area) ³	2	48	£ 96.00
Total Variable costs		£ 21,876.00	Total Variable costs		£ 11,254.00	Total Variable costs		£ 7,358.00	Total Variable costs		£ 7,456.00	Total Variable costs		£ 7,456.00				
Gross Margin		£ 23,569.05	Gross Margin		£ 11,358.30	Gross Margin		£ 2,568.70	Gross Margin		£ 5,779.60	Gross Margin		£ 5,779.60				
Direct Costs			Direct Costs			Direct Costs			Direct Costs			Direct Costs						
Rent	£ 136.00	£ 3,400.00	Rent	£ 136.00	£ 3,400.00	Rent	£ 136.00	£ 3,400.00	Rent	£ 136.00	£ 3,400.00	Rent	£ 136.00	£ 3,400.00				
Fencing Costs	£ 25.00	£ 625.00	Ditching Costs ⁴	£ 44.80	£ 1,120.00	Ditching Costs ⁴	£ 44.80	£ 1,120.00	Ditching Costs ⁴	£ 44.80	£ 1,120.00	Ditching Costs ⁴	£ 44.80	£ 1,120.00				
Grazing Inspection costs	Hours	Rate hr	Grazing Inspection costs ⁵	Hours	Rate hr	Grazing Inspection costs ⁵	Hours	Rate hr	Grazing Inspection costs ⁵	Hours	Rate hr	Grazing Inspection costs ⁵	Hours	Rate hr				
1 hour per day over a 200 day season (Apr-Oct) ¹⁰	200	£ 14.50	£ 2,900.00	1 hour per day over a 200 day season (Apr-Oct) ¹⁰	200	£ 14.50	£ 2,900.00	1 hour per day over a 200 day season (Apr-Oct) ¹⁰	200	£ 14.50	£ 2,900.00	1 hour per day over a 200 day season (Apr-Oct) ¹⁰	200	£ 14.50	£ 2,900.00			
Total Direct costs		£ 6,925.00	Total Direct costs		£ 7,420.00	Total Direct costs		£ 7,420.00	Total Direct costs		£ 7,760.63	Total Direct costs		£ 7,940.00				
Net Margin before overheads		£ 16,644.05	Net Margin before overheads		£ 3,938.30	Net Loss before overheads		-£ 4,851.30	Net Loss before overheads		-£ 1,981.03	Net Loss before overheads		-£ 2,160.40				
	per ha	£ 665.76	Reduction in contribution relative to high output system		£ 12,705.75	Reduction in contribution relative to high output system		£ 21,495.35	Reduction in contribution relative to high output system		£ 18,625.08	Reduction in contribution relative to high output system		£ 18,804.45				
			per hectare		£ 508.23	per hectare		£ 859.81	per hectare		£ 745.00	per hectare		£ 752.18				
			Grazing payment to reach equivalence per Hectare		£ 508.23	Grazing payment to reach equivalence per Hectare		£ 859.81	Grazing payment to reach equivalence per Hectare		£ 745.00	Grazing payment to reach equivalence per Hectare		£ 752.18				
Net return per hectare with BPS	£ 665.76		Net return per hectare with BPS	£ 157.53		Net return per hectare with BPS	-£ 194.05		Net return per hectare with BPS	-£ 79.24		Net return per hectare with BPS	-£ 86.42					
Net return per hectare without BPS	£ 436.23		Net return per hectare without BPS	-£ 72.00		Net return per hectare without BPS	-£ 423.58		Net return per hectare without BPS	-£ 308.77		Net return per hectare without BPS	-£ 315.95					

Figures in red are negative values

Notes to accompany the Lowland Grazing Budgets

Costs are largely compatible with those in the John Nix Farm Management Pocketbook, with the possible exception of those costs generated from local data - see foot notes.

Remember Business overheads still have to be taken into account on all these numbers, but as they vary so much we are only looking at enterprise margins here. The bottom figures show the impact of no BPS payments.

To arrive at a margin equivalent to conventional high output the medium intensity (scenario B) needs a hectare payment of £508/ha and lowest intensity (scenario C) £860 per hectare - this is before the demise of BPS. These payments would need to be £738/ha and £1,089/ha respectively if compensation for the complete removal of BPS were to be provided.

Without BPS, only the high output scenario would make a profit (see line G1), which highlights the importance of the scheme payments in supporting extensive livestock systems.

The high output budget (scenario A) assumes improved pasture with high sugar ryegrass and use of nitrogen and other fertilisers, within the remit of RB209. The High output calves will receive creep feeding to balance grazing and keep higher stocking density.

The medium and low output budgets (scenarios B to E) assume just extensive grazing to allow species diversity and improvement only. These also assume either no fertiliser or low fertiliser and natural unimproved pasture hence lower stocking rates.

Most fixed costs will be the same and it is this that sees such a deterioration in the output per unit.

To create wet pasture or areas of fen, the stocking rates decrease further. Costs such as fluke control increase and often poorer growth rates are seen on the calves affecting economic performance further.

Contingency planning as to what happens to the herd in very wet times also becomes an issue for the farmer.

As conservation benefits increase then the stocking rates will decrease and therefore greater degradation of economic margins.

Maintaining some conservation benefits can increase costs per hectare in management.

Placing pasture into a long term agricultural decline to benefit conservation then has implications should it be needed to be restored again.

How is a value placed on the benefit of improved conservation?

Where and under which regime is greatest carbon sequestration achieved?

Notes on completion of cells and formulas

¹ Miscellaneous costs include things like tags and mineral blocks

² Topping half the area may be a bit high for 'normal' farms. HT GS10 (wintering wildfowl) assumes 30% topping. RSPB top all their marshes to promote fresh grass growth for waterfowl. The time estimates used for scenarios B & C (36 and 46 hours respectively) are quite high and may reflect slower topping of smaller, rush-dominated marshes using a small flail topper. RSPB estimates have been used for scenarios D & E - 10 hours based on a 4.6m rotary topper in fields with little or no rush.

³ RSPB estimates. HT GS10 (wintering wildfowl) assumes 30% 'weed control'. These costs are based on weed wiping 5ha (20%) at 2.5 ha/hour = 2 hours. Rate is based on £28/hour for labour & machinery (RSPB charges) plus 4 litres/hour chemical @ £5/litre = £48/hour. No weed wiping for species-rich grassland (as a general rule).

⁴ Ditching replaces fencing for Broads scheme tiers, whilst acknowledging that some ditches will need to be fenced, particularly on peat soils. Ditch density varies throughout the Broads. Calculation is based on 6250m for 25ha marshes. 6 year rotation = 1042m/year. Weed bucket at 300m/day (8 hours) = roughly 3.5 days or 28 hours @ £40/hour (RSPB £35 / IDB £45) = £1120 per year or £44.80/ha/year. Costs may be higher on softer peat soils, and will double where using a hard-edge bucket for reprofiling (RSPB estimate 150m/day).

⁵ Based on 75m footdrains per ha for breeding waders (scenario E). Maintained on 5 year rotation - 5ha per year x 75m = 375m @ RSPB contractor rate £1/m = £375 (or £15 per ha). Adjusted down by a third to 50m footdrains per ha for wintering wildfowl (scenario D) as fewer footdrains expected. RSPB rate is for use of the spoil spreader, which is cheaper than using a 360 excavator.

⁶ Includes water level monitoring / adjustments during stock check

⁷ Additional water level management likely to be required for wintering wildfowl and breeding wader management, including during winter months when there is no stock checking. Based on RSPB costs (1 day per week over 600ha), this equates to 15 mins/ha Nov-Mar for scenario D and 24 mins/ha Nov-Jun for scenario E.

⁸ Assumption that winter feed is conserved forage so no additional costs have been added. Some systems may need additional bought-in winter feed - particularly for beef finishing units (in these scenarios, calves are sold as stores in autumn). HLS calculations allowed for extra barley to compensate for lost energy from later silage cuts on wet grassland.

⁹ Bull costs based on purchase price of £4000, kept for 3 years, sold for £1500, and annual costs £600-700/year.

¹⁰ SWT commented that average marshman's costs for 2019 were £21/acre, which equates to £1302. As the cost of grazing inspections is the same for all scenarios, so doesn't impact on the overall payment differences, no changes have been made.

Farm Y: Costs here are based on a suckler beef herd where calves are sold at maturity.
 Costs are the same as the original calculations for farm X, with the exception of the cells in orange.
 Keep scrolling right for scenarios D and E. Yellow/orange cells are editable.

BASELINE LOWLAND GRAZING SYSTEM			BROADS LANDSCAPE TIER			BROADS HABITAT TIER			BROADS HABITAT TIER			BROADS HABITAT TIER		
SCENARIO A. High Output baseline			SCENARIO B. Reduced Output, grazing marsh/river valley grassland			SCENARIO C. Low Output, species-rich grassland on peat			SCENARIO D. Low Output, wintering wildfowl on clay			SCENARIO E. Low Output - breeding waders on clay		
Hectares	25		Hectares	25		Hectares	25		Hectares	25		Hectares	25	
Stocking rate (LU/ha/yr)	2.4		Stocking rate (LU/ha/yr)	1.4		Stocking rate (LU/ha/yr)	0.6		Stocking rate (LU/ha/yr)	0.8		Stocking rate (LU/ha/yr)	0.8	
Cows	60		Cows	35		Cows	15		Cows	20		Cows	20	
Calf Sales	56		Calf Sales	33		Calf Sales	14		Calf Sales	19		Calf Sales	19	
Value per calve	£ 587.00		Value per calve	£ 587.00		Value per calve	£ 587.00		Value per calve	£ 587.00		Value per calve	£ 587.00	
Primary Output	£ 33,106.80		Primary Output	£ 19,312.30		Primary Output	£ 8,276.70		Primary Output	£ 11,035.60		Primary Output	£ 11,035.60	
Cull sales	6		Cull sales	3		Cull sales	1.5		Cull sales	2		Cull sales	2	
Cull value	£ 1,100.00		Cull value	£ 1,100.00		Cull value	£ 1,100.00		Cull value	£ 1,100.00		Cull value	£ 1,100.00	
Secondary Output	£ 6,600.00		Secondary Output	£ 3,300.00		Secondary Output	£ 1,650.00		Secondary Output	£ 2,200.00		Secondary Output	£ 2,200.00	
BPS, based on 2019 rate	229.53	£ 5,738.25	BPS, based on 2019 rate	229.53	£ 5,738.25	BPS, based on 2019 rate	229.53	£ 5,738.25	BPS, based on 2019 rate	229.53	£ 5,738.25	BPS, based on 2019 rate	229.53	£ 5,738.25
Total Output	£ 45,445.05		Total Output	£ 22,612.30		Total Output	£ 9,926.70		Total Output	£ 13,235.60		Total Output	£ 13,235.60	
Variable costs per cow			Variable costs per cow			Variable costs per cow			Variable costs per cow			Variable costs per cow		
Concentrate costs per cow	£ 38.00	£ 2,280.00	Concentrate costs per cow	£ 38.00	£ 1,330.00	Concentrate costs per cow	£ 38.00	£ 570.00	Concentrate costs per cow	£ 38.00	£ 760.00	Concentrate costs per cow	£ 38.00	£ 760.00
Concentrate costs per calf	£ 26.85	£ 1,611.00	Concentrate costs per calf	£ 10.00	£ 350.00	Concentrate costs per calf	£ 10.00	£ 150.00	Concentrate costs per calf	£ 10.00	£ 200.00	Concentrate costs per calf	£ 10.00	£ 200.00
Vet and med	£ 21.32	£ 1,279.20	Vet and med	£ 21.32	£ 746.20	Vet and med	£ 21.32	£ 319.80	Vet and med	£ 21.32	£ 426.40	Vet and med	£ 21.32	£ 426.40
Winter bedding	£ 36.92	£ 2,215.20	Winter bedding	£ 36.92	£ 1,292.20	Winter bedding	£ 36.92	£ 553.80	Winter bedding	£ 36.92	£ 738.40	Winter bedding	£ 36.92	£ 738.40
Winter feed costs ⁸	£ 117.04	£ 7,022.40	Winter feed costs ⁸	£ 117.04	£ 4,096.40	Winter feed costs ⁸	£ 117.04	£ 1,755.60	Winter feed costs ⁸	£ 117.04	£ 2,340.80	Winter feed costs ⁸	£ 117.04	£ 2,340.80
Miscellaneous ¹	£ 15.00	£ 900.00	Miscellaneous ¹	£ 15.00	£ 525.00	Miscellaneous ¹	£ 15.00	£ 225.00	Miscellaneous ¹	£ 15.00	£ 300.00	Miscellaneous ¹	£ 15.00	£ 300.00
Replacement Heifer cost	£ 1,200.00	£ 7,200.00	Replacement Heifer cost	£ 1,200.00	£ 3,600.00	Replacement Heifer cost	£ 1,200.00	£ 1,800.00	Replacement Heifer cost	£ 1,200.00	£ 2,400.00	Replacement Heifer cost	£ 1,200.00	£ 2,400.00
Bull Costs (1 bull) ⁹	£ 1,000.00	£ 1,000.00	Bull Costs (1 bull) ⁹	£ 1,000.00	£ 1,000.00	Bull Costs (1 bull) ⁹	£ 1,000.00	£ 1,000.00	Bull Costs (1 bull) ⁹	£ 1,000.00	£ 1,000.00	Bull Costs (1 bull) ⁹	£ 1,000.00	£ 1,000.00
Forage costs per hectare			Forage costs per hectare			Forage costs per hectare			Forage costs per hectare			Forage costs per hectare		
Fertiliser	£ 120.00	£ 3,000.00	Topping (50% of area) ²	36 38	£ 1,368.00	Topping (50% of area) ²	46 38	£ 1,748.00	Topping (50% of area) ²	10 38	£ 380.00	Topping (50% of area) ²	10 38	£ 380.00
Plant protection costs	£ 45.00	£ 1,125.00	Weed wiping (20% of area) ³	2 48	£ 96.00	Weed wiping (20% of area) ³	2 48	£ 96.00	Weed wiping (20% of area) ³	2 48	£ 96.00	Weed wiping (20% of area) ³	2 48	£ 96.00
Total Variable costs	£ 27,632.80		Total Variable costs	£ 14,403.80		Total Variable costs	£ 8,122.20		Total Variable costs	£ 8,641.60		Total Variable costs	£ 8,641.60	
Gross Margin	£ 17,812.25		Gross Margin	£ 8,208.50		Gross Margin	£ 1,804.50		Gross Margin	£ 4,594.00		Gross Margin	£ 4,594.00	
Direct Costs			Direct Costs			Direct Costs			Direct Costs			Direct Costs		
Rent	£ 136.00	£ 3,400.00	Rent	£ 136.00	£ 3,400.00	Rent	£ 136.00	£ 3,400.00	Rent	£ 136.00	£ 3,400.00	Rent	£ 136.00	£ 3,400.00
Fencing Costs	£ 25.00	£ 625.00	Ditching Costs ⁴	£ 44.80	£ 1,120.00	Ditching Costs ⁴	£ 44.80	£ 1,120.00	Ditching Costs ⁴	£ 44.80	£ 1,120.00	Ditching Costs ⁴	£ 44.80	£ 1,120.00
Grazing Inspection costs			Grazing Inspection costs ⁶			Grazing Inspection costs ⁶			Grazing Inspection costs ⁶			Grazing Inspection costs ⁶		
1 hour per day over a 200 day season (Apr-Oct) ¹⁰	200 £ 14.50	£ 2,900.00	1 hour per day over a 200 day season (Apr-Oct) ¹⁰	200 £ 14.50	£ 2,900.00	1 hour per day over a 200 day season (Apr-Oct) ¹⁰	200 £ 14.50	£ 2,900.00	1 hour per day over a 200 day season (Apr-Oct) ¹⁰	200 £ 14.50	£ 2,900.00	1 hour per day over a 200 day season (Apr-Oct) ¹⁰	200 £ 14.50	£ 2,900.00
Additional water level management (Nov-Mar) ⁷	6.25 £ 14.50	£ 90.63	Additional water level management (Nov-Jun) ⁷	10 £ 14.50	£ 145.00	Additional water level management (Nov-Jun) ⁷	10 £ 14.50	£ 145.00	Additional water level management (Nov-Jun) ⁷	10 £ 14.50	£ 145.00	Additional water level management (Nov-Jun) ⁷	10 £ 14.50	£ 145.00
Total Direct costs	£ 6,925.00		Total Direct costs	£ 7,420.00		Total Direct costs	£ 7,420.00		Total Direct costs	£ 7,760.63		Total Direct costs	£ 7,940.00	
Net Margin before overheads	£ 10,887.25		Net Margin before overheads	£ 788.50		Net Loss before overheads	-£ 5,615.50		Net Loss before overheads	-£ 3,166.63		Net Loss before overheads	-£ 3,346.00	
Reduction in contribution relative to high output system			Reduction in contribution relative to high output system	£ 10,098.75		Reduction in contribution relative to high output system	£ 16,502.75		Reduction in contribution relative to high output system	£ 14,053.88		Reduction in contribution relative to high output system	£ 14,233.25	
per hectare			per hectare	£ 403.95		per hectare	£ 660.11		per hectare	£ 562.16		per hectare	£ 569.33	
Grazing payment to reach equivalence per Hectare			Grazing payment to reach equivalence per Hectare	£ 403.95		Grazing payment to reach equivalence per Hectare	£ 660.11		Grazing payment to reach equivalence per Hectare	£ 562.16		Grazing payment to reach equivalence per Hectare	£ 569.33	
Net return per hectare with BPS	£ 435.49		Net return per hectare with BPS	£ 31.54		Net return per hectare with BPS	-£ 224.62		Net return per hectare with BPS	-£ 126.67		Net return per hectare with BPS	-£ 133.84	
Net return per hectare without BPS	£ 205.96		Net return per hectare without BPS	-£ 197.99		Net return per hectare without BPS	-£ 454.15		Net return per hectare without BPS	-£ 356.20		Net return per hectare without BPS	-£ 363.37	

Notes to accompany the Lowland Grazing Budgets

Costs are largely compatible with those in the John Nix Farm Management Pocketbook, with the possible exception of those costs generated from local data - see foot notes.
 Remember Business overheads still have to be taken into account on all these numbers, but as they vary so much we are only looking at enterprise margins here. The bottom figures show the impact of no BPS payments.

To arrive at a margin equivalent to conventional high output the medium intensity (scenario B) needs a hectare payment of £508/ha and lowest intensity (scenario C) £860 per hectare - this is before the demise of BPS. These payments would need to be £738/ha and £1,089/ha respectively if compensation for the complete removal of BPS were to be provided.

Without BPS, only the high output scenario would make a profit (see line 61), which highlights the importance of the scheme payments in supporting extensive livestock systems.
 The high output budget (scenario A) assumes improved pasture with high sugar ryegrass and use of nitrogen and other fertilisers, within the remit of RB209. The High output calves will receive creep feeding to balance grazing and keep higher stocking density.
 The medium and low output budgets (scenarios B to E) assume just extensive grazing to allow species diversity and improvement only. These also assume either no fertiliser or low fertiliser and natural unimproved pasture hence lower stocking rates.

Most fixed costs will be the same and it is this that sees such a deterioration in the output per unit.
 To create wet pasture or areas of fen, the stocking rates decrease further. Costs such as fluke control increase and often poorer growth rates are seen on the calves affecting economic performance further.
 Contingency planning as to what happens to the herd in very wet times also becomes an issue for the farmer.

As conservation benefits increase then the stocking rates will decrease and therefore greater degradation of economic margins.
 Maintaining some conservation benefits can increase costs per hectare in management.
 Placing pasture into a long term agricultural decline to benefit conservation then has implications should it be needed to be restored again.

How is a value placed on the benefit of improved conservation?
 Where and under which regime is greatest carbon sequestration achieved?

Notes on completion of cells and formulas

¹ Miscellaneous costs include things like tags and mineral blocks
² Topping half the area may be a bit high for 'normal' farms. HT GS10 (wintering wildfowl) assumes 30% topping. RSPB top all their marshes to promote fresh grass growth for waterfowl. The time estimates used for scenarios B & C (36 and 46 hours respectively) are quite high and may reflect slower topping of smaller, rush-dominated marshes using a small flail topper. RSPB estimates have been used for scenarios D & E - 10 hours based on a 4.6m rotary topper in fields with little or no rush.
³ RSPB estimates. HT GS10 (wintering wildfowl) assumes 30% 'weed control'. These costs are based on weed wiping 5ha (20%) at 2.5 ha/hour = 2 hours. Rate is based on £28/hour for labour & machinery (RSPB charges) plus 4 litres/hour chemical @ £5/litre = £48/hour. No weed wiping for species-rich grassland (as a general rule).
⁴ Ditching replaces fencing for Broads scheme tiers, whilst acknowledging that some ditches will need to be fenced, particularly on peat soils. Ditch density varies throughout the Broads. Calculation is based on 6250m for 25ha marshes. 6 year rotation = 1042m/year. Weed bucket at 300m/day (8 hours) = roughly 3.5 days or 28 hours @ £40/hour (RSPB £35 / IDB £45) = £1120 per year or £44.80/ha/year. Costs may be higher on softer peat soils, and will double where using a hard-edge bucket for reprofiling (RSPB estimate 150m/day).
⁵ Based on 75m footdrains per ha for breeding waders (scenario E). Maintained on 5 year rotation - 5ha per year x 75m = 375m @ RSPB contractor rate £1/m = £375 (or £15 per ha). Adjusted down by a third to 50m footdrains per ha for wintering wildfowl (scenario D) as fewer footdrains expected. RSPB rate is for use of the spoil spreader, which is cheaper than using a 360 excavator.
⁶ Includes water level monitoring / adjustments during stock check
⁷ Additional water level management likely to be required for wintering wildfowl and breeding wader management, including during winter months when there is no stock checking. Based on RSPB costs (1 day per week over 600ha), this equates to 15 mins/ha Nov-Mar for scenario D and 24 mins/ha Nov-Jun for scenario E.
⁸ Cost of cow feed for Farm Y.
⁹ Original bull costs based on purchase price of £4000, kept for 3 years, sold for £1500, and annual costs £600-700/year. Farm Y supplied bull cost of at least £2000. This equates to annual bull costs of around £1000 using the same calculation.
¹⁰ SWT commented that average marshman's costs for 2019 were £21/acre, which equates to £1302. As the cost of grazing inspections is the same for all scenarios, so doesn't impact on the overall payment differences, no changes have been made.

9. Peer review form

Annex 6: Peer review form NWT

1. Is the report organised according to the T&T reporting guidelines?

Yes	✓	Comments about what is done well: <i>The report is well structured as regards headings and sub-headings. It clearly illustrates the breadth and variance of the views advanced by the consultees and highlights the important points of consensus which require further consideration.</i>
No		Suggestions for improvement:

2. Is the report written in plain language and accessible by a non-technical reader?

Yes	✓	Comments about what is done well: <i>The language used is clear and assessable and the results of questions and other data is clearly displayed in tables and graphs.</i>
No		Suggestions for improvement:

3. Are the key themes and research questions clearly included within the report?

Yes	✓	Comments about what is done well: <i>These appear clear and extensively includes consultee's comments both verbatim and paraphrased. This has the effect of providing a clear and accurate impression of the points that the consultees are trying to make.</i>
No		Suggestions for improvement:

4. Does the methodology outline details on the sample, research methods, timing and location and any limitations of the data included in the report?

The points are clearly set out and details how the findings detailed in the report have evolved and why some points were progressed above others. It also details the effect that Covid-19 has had on the resulting data that has been included in the report.

5. How relevant are the research methods used in relation to the research questions?

Despite the impact that Covid-19 has had on the consultation methods that have been adopted, the research methods used are of sufficient breadth so as to reach a wide cross section of consultees e.g. focus groups and one to one discussions, on-line surveys, and workshops

6. Do conclusions, findings and recommendations flow from the text?

1 (No - Low relevance)		Comments about what is done well:
2		
3		
4	✓	Suggestions for improvement:
5 (Yes - Highly relevant)		<i>Section 5 would read better by adopting bullets points and the line spacing used in Section 6</i>
Not Applicable		

7. In the conclusion section, are available results reflected back to answer the key research questions where possible?

Yes	✓	Comments about what is done well: <i>The results sum up adequately the general consensus reached from the research questions</i>
No		Suggestions for improvement:

Date peer reviewed: 21/09/2020

Peer reviewer: Aaron Brown

Annex 6: Peer review form RSPB

6. Is the report organised according to the T&T reporting guidelines?

Yes	✓	Comments about what is done well:
No		Suggestions for improvement:

7. Is the report written in plain language and accessible by a non-technical reader?

8. Are the key themes and research questions clearly included within the report?

Yes	✓	Comments about what is done well:
No		Suggestions for improvement:

Yes	✓	Comments about what is done well:
No		Suggestions for improvement:

9. Does the methodology outline details on the sample, research methods, timing and location and any limitations of the data included in the report?

10. How relevant are the research methods used in relation to the research questions?

6. Do conclusions, findings and recommendations flow from the text?

7. In the conclusion section, are available results reflected back to answer the key research questions where possible?

1 (No - Low relevance)		Comments about what is done well:
2		
3		
4		Suggestions for improvement:
5 (Yes - Highly relevant)		
Not Applicable		

Date peer reviewed: 21/09/2020

Yes	✓	Comments about what is done well:
No		Suggestions for improvement:

Peer reviewer: Mark Smart

MS comments re BA t and T

1. Is the report organised according to the T&T reporting guidelines?

Yes Comments about what is done well:

In general, the report is organised in according to the reporting guidance. It is easy to read and flows well. It layout the questions that were asked, the approach that was taken to consult with local farmers and land managers, there reply and then conclusions. It is good to see the actual results from the surveys which gives confidence that the report it accurate and thorough. As I started to review this, I was highlighting questions, I was pleasantly surprised to find that they were all answered later in the document

No Suggestions for improvement:

In the guidelines is clearly explains the situation regarding anonymity. On two occasions this is broken 4231 specifically mentions RSPB
4225 specifically mentions RSPB
The wording needs changing to make these views anonymous.

2. Is the report written in plain language and accessible by a non-technical reader?

Yes. Comments about what is done well:

The report is laid out well, is well explained and easy to read.
Through the document there is a number of use of acronyms. Whilst they are explained on first use the report guidance suggests including them in a table at the end. This would be worth doing ande help understanding and act as an easy point of reference.

No. Suggestions for improvement:

Add acronyms table in at end.

3. Are the key themes and research questions clearly included within the report?

Yes. Comments about what is done well:

Key themes are clearly explained at the beginning and run through the report in a consistent way.

No Suggestions for improvement:

None

4. Does the methodology outline details on the sample, research methods, timing and location and any limitations of the data included in the report?

All the data is and results are a direct 'report/account of the information that was supplied

5. How relevant are the research methods used in relation to the research questions?

The need to gather individual views that feed into the final recommendation was critical in this T and T if it is to show a representation of what the landowners would like and feel would work. This was laid out and explained well.

6. Do conclusions, findings and recommendations flow from the text?

Yes, throughout the document it clearly outlines what the question is, what the findings are, how they were gathered and what the outcome/recommendation.

7. In the conclusion section, are available results reflected back to answer the key research questions where possible?

Yes, this is clear

List of Abbreviations

AE – Agri-Environment

BASIS –

BASC – The British Association for Shooting and Conservation

BPS – Basic Payment Scheme

BRASCA – Broads Reed and Sedge Cutters Association

BRGA – British Reed Grower Association

CAP – Common Agricultural Policy

CLA – Country Land and Business Association

CS – Countryside Stewardship

CSS – Countryside Stewardship Scheme

DEFRA – Department for Environment, Farming and Rural Affairs

EA – Environment Agency

ELM – Environmental Land Management

ELS – Entry Level Stewardship

ES – Environmental Stewardship

ESA – Environmentally Sensitive Areas (scheme)

FWAG – Farming and Wildlife Advice Group

HT – Higher Tier (Countryside Stewardship)

HLS – Higher Level Stewardship

MT – Mid Tier (Countryside Stewardship)

NE – Natural England

NFU – National Farmers Union

NMP – Nature Management Points

NrOSo – National Register of Sprayer Operators

RDS – Rural Development Service

RPA – Rural Payments Agency

RSPB – Royal Society for the Protection of Birds

WES – Wildlife Enhancement Scheme