FRAMEWORK AGREEMENT SCHEDULE 4

ORDER FORM/
WORK PACKAGE ORDER

FROM

Authority	Secretary of State for Environment, Food and Rural Affairs
Address	Defra Group Commercial 3rd Floor, Mallard House 1-2 Peasholme Green York YO1 7PX
Contact Ref:	[redacted]
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TO

Contractor	Land Use Consultants
For attention of:	[redacted]
Address	37 Otago Street Glasgow G12 8JJ

1. SERVICES REQUIREMENTS

AESME Lot 1: Resurvey of Higher Level Stewardship and CS Agreements

1. Background

The Agri-Environment Evidence Programme is jointly delivered by Natural England and the Environment Agency on behalf of Defra, with input from the Forestry Commission and Historic England. The Evidence programme seeks to monitor and evaluate existing Agri-Environment Schemes, including Countryside Stewardship and Environmental Stewardship.

The programme delivers evidence to:

- Evaluate the delivery of agri-environment schemes and their effectiveness in achieving their intended policy objectives.
- Inform current and future agri-environment policy, scheme delivery and development.
- Fulfil domestic reporting requirements.

A key component of the Agri-Environment Evidence Programme has been agreement scale monitoring. This aims to provide integrated monitoring of agreements across multiple scheme objectives. The location of agreement scale

monitoring in a simplified logic model for agri-environment monitoring and evaluation is shown below (Fig 1).

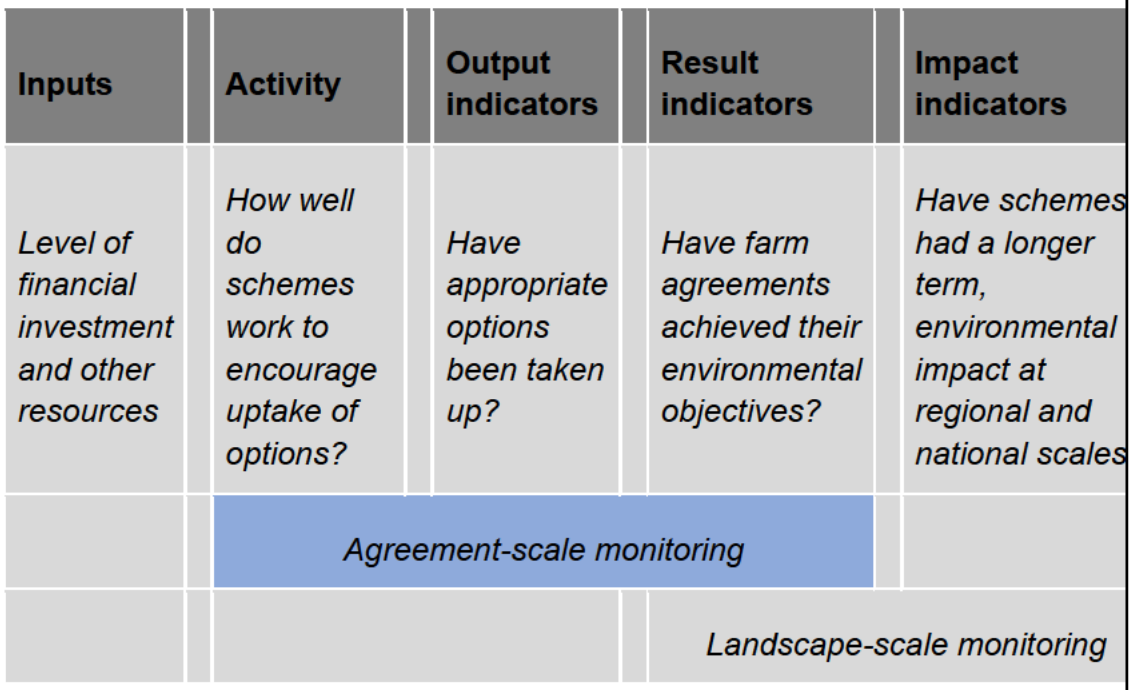


Figure 1. Simplified logic model for Agri-Environment monitoring and evaluation. Indicative location of agreement monitoring highlighted in blue in the logic model.

The programme has funded agreement scale monitoring for Higher Level Stewardship (HLS) and Countryside Stewardship (CS), summarised in sections 1.1 and 1.2. This project will build on this previous research in addition to a new element of work, investigating the role of guidance in achieving positive scheme outcomes (section 1.3).

1.1 Higher Level Stewardship

Agreement scale monitoring of HLS has consisted of baseline monitoring and subsequent resurvey.

- *HLS baseline: Monitoring the outcomes of Higher Level Stewardship: Results of a 3-year agreement monitoring programme* (NECR114: Mountford et al 2013).
    - A baseline field survey of HLS agreements which were in their first year. This was coupled with a desk-based assessment of agreement design.
    - This was to assess the potential success of agreements and provide a representative assessment and baseline for future surveys to build upon.
    - Surveys were conducted in 2009 to 2011.

- *HLS resurvey: Agreement Scale Monitoring of HLS: Resurvey of agreements baselined between 2009-11* (LM0445: Staley et al 2017).
    - Repeat surveys of 174 HLS agreements. The agreements were widely distributed across England to ensure coverage of grassland, moorland and arable options. Additionally, agreements were targeted to include representatives of heath, fen, bog and calcicolous grassland options.
    - Survey work was focussed on 70 management options identified as priorities and up to 3 parcels of land were resurveyed for each option on an agreement.
    - Resurveys were conducted in 2015 and 2016.
    - Face-to-face interviews were conducted with agreement holders
    - Field surveys included:
        - Mapping of broad and priority habitat
        - Assessment of FEP feature conditions
        - Detailed botanical data collection
        - Assessment of whether Indicators of Success were met
        - In SSSIs assessments followed Common Standards Monitoring
        - For some options a winter bird survey was conducted.

It is estimated that 59 of the HLS agreements are now in CS. Exact numbers of those still in HLS, transitioned to CS or dropped out of AES will need to be investigated early in the project (see section 3.1).

1.2 Countryside Stewardship

Agreement scale monitoring of CS agreements has only consisted of a baseline survey (*Agreement scale monitoring of Countryside Stewardship agreements* LM0458: Jones et al 2019). The CS baseline project included initial assessments of a range of CS agreements (Table 1). The CS baseline project was followed by a review project to assess the choices to be made when conducting a resurvey and how work could inform monitoring of the new schemes that will reward farmers and land managers for the delivery of environmental benefits and other public goods, which will replace currently available AES (LM04103: APEM 2021).

Table 1 Number of agreements with field surveys in the CS baseline project. Desk based assessments may have been more numerous (see later sections for details).

Agreement category	No. in sample
Higher Tier (HT)	105
Woodland Management	44
Mid Tier (MT)	240

Water only Capital Grants	57
Woodland Creation	17
Hedges & Boundaries	37
Total	**500**

The CS baseline project assessed agreements against multiple scheme objectives, specifically:

- Biodiversity
- Resource protection
- Historic environment
- Landscape character
- Climate change mitigation and adaptation

In this specification 'HLS cohort' is used to describe agreements which were previously surveyed in the HLS baseline and first resurvey (NECR114 & LM0445), even if by the time they are resurveyed they have ended and been replaced by a CS agreement. The term 'CS cohort' applies to those agreements surveyed in the CS baseline project (LM0458).

1.3 The role of Guidance in Achieving Positive Scheme outcomes (GAPS project)

Alongside resurveys of CS and HLS agreements, the project should investigate whether there is a relationship between engagement with land management guidance and positive agri-environment agreement outcomes, and to explore the factors influencing this relationship. This is a distinct work package within the project and is referred to throughout as the GAPS project.

Whilst a growing body of evidence points to the role of advice in supporting the delivery of AES (e.g. Brockett 2019, Brockett 2020, Boatman et al 2014, Hall 2018, Jones et al 2015, Mills et al 2019, Smallshire et al 2004, Tsouvalis and Little 2019), comparatively little is known about the role of guidance. In the GAPS project, 'guidance' is defined as information provided via some form of media (e.g. on a webpage, on paper, as a PDF, via an app, in a forum, on social media) in a one-to-many format, on the topic of managing land to achieve specific environmental outcomes. It includes, but is not limited to, the guidance provided directly via the agri-environment scheme (AES).

When an agreement holder needs help implementing some aspect of their agri-environment agreement, if advice is not provided via the AES (as is the case for mid-tier Countryside Stewardship (CS) agreements, for example) they would have the following options. They could try to manage on the scheme guidance alone, or in combination with guidance sourced from elsewhere –

which they may have found for themselves, or which may have been shared with them from a trusted source. They may seek out advice from other sources, such as via the private or third sector, or through their social network. We know that not all agreement holders may have the time or financial resources to seek out and pay for advice, and it may not be straightforward to source appropriate advice from other sources. This suggests that guidance could, under some circumstances, be important in informing how agreements are delivered when additional support is required.

GAPS focuses on understanding what those AES agreement holders that aren't provided with advice directly through their participation in the AES do once their agreement is live, to help them manage their land in accordance with their agreement. It seeks to understand the extent to which agreement holders engage with guidance of different kinds, when, and for what purposes; when (and whether) this is in relation to engagements with any kind of advice from any source; and what influence these information-seeking strategies have on the outcomes of their agreements. Whilst there is a growing body of evidence on the range of approaches that land managers take in relation to engagements with guidance and their access to advice[1], the unique contribution of the GAPS project is to make the link between these kinds of strategies and the achievement of their agreement's objectives on the ground, with a specific focus on those who are not eligible for free advice through their participation in the scheme.

GAPS will also respond to an evidence need identified in a recent project, which investigated land management professionals' engagement with guidance available via digital media. This study found that whilst digitally mediated guidance, in various forms, is considered to be useful and increasingly popular, there are few if any evaluations of the links between engagements with this kind of guidance and environmental outcomes (Chiswell et al 2020).

GAPS is particularly timely, given the development of a suite of new guidance materials to support the new schemes that will reward farmers and land managers for the delivery of environmental benefits and other public goods, which will replace currently available AES. This guidance will primarily be made available online on GOV.UK, and it is likely that – as now – not all agreement holders will be eligible to receive free advice directly through the scheme.

[1] This body of evidence is being developed internally, based on user research delivered to inform the development of the future agri-environment schemes.

2. Project aims and objectives

[redacted]

[redacted]

Project objectives:

The objectives of this project are to:

- explore the environmental effectiveness of HLS and CS at option and agreement level over time;
- explore the extent to which the circumstance (e.g. farm type, ownership etc.), commitment and understanding of the agreement holder has influenced the outcome;
- understand how delivery of environmental outcomes may have changed over time;
- evaluate the patterns of outcome from across the agreement sample to provide an overall assessment of the environmental effectiveness of HLS and CS;
- as part of the GAPS project, assess whether there is a relationship between engagement with land management guidance and positive agri-environment agreement outcomes, and to explore the factors influencing this relationship, by:
    - Seeking to understand what (if any) land management information agreement holders who do not have access to technical land management advice via the AES, use to help them deliver their AES agreement;
    - Investigating the relationship between agreement holders' engagement with guidance – either alone, or with other sources of support (e.g. advice, training) – and positive scheme outcomes (environmental and/or social);
    - Seeking to understand the impact of negative experiences of scheme guidance (e.g. finding it, understanding it, putting it into practice) on scheme outcomes (environmental and/or social)

[redacted]

Building on the aims and objectives, the following tasks set out the work which is required. Further detail on project tasks can be found in section 3.

Project tasks:

Preparatory work:

1) Explore the status of previously surveyed HLS and CS agreements and decide final sample numbers and mix of live and recently expired agreements (see section 3.1 for details).
2) Review databases from previous HLS and CS surveys and design a database and data management plan for this resurvey (see section 6 for details).
3) Building on tasks 1 and 2, evaluate and decide methodologies for desk-based assessments and field surveys for HLS and CS cohorts in preparation for surveys in years 2, 3 and 4 of the project.
4) Conduct field testing to ensure methodologies, time scales and questionnaires are appropriate.

HLS cohort:

5) Quantify change using data from the HLS baseline survey (2009 – 2011), HLS resurvey (2015 – 2016) and this third survey. This should consider changes in habitat type and extent, habitat condition, characteristics of plant communities (e.g. species richness), and assess desired outcomes (as defined by indicators of success), both in detail at the scale of individual management options, and more broadly across all agreements surveyed (see section 3.6).

CS cohort:

6) *Biodiversity*: Quantify change between the CS baseline survey (2009 – 2011) and this second survey. This should consider changes in habitat type and extent, habitat condition, characteristics of plant communities (e.g. species richness), and assess against desired outcomes (for example indicators of success) (see section 3.7.1).
7) *Resource protection*: Building on baseline surveys, assess the impact of agreements, options and capital items on water pollution, flood mitigation, air quality (ammonia emission) and soil quality (see section 3.7.2).
8) *Historic environment*: Review previous assessments of historic environment and resurvey agreements with historic features (see section 3.7.3).
9) *Landscape*: Repeat landscape surveys and adapt the methodology where improvements can be made (see section 3.7.4).
10) *Climate change mitigation and adaptation*: Assess how transition from one agreement to another impacts the potential for climate change mitigation (see section 3.6.5), and assess if the agreements' adaptation potential are realised between baseline and resurvey (see section 3.7.5)

Attitudinal survey (HLS and CS cohorts):

11) Quantify and describe agreement holder characteristics in order to assess their previous experience, motivation, experience of participation in HLS and CS (both in terms of the application process and agreement implementation), and plans for the future in relation to AES involvement and independent environmental practice (see section 3.8). This attitudinal survey is in addition to interviews as part of the GAPS work package.

GAPS work package (see section 4)

12) Deliver a quick scoping review of the published and grey literature on the link between engagements with land management guidance of different kinds, especially but not limited to AES guidance, and environmental and social outcomes.
13) Develop a sampling framework to explore variation in relevant factors for a robust sample of Mid Tier CS agreement holders
14) Prepare for qualitative data collection by: developing an interview protocol to use in semi-structured interviews, to investigate GAPS project objectives and related research questions; developing participant information and consent sheets
15) Deliver interviews with agreement holders and transcribe audio recordings of these interviews

Analysis, reporting and dissemination:

16) Compare HLS and CS environmental variables and outcomes between different types of habitats and features, and assess the role of agreement holder characteristics and geographical and physical variables (such as size of agreement, altitude or type of agricultural land) on these variables.
17) Evaluate changes in HLS and CS agreements between the baseline surveys and resurveys in the context of changes in environmental variables across the wider countryside over a similar time period, through conducting a counterfactual comparison.
18) Combining data from HLS and CS cohorts, compare and contrast their delivery of environmental outcomes. Explore how agreements have delivered across multiple scheme objectives (tasks 6-10) and explore the potential for trade-offs or synergies across different objectives. This should include an overall assessment of environmental outcomes delivered by HLS and CS agreements.
19) Analyse qualitative data from interviews with agreement holders carried out for the GAPS project alongside data relating to the achievement of agreement objectives and environmental outcomes for each agreement.
20) Use the findings from the GAPS project to inform development of a new social indicator relating to engagements with guidance.
21) Disseminate findings through reports, webinars, infographics and non-technical summaries and provide a summary of findings to agreement holders (see section 6).

3. HLS/CS resurvey approach

3.1 Preparatory work

Preparatory work in the project should review the status of previously surveyed HLS and CS agreements. This will inform final sample numbers and the mix of live and expired HLS and CS agreements in the project. For the HLS cohort this is likely to include:

- HLS agreements which have not expired;
- HLS agreements which have been extended;
- farms which previously had an HLS agreement but now have a CS agreement;
- farms which previously had an HLS agreement but now have no Agri-environment agreement.

For the CS cohort this is likely to include:

- CS agreements which have not expired;
- CS agreements which have been extended;
- CS agreements which have expired and been replaced by another CS agreement;
- farms which previously had a CS agreement but now have no Agri-environment agreement.

Initial work suggests that as of Q4 2020/21, 59 of the 173 HLS agreements have expired and been replaced by a CS agreement. This proportion is likely to increase over time. Additionally, this analysis will not have detected those HLS agreements which have recently been extended or will extend before field surveys in 2022/23 and 2023/24.

Initial analysis suggests the majority of CS agreements were originally due to have expired before field surveys due in 2022 and 2023 (see table below). However, this will not have included recent CS extensions and will not include examples where CS agreements have recently finished but been replaced by a subsequent CS agreement.

Table 2 Example expiry dates of CS agreements included in the baseline survey.

		Original expiry year				
Agreement category	**Total**	**Pre-2021**	**2021**	**2022**	**2025**	**2026**
MT	240	37	133			
HT	105	3	28	1	7	21

Woodland improvement	44	16	14			
Water only capital grants	57	-	-	-	-	-
Total	**500**	**56**	**175**	**1**	**7**	**21**

The contractor should plan to review and assess how best to sample across this range of agreements. However, the contractor will need to include resources for detailed spatial analysis to detect and understand the change of agreements over time, for example the transfer of HLS agreements to CS and replacement of CS agreements with another CS agreement (see task 1).

The project should make use of the different agreement status across the HLS and CS cohorts, to understand how they have impacted agreement holder attitudes and environmental outcomes.

3.2 Splitting resources across agreement types

[redacted]

Higher priorities do not require all agreements within a cohort to be re-surveyed. However, the number of agreements resurveyed should provide robust scientific conclusions. The contractor can choose how to split agreement surveys across the 3 years of field surveys, although note MT agreements required for the GAPS work package to finish and report by March 2024.

[redacted]

[redacted]

3.2 Counterfactuals

Using robust counterfactuals is an important element of the project. Tenderers are invited to propose approaches to build upon those in previous surveys, particularly to understand additionality of activity and outcomes.

For the CS baseline project, counterfactuals were included where possible. This included counterfactuals for both biodiversity and soil sampling surveys (see soil quality section below, 3.7.2). Resurvey of counterfactual sites should be prioritised in a resurvey. Although generally low in number, they have the potential to increase robustness of findings.

For the HLS surveys, national datasets were used as project counterfactuals. For the HLS survey, the Countryside Survey offered a national baseline, however this was no longer available for the resurvey. The National Plant Monitoring Scheme (NPMS) was therefore used as a national counterfactual. For this project the contractors should consider how national counterfactuals could be utilised in this re-survey for both the HLS and CS cohorts, including the ecosystem survey as part of the Natural Capital and Ecosystem Assessment.

3.4 Replicating methods

There is a trade-off between replicating methods used in previous surveys and adapting methods to improve or make use of newer technology. This trade-off was explored in the review of the CS baseline project (LM04103: APEM 2021). Generally, the aim is that surveys in this project should replicate the methods of previous HLS and CS surveys to maximise comparability over time for the two cohorts. In a small number of cases adapting methodologies may be sensible where there were significant challenges in implementation or where necessary to capture change (e.g. Climate change mitigation, see section 3.7.6).

Additionally, consideration may be made to other work areas to assess comparability with other current and future work, such as the Natural Capital and Ecosystem Assessment (NCEA).

Details of the methodologies are available in published reports and CS Baseline field survey handbook on request.

Given the estimated project budget, it is anticipated that elements of new monitoring methods could be included in the project, to provide additional measurements to supplement those previously used in surveys. This could include, but is not limited to:

- The use of earth observation to develop a core set of measurements, which a relevant to many AES agreements. These could supplement field surveys and could provide a baseline for future earth observation measurements.

- Build on the use of eDNA to monitor soil invertebrates, as piloted in the CS baseline and repeated in this resurvey.

Tenderers can propose how elements of new monitoring technology can be incorporated into this project.

3.5 Field testing of methods

The tenderers should consider the role of field testing and training and the timescale when this could be delivered. This field testing is not anticipated to collect data for the main project. The tenderers should consider the need to test methods on agreements of contrasting type and scale, with examples of differing high level scheme objectives (e.g. biodiversity, resource protection, historic environment, landscape, climate change adaptation). Tenderers should propose an approach to ensure effective methods and use well trained surveyors.

3.6 HLS cohort

The first HLS resurvey assessed progress towards environmental outcomes since the previous baseline survey and assessed how agreement holder characteristics affect the delivery of these environmental outcomes. This project should build on the previous work and assess environmental outcomes since both the baseline and first resurvey and assess how agreement holder characteristics have impacted the delivery of these environmental outcomes over the longer intervening period. This project should aim to resurvey in a comparable way to the first resurvey.

For this survey the current agri-environment agreement will likely differ from that in place for previous surveys (as set out in section 3.1). This resurvey should investigate how environmental outcomes have differed depending on whether HLS has been extended, replaced by CS or dropped out of AES. Because of this, a detailed desk-based exercise will be required to review and understand the current agreement in place. This should include an assessment of whether transitions from HLS to CS have seen appropriate option choices across the agreements and whether this represents increased or reduced environmental ambition.

This second HLS resurvey should ensure the sample of agreements includes sufficient replication of options and features to enable meaningful results. From the HLS baseline agreements were selected on the basis of:

- Year 1: “100 lowland agreements that contained a minimum of 50 agreements with arable (HE and HF) options and at least 50 with grassland (HK) management options”.
- Year 2: “50 agreements was stratified to target agreements containing options from the HL group (moorland and rough grazing”.
- Year 3: “24 agreements containing options that had been poorly represented thus far in the study, specifically HO options for lowland heath, HQ options for fen, lowland raised bog and reedbed and HK grassland options HK6-8 on calcareous grassland”.

This project will need to review and determine how these three different types of agreement are sampled. Additionally, timing of survey should be considered in relation to the habitats under agreement and optimum sampling time. It is the intention that CS agreements which have replaced expired HLS agreements should follow the methodology of the HLS surveys to ensure comparability over time.

3.7 CS Cohort

As set out above, the CS baseline project included assessments covering multiple different scheme objectives (Biodiversity, Resource protection, Historic environment, Landscape character, Climate change mitigation and adaptation). The aim of this project is to maintain this wide coverage of scheme objectives for CS agreements. In addition to the initial desk based assessment required for the HLS cohort (section 3.6), desk assessments should be completed for the CS cohort to understand the current agreement in place and if/how it differs from the agreement in place during the baseline survey. Changes in agreements should assess whether this represent an increase or reduction in environmental ambition.

3.7.1 Biodiversity

The assessment of biodiversity in the CS baseline project was prioritised due to the importance of protecting and enhancing wildlife and biodiversity within the CS scheme. This included assessments of baseline habitat and feature condition and assessment of quality of agreements including implementation against guidance, appropriateness of option choice and location, assessment of BEHTA and missed opportunities. These methods should be replicated to assess change over time with the ambition to return to the same agreements, options and features as the baseline.

Invertebrates genetics pilot

The CS baseline project included a pilot study of the use of DNA sequencing to investigate invertebrate diversity under CS options. This pilot was linked to the soil quality surveys (see section 3.7.2) and should once again make use of the soil quality field work and locations.

For the invertebrate genetics pilot there were three MT and three HT agreements, within each were three different options:

- AB1 - Nectar Flower Mix
- AB9 - Winter bird food
- SW1 - 4-6m buffer strip on cultivated land
- plus a control, a counter-factual treatment (arable land) which where possible was at the edge of a field with an option.

In total there were 59 samples for genetic analysis from Tullgren, pitfall and malaise traps (see LM0458 for more detail).

Since the baseline survey, genetic methods have advanced and land management may have led to further changes in soil communities. This project should therefore resurvey the same locations, where land management has remained similar, or find replacement sites where significant changes have occurred.

Key questions the pilot should explore:

- Can genetic techniques be used to detect change in invertebrate communities under agri-environment options over time?
- How easy are comparisons over time when genetic techniques have changed?
- Do the techniques used in the resurvey of invertebrate diversity provide a methodology for wider use across the Agri-environment evidence programme?

3.7.2 Resource protection

The assessment of resource protection in the CS Baseline project included condition, placement and choice (item / option selection; evidence of need; and missed opportunities) of relevant management options and capital items across Countryside Stewardship High and Medium Priority Areas for Water. The Baseline also assessed the impact of Catchment Sensitive Farming advice on CS implementation. The Baseline methods should be replicated through re-survey to assess change over time with the ambition to return to the same agreements, options and items as the Baseline using the same methods.

To increase the value of the re-survey, reporting should differentiate between both: (1) items / options that have not (yet) been implemented (if any), are being implemented, and had been but are no longer being implemented; and (2) agreements and items / options specifically selected to address resource protection issues and all agreements and items / options relevant to resource protection (including those that were not selected to address resource protection issues).

Soil quality measurements

Detailed sampling stratification was developed to assess soil quality under CS. The factorial design consisted of 2 arable options plus counterfactual and 2 grassland options plus counterfactual, giving 6 combinations. This was replicated on 2 soil types (giving 12 combinations) and then replicated 7 times across the country giving a maximum of 84 sites, with 79 achieved in the baseline survey. Due to the replication and factorial design, this soil quality study should be prioritised for resurvey, with the aim to assess change over the intervening 5-6 years.

3.7.3 Historic environment

The assessment of historic environment included 662 desk-based assessments and 184 field surveys. This project should focus on re-assessing the field survey locations which in the baseline survey assessed: evidence of need, condition on resurvey, appropriateness of option choice and observed impact.

The key question for the historic environment evaluation is to what extent CS agreements have improved outcomes for the historic environment. This should be achieved by completing detailed desk-based assessments for a subset of the 184 field sites and follow this with a field survey.

Building on the work done in the baseline project the resurvey should:

- Review the evidence of need for intervention

- Compare condition at baseline with condition at resurvey
- Review whether an appropriate option was used and whether it was well implemented
- Compare the expected impact from the baseline surveyed with the realised impact.
- Assess missed opportunities: including which historic features within an agreement were included under options and alternate choice of options.

This analysis should consider the historic feature itself and its setting within the landscape. There should also be questions in the agreement holder survey which explore the land manager's understanding and management of their historic features.

Due to the specialist nature of the historic environment survey, both the desk based assessments and the field survey will need to be completed by a historic environment specialist with experience of land management practices.

In the baseline survey, 51 HT agreements were visited for historic environment, out of 105 total HT surveys, (approximately 49%). For MT agreements, 121 were visited for historic environment, out of total 240 MT surveys (50%). Therefore 50% can be used as an estimate to assess how many historic environment surveys will be included in the resurvey relative to total agreement numbers.

3.7.4 Landscape

The assessment of landscape in the CS baseline project used a modified version of the Rapid Field Survey technique developed for monitoring Environmental Stewardship (BD5303: LUC 2013). The assessment included desk based preparation followed by field survey, which included one example for each option in the agreement that matched relevant NCA Priority Statement (Landscape). The resurvey should focus on features previously surveyed and assess change over time, particularly related to condition and implementation. Similarly, the choice of options and their placement will be important where agreements have changed. The project should assess if minor changes to the methodology can improve robustness of results.

3.7.5 Climate change adaptation

The assessment of climate change adaptation in the CS baseline built on the Climate Change Adaptation Manual and used the National Biodiversity Climate Change Vulnerability Model. The objectives of the climate change adaptation assessments are to:

1) Identify climate sensitive features and habitats present on the holding

2) Assess how vulnerable these features and habitats are to climate change impacts

3) Assess whether CS management supports adaptation to climate change

4) Assess how contribution of CS management to climate change adaptation has changed over time.

It is anticipated that objectives 1-3 can build directly on the CS baseline work, although will need reviewing as agreements change and expire over time. Objective 4 is of particular importance for this project, given the potential to use this resurvey to assess change over time. For example, the CS baseline project found:

> *"The CS agreements are expected to produce significant benefits to climate change adaptation for climate sensitive features. Nearly half (44%) of the most climate sensitive features are under an option that directly manages them in a way which would be expected to help with climate change adaptation by reducing their vulnerability, and 75% of the remaining features benefit indirectly from options applied close by in the landscape."* (page 258, LM0458).

To assess objective 4 field work will be required. For example, field work should assess whether the expected impacts, highlighted above, have been realised over time and whether this improves the RAG rating given to features.

It is anticipated that the same methods should be employed to assess if the baseline assessments of adaptation potential are realised at the end of agreement. Specifically, building on the baseline project and using a combination of field and desk-based work, contractors should:

- Undertake a feature inventory using the agreement documents and maps
- Use the Priority Habitat Inventory to identify priority habitats associated with field parcels under option within the agreement
- Complete RAG assessment of the unmitigated and mitigated vulnerability of features and habitats based on identified adaption outcomes from options
- Assess the fragmentation and connectivity of field parcels under option within the landscape
- Assess the contribution of the agreement at the landscape scale based on the National Biodiversity Climate Change Vulnerability Model (Taylor, Knight & Harfoot, 2014)

- Complete RAG assessment of agreements against the climate change adaptation principles identified by Atkins (2018).

3.7.6 Climate change mitigation

The assessment of climate change mitigation in the CS baseline project built on previous work to estimate climate change mitigation from agri-environment options (LM0470: Warner et al 2020). In the baseline project, 390 agreements with potential impact on GHG emissions were analysed. These estimates for individual agreements are based on the published mean net emission coefficients from LM0470 and calculated for the options within a particular agreement. Therefore, these estimates will not change if the combination and area of options in an agreement does not change.

For this project there is potential to assess whether the transition when an agreement ends results in change in potential climate change mitigation. This would include assessing transitions from HLS to CS, CS agreements being replaced by new CS agreements, and HLS and CS agreements ending without being replaced. As climate change mitigation was not measured in the HLS survey this would require using previous estimate of climate change mitigation of Environmental Stewardship option (BD2302) for recently expired HLS agreements, and comparing with replaced CS agreements.

The assessment of climate change mitigation is entirely desk-based and builds on the preparatory work in task 1, but may also benefit from the desk-based assessment required at the start of tasks 4 and 5. For this reason it is proposed that the climate change mitigation assessment should take place later in the project. Tenderers are welcome to propose the best timing to conduct this work.

3.7.7 Woodland agreements

The CS baseline project surveyed 44 woodland management agreements and 17 woodland creation agreements. Resurveying these agreements is high priority to ensure sufficient replication (see table 3). For woodland management agreements, which predominantly included option WD2, the baseline survey used the Woodland Condition Survey method. For this resurvey, the contractors should consider using the more recent Woodland Wildlife Toolkit (see https://woodlandwildlifetoolkit.sylva.org.uk/assess). This assesses woodland condition as either good, moderate, or poor based on 15 indicators.

3.8 Agreement holder survey

This project will include an attitudinal survey of agreement holders, similar to that conducted in the HLS resurvey project. The aim is that every agreement selected

for a site visit will also have an agreement holder survey. This is in addition to interviews as part of the GAPS project. The purpose of this survey is to:

1) Understand links between agreement holder attitudes and environmental outcomes (see Fig 2),
2) Establish a baseline of current AES participants for involvement in new environmental land management schemes, particularly because those currently involved in HLS and CS are potential participants in the new local nature recovery scheme
3) Where possible access participants who dropped out of AES and understand transitions from one scheme to another. The data collected here will provide a baseline that will allow studies of future schemes to be able to compare:
   - participants who have remained in AES with those who have dropped out;
   - those involved in current AES with new entrants to local nature recovery scheme;
   - those previously involved in AES to those who do not access new environmental land management schemes.

Figure 2: Simple flow diagram representing links between actions and outcomes

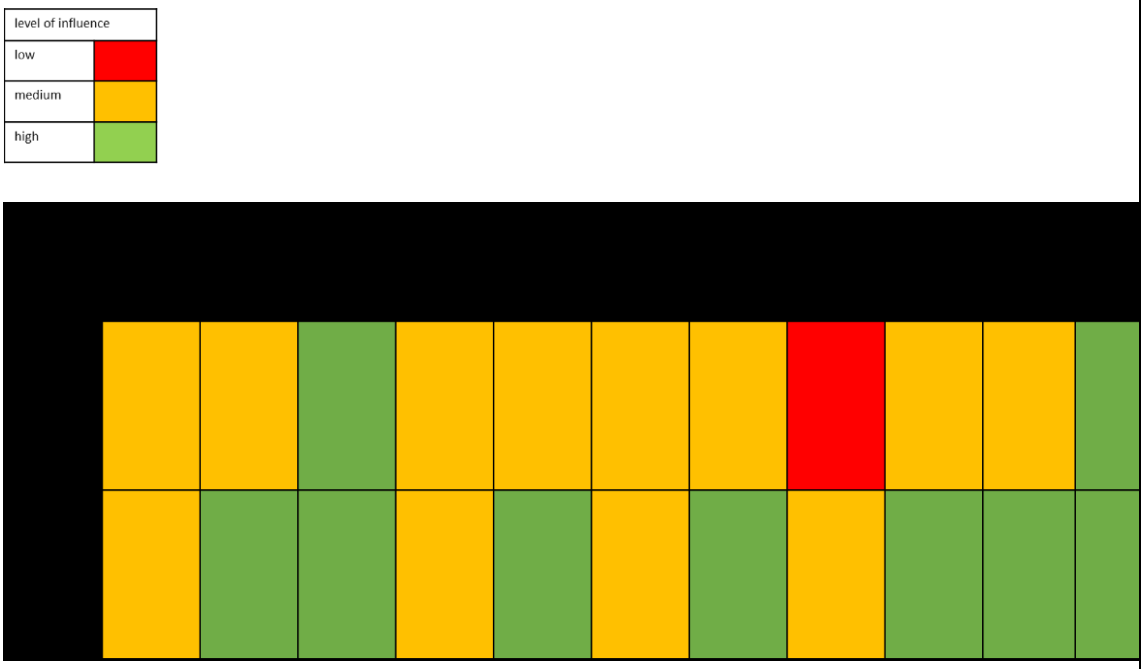
The survey will use social indicators[2] to understand links between social factors and environmental outcomes. In particular, social indicators can:

[2] A suite of social indicators was developed in a previous agri-environment evidence programme project titled 'Scoping study – evaluating the social impacts affecting AES delivery' (LM0478). This is available at http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=20129&FromSearch=Y&Publisher=1&SearchText=social&GridPage=9&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description

- Identify social factors that influence the quality of outcomes delivered by participants
- Identify the impact that AES involvement has on participants' wellbeing
- Compare participants across different elements of AES
- Track the influence of AES on participants' environmental outlook
- Explore the influence of AES participants' engagement with their local area
- Identify patterns in social factors, sustainability, and the quality of environmental outcomes
- Identify where/when/what type of additional support may be required and for whom
- Disaggregate the impact of wider influences on wellbeing/social capital.

Potential survey questions are set out in Annex 1. The table below illustrates the link between the social indicators we want to measure using the HLS/CS resurvey and participation level in AESs and attitude to AESs (Table 4).

Table 4: Example of relationship between categories of social indicators and participation and attitudes



The agreement holder survey should be delivered as a structured interview. Contractors should propose whether these interviews should be conducted face-to-face alongside the field surveys, over the telephone or online via

videoconferencing. Contractors should also consider how this links with the GAPS project, which will also include questions relating to social indicators (see section 4).

4 GAPS project

4.1 GAPS Scope

4.1.1 Guidance and advice

Guidance is defined here as information provided via some form of media in a one-to-many form of communication, as opposed to through personal interaction with an adviser (such as verbal advice delivered either to an individual or group, or via personal written communications from an adviser). Guidance passed to an agreement holder by an adviser would still be considered as guidance here.

It is only 'technical guidance' – that is, guidance about how to achieve environmental land management objectives – that is of interest in this project, not guidance on administrative or operational aspects such as how to apply to the AES.

GAPS is primarily concerned with understanding the impact of guidance on AES agreement delivery and specifically targets those agreement holders that are not provided with advice directly through their participation in the AES. However, we recognise that agreement holders may seek out their own advice and GAPS aims to understand the range of information-seeking strategies these agreement holders implement to meet their needs for support in AES agreement delivery.

It is anticipated that land managers may engage with any of the following sources of information (guidance and/or advice) to help them manage their AES agreement and achieve its environmental outcomes:

- Technical scheme guidance, provided directly by the AES, in any of the following forms: webpages on GOV.UK; the scheme manual (typically available as a PDF); or prescriptions for each specific agreement, personalised to the agreement holder and provided at the inception of their agreement.

- Information provided via Catchment Sensitive Farming (CSF), which currently operates in selected catchments across England[3] but will be available to farmers across the whole of England by March 2023. CSF targets land managers specifically in those catchments to proactively offer advice, guidance and access to training and related events. CSF

focuses on environmental outcomes relating to water, including water quality, and many of the forms of land management advocated correspond with options available in AES. As part of its suite of tools, CSF offers access to expert advice (provided by external contractors through a framework agreement) relating to mid-tier CS, and Catchment Sensitive Farming Officers (CSFOs) have a role in supporting applications for some water-related options. The majority of CSFOs are employed by Natural England, although delivery in some catchments is led by partner organisations such as the Environment Agency and water utility companies. CSFOs operate independently from land management advisers, who advise specifically on AES.

- A range of arm's length and third sector bodies (e.g. AHDB, CFE, FWAG, RSPB) may also offer technical guidance or advice, either fully funded or for a fee.

- Advice and guidance available through private sector providers, usually through a paid-for relationship with the land manager.

- The Environment Agency also provides advice and/or signposts to guidance to underpin or achieve regulatory compliance. This will not be specific to AES-related management, but the focus of this advice or guidance may intersect with some aspects of AES management.

- Advice from peers or others in agreement holders' social networks.

- A range of technical land management guidance is also available via digital media (e.g. in the form of video, podcasts, social media, forum discussions) or in the form of decision support tools (see Chiswell *et al* 2020).GAPS should consider the extent to which agreement holders engage(d) with any of these sources of information in delivery of their agreement, in addition to any other sources of information.

4.1.2 Defining 'positive scheme outcomes'

'Positive scheme outcomes' are defined in this project as:

- The successful delivery of the land management actions or activities specified in their agreement, including achievement of the 'indicators of success' as set out in their agreement, potentially in addition to

[3] CSF targets the majority of its delivery in locations that are Countryside Stewardship High Priority Areas for Water, though there is also some delivery outside these areas.

- Decisions to continue managing land in the ways mandated by their agreement beyond the life of their agreement, and/or

- Decisions to manage additional land, not previously included in an AES agreement, in the same ways as specified in their agreement, and/or

- Decisions to apply for further AES agreements.

Both social and environmental outcomes are of interest. Social outcomes can be measured with reference to social indicators, exploring these in more detail than is possible in the agreement holder surveys (see section 3.8). Social indicators relating to wellbeing and resilience are likely to be of particular relevance to the GAPS project, given that there is some evidence to suggest that interactions with scheme guidance may affect farmer wellbeing in some cases. An internal research project[4] found that a lack of clear AES guidance and consistent AES advice from local advisers increases farmers' negative wellbeing through isolation, lack of knowledge and frustration with the administrative burden without appropriate help.

The results from the GAPS project can feed into further work to develop this suite of social indicators, for example by:

- investigating whether engagements with guidance follow the same relationship as engagements with advice, where the more advice and training about their agreement that a land manager receives, the more aware they become of the environmental impacts of their land management practices and the more likely they are to sustain their environmental land management activity;

- exploring whether the impact of engagements with guidance on scheme outcomes reduces as land managers gain more experience of managing land in line with AES objectives; and

- considering whether there is scope to expand the suite of social indicators already developed, to include a new indicator relating to engagements (of different kinds) with guidance (of different kinds).

4.1.3 Types of agreement to include in the GAPS project

GAPS will focus solely on land managers with mid-tier CS agreements, since advice is not provided to these agreement holders directly via the scheme.

[4] This research involved focus groups with Farming Community Network caseworkers and was delivered in spring 2019.

4.1.4 GAPS methods

Contractors should deliver qualitative in-depth, semi-structured interviews with 30-50 agreement holders. The method of delivery of these interviews can be varied to suit the participant, e.g. face-to-face, telephone or online (e.g. via Zoom). Audio recordings should be made of these interviews, which should then be transcribed for analysis and archiving.

This data should be analysed alongside data collected elsewhere in the wider project for these specific agreement holders, to understand the relationship between engagements with guidance and positive scheme outcomes.

4.1.5 Defining the GAPS sample

The successful contractors should ensure that sufficient variation is achieved in the sample of agreements included in the GAPS project to explore the range of factors that may influence how an agreement holder fares managing their land under mid-tier CS in the absence of free advice provided directly via the scheme.

This may include consideration of at least some of the following factors when defining the sample, depending on the availability of this information at the planning stage:

- Agreement status:
    - agreements that were live at the time of the baseline survey, and that remain so now either because they are operating within the original duration of the agreement or because they have been extended;
    - agreements included in the baseline survey that have expired, which may or may not have been replaced with a subsequent AES agreement.
- The number of years' experience an agreement holder has of managing land in an AES. There is evidence that there is a correlation between AES experience and positive environmental scheme outcomes (summarised in Okumah et al 2018). The longer a land manager participates in an AES, the more experiential and social learning they accumulate, which increases their tacit knowledge. Agreement holders' awareness and understanding of the link between farming practices and positive outcomes also increases, which adds to their awareness and understanding of how to effectively manage their land in these ways. We might therefore expect that agreement holders with more AES

experience may be better able to manage their agreement using guidance in the absence of advice, compared to those with less experience.

- A range of factors including age, education, engagement in diversification activities, type of land manager, IT literacy and ability to access the internet (including at point of use of guidance, i.e. in remote locations on the holding) can influence the extent to which land management professionals engage with digitally-mediated guidance (Chiswell et al, 2020).

- Agreements located within Countryside Stewardship High Priority Areas for Water. Holdings in these locations are able to access advice and guidance through CSF, if they wish to; the majority of agreements located outside these catchments cannot[5]. This advice is separate to, but can be complementary to, advice available directly through an AES.

- Agreements including any land designated as a Site of Special Scientific Interest (SSSI). These are likely to have previously been engaged by Natural England advisers regarding environmental land management, and agreement holders who have previously managed land under higher tier CS or Higher Level Stewardship are also likely to have previously received environmental land management advice from Natural England.

- Options included in the agreement. This should include consideration of whether the agreement includes any options that were selected to address specific resource protection issues (for example, in relation to water quality), and any options that were planned but not implemented following commencement of the agreement.

- Geographical and physical factors, such as the size of the agreement and type of agricultural land.

4.2 GAPS Objectives

4.2.1 To understand what (if any) land management information agreement holders who do not have access to technical land management advice via the AES, use to help them deliver their AES agreement (GAPS objective 1)

Research question (RQ) 1.1: What kinds of guidance do agreement holders engage with to help them deliver their AES agreements? Do they use official

[5] See https://www.gov.uk/guidance/catchment-sensitive-farming-reduce-agricultural-water-pollution#find-out-if-your-lands-in-a-high-priority-area

scheme guidance and/or guidance from other sources? What format is this guidance in, e.g. physical manuals, PDFs, leaflets, webpages, social media, forums, podcasts, videos, decision support tools? Does this vary with age, education level, engagement in diversification activities, internet access (including access to wi-fi, 4G/5G on the holding), IT literacy?[6]

RQ1.2: Why do agreement holders engage with specific types of guidance? Under what circumstances? For what purposes (e.g. in relation to a specific option)? When (e.g. at what stage of their agreement / the timing of a particular activity, such as planning or adjusting management when an outcome is not achieved)? Where (e.g. on what types of land / where are they accessing the guidance)?

RQ1.3: Under what circumstances do agreement holders seek (or otherwise access) advice of different kinds (e.g. paid for advice, free advice, advice from peers) or training to supplement guidance? What factors are associated with this (e.g. characteristics of the agreement, the holding or the agreement holder)?

4.2.2 To investigate the relationship between agreement holders' engagement with guidance – either alone, or with other sources of support (e.g. advice, training) – and positive scheme outcomes (environmental and/or social) (GAPS objective 2)

RQ2.1: What kinds of engagements with guidance of different kinds, and with any other sources of support, are associated with positive AES outcomes?

RQ2.2: Does engagement with scheme guidance alone lead to positive scheme outcomes? Under what circumstances?

4.2.3 To understand the impact of negative experiences of scheme guidance (e.g. finding it, understanding it, putting it into practice) on scheme outcomes (environmental and/or social) (GAPS objective 3)

RQ3.1: How do agreement holders that have had a negative experience of scheme guidance respond – do they seek guidance from elsewhere (where?) or seek out other kinds of support (e.g. advice or training)? What factors influence this?

RQ3.2: Is a negative experience of scheme guidance associated with less positive scheme outcomes (environmental and/or social)? Under what circumstances?

[6] These factors were identified in Chiswell et al (2020) as affecting engagements with digital media to support land management activities.

4.3 GAPS Requirements

The GAPS project should finish and report before the end of the full resurvey project. The contractors should propose when completion of the GAPS project is feasible. The GAPS project should finish no later than March 2024 and be published soon after.

4.3.1 Evidence review (GAPS task 1)

Deliver a quick scoping review of the published and grey literature on the link between engagements with land management guidance of different kinds, especially but not limited to AES guidance, and environmental and social outcomes. The scope for this review will be agreed with the steering group.

GAPS deliverable 1: quick scoping review report

4.3.2 Develop a sampling framework (GAPS task 2)

Informed by the findings of the evidence review delivered in task 1 and the availability of basic information about Mid Tier CS agreements and agreement holders, develop a sufficiently robust sampling framework. This should aim to explore variation in relevant factors as outlined in section 4.1.5. This should seek to involve 30-50 agreement holders.

GAPS deliverable 2: sampling framework

4.3.3 Prepare for qualitative data collection (GAPS task 3)

Develop an interview protocol to use in semi-structured interviews, to investigate each of the objectives and related research questions.

Prepare an engagement approach and all required materials (e.g. participant information and consent sheet) to use to invite agreement holders to take part in an interview, including a 'line to take' to use to introduce the GAPS project to potential interviewees during field surveys and attitudinal surveys.

Approval will need to be gained from Defra Survey Control and the Natural England Research Ethics Committee, in addition to any institutional ethics committee (as applicable) prior to carrying out data collection with agreement holders (see section 10). The Natural England Project Manager will lead on any applications to the Natural England Research Ethics Committee, with input from the successful contractors. The successful contractors will be expected to amend the research proposal as required.

Produce a data management plan[7] which includes this information, in preparation for data archiving at the end of the project.

Using the sampling framework (deliverable 2), shortlist 30-50 agreements to target and liaise with those carrying out surveys as set out in section 3 to ensure that these agreements are prioritised in the first phase of their fieldwork.

GAPS deliverable 3: interview protocol and participant engagement materials

GAPS deliverable 4: data management plan

4.3.4 Delivery of qualitative data collection (GAPS task 4)

Approach agreement holders (using participant engagement materials) to invite them to participate in an interview, within 2 weeks of the attitudinal survey carried out in the wider project.

Review available data about each agreement prior to delivery of interviews with agreement holders to identify relevant areas to probe during interview.

Deliver interviews and transcribe audio recordings of these interviews.

GAPS deliverable 5: interviews with 30-50 agreement holders

4.3.5 Analysis & reporting (GAPS task 5)

Analyse qualitative data from interviews along with data relating to achievement of agreement objectives and environmental outcomes for each agreement, to respond to the GAPS research objectives and research questions. The analysis should also consider the development and definition of a new social indicator relating to engagements with guidance.

Produce a full report that describes the approach taken and includes the evidence review as well as results of the analysis.

Produce one or more infographics summarising the findings.

Produce a short, non-technical summary of the findings, to share with GAPS project participants.

GAPS deliverable 6: draft report for review by project steering group

GAPS deliverable 7: second draft of report, taking into account feedback from project steering group on first draft, for review by project steering group and external peer reviewers

[7] See the data management planning overview produced by the UK Data Service for more information about producing a data management plan: https://ukdataservice.ac.uk/learning-hub/research-data-management/plan-to-share/data-management-planning-overview/

GAPS deliverable 8: final report, implementing changes as required by external peer reviewers and project steering group

GAPS deliverable 9: infographic(s)

GAPS deliverable 10: two-page summary

4.3.6 Dissemination (GAPS task 6)

Deliver a 1 hour webinar (including time for Q&A) to Defra group colleagues.

Make all data collected in this project available for reuse, including anonymisation, and archive in an appropriate repository (to be agreed with the Natural England project manager).

GAPS deliverable 11: webinar and slide deck

GAPS deliverable 12: archive data

5 Timetable

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6 Data

We require Contractors to develop a fit for purpose database for all data collected, which will need to be agreed with the Project Steering Group. Where possible, the database should be designed to function within a commonly accessible application.

Additionally, the contractor should provide a species list to agreement holders at the end of field work which shows species recorded on their land. Data relating to their own agreement collected during field surveys should be provided to agreement holders at the end of the project on their request.

All data resulting from this project, project documents, Intellectual Property Rights and other materials will be the property of Natural England.

6.2 Agri-environment scheme data

To facilitate the project aims, Natural England's Data Services team will liaise with the successful contractor to generate contractor data licences as required. The contractor will be responsible for applying to and liaising with the Data Services team in requisite time in order to obtain the necessary data. The Natural England project manager will assist in this and make a preliminary enquiry on behalf of the project but, following outline approval, the successful contractor(s) will be required to provide a full data request as required to meet the detail of their tender.

Data will be supplied to the successful contractor via secure data sharing in a format to be agreed with Natural England's Data Services / GIS team. Please note that information about AES agreements may be provided in pdf formats, including contact details.

All information provided to the contractor for the purposes of this project shall be kept securely, confidentially and disposed of at the end of the project. It must not be used elsewhere without prior consent. The supplier will be required to follow Natural England's data protection policy and only act on information provided under our instruction.

6.3 Open research and data archiving

- Natural England is committed to making as much of its evidence and information as possible available for reuse by others, under the Open Government Licence. The data arising from this project should be suitable for release under Open Government Licence.

- The contractor is required to develop a plan to archive data produced during the course of this project with an appropriate data archive(s), to be agreed with the steering group at the inception meeting. This plan will include steps to make the data Findable, Accessible, Interoperable, and Reusable and should include submitting species data to NBN Atlas.

- The following material should be archived:

    - Field survey data

    - Anonymised data from agreement holders collected during the research (e.g. transcripts of interviews delivered for the attitudinal survey and for the GAPS project)

    - Information about how the data was produced (i.e. documentation about methods, survey questionnaire and interview protocol)
    - Information about how the data was analysed
- Participant information and consent sheets should include reference to the ambition to archive anonymised data collected in this project, in order to allow participants to provide informed consent for this at the point of participation.
- The contractor should produce a data management plan prior to data collection – and update this throughout the project, as required – which sets out:
    - A description of the data that will be created during the research
    - Ethical / legal information
    - Quality assurance of the data, including any standards applied
    - How data will be documented
    - Data storage and backup measures and required equipment / infrastructure
    - Plans for sharing and preservation of data, who will have access and whether there are any embargoes or restrictions
    - Data management roles and responsibilities
    - Costing / resourcing required, including for example costs of transcription and anonymization
- The contractor should budget sufficient time and resources to deliver all aspects of data archiving.

7 Management

- The successful contractor(s) must appoint a project manager, who will be responsible for the management and delivery of the project and will act as the liaison point for the Natural England project manager.
- The contractor will be expected to organise and lead a project inception meeting at the start of the project, where they will need to provide a

detailed proposal and plan for the work they will undertake and agree any variations with the project steering group.

- This project will be overseen by a project steering group made up of Natural England, Defra and other relevant partners and will meet 12 times throughout the course of the project. The contractor will be responsible for setting up all steering group meetings.

- The contractor will be expected to present an update on the research at each steering group meeting.

- It is anticipated that most meetings with the project steering group, including the inception meeting, will be held remotely via telephone / videoconferencing (MS Teams preferred). Face-to-face can be considered where necessary.

- Secretariat and production of minutes from all meetings with the Natural England project manager and the project steering group is the responsibility of the contractor, who will share meeting minutes with the Natural England project manager and other meeting attendees.

- The contractor is required to send a short (e.g. maximum one page of A4) progress update to the Natural England project manager once a month. The form and specific timing of these updates will be agreed in the inception meeting.

- The contractor is responsible for assessing the risks associated with the project as planned and for putting in place mitigation measures to respond to them. The contractor is responsible for reviewing this risk register at least every month, updating it as required and notifying the Natural England project manager of any changes.

8 Resources

The expected start date is set out on page 1 of this request for quotation. The project shall finish no later than 31 March 2025.

Research contracts are let on a firm price basis (excluding VAT). This is an all-inclusive price for the contract and, so long as the scope of the contract remains the same, it is not subject to any review, amendment or alteration.

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10 Approvals

10.1 Data protection considerations and ethical approval

- When collecting data from research participants, the successful contractor should use the existing privacy notice developed for use in agri-environment scheme settings, which will be made available by Natural England.

- It is also expected that the contractor will develop a participant information and consent sheet for use when recruiting participants to take part in surveys and interviews. A template can be provided by Natural England if required.

- Natural England requires that all research involving people is subject to ethical review by the Natural England Research Ethics Committee, in addition to any other ethical approvals required by the successful contractor's institution (if applicable).

10.1.1 Natural England ethics procedure

- The Natural England project manager will coordinate engagement with the Natural England Research Ethics Committee.

- The successful contractor will be required to complete a checklist (approximately 4 pages) detailing planned data collection activities that involve collecting data from or about people.

- Completion of the checklist will determine whether a full application to the Committee is required. If a full application is not required, the research can proceed as planned without the need to seek formal approval from the Committee.

- A full application comprises completion of a proposal form (3 pages), which will then be considered by the Committee who will advise whether the research can proceed as planned or whether the proposed approach needs to be amended. The successful contractor will be required to complete the form if required, detailing the research approach and to adapt the approach if required by the Committee.

- In order to minimise the risk of a potential delay to the project should a formal application to the Natural England Research Ethics Committee be required, the contractor is advised to plan to complete the ethics checklist as soon as possible once the research plans have been developed.

10.1.2 Institutional ethical review

- If the successful contractor is based in, or affiliated with, an organisation that has its own ethical review process, it is the contractor's responsibility to manage this process and ensure that ethical approval is obtained. This would be in addition to going through the Natural England ethics procedure.

10.2 Approval from Defra's Survey Control Liaison Unit

Approval from the Survey Control Liaison Unit (SCLU) in Defra is required for structured data collection with 25 or more participants, and so both the attitudinal surveys and interviews with agreement holders delivered in the GAPS project will need approval from SCLU.

NE will make the initial application. Following outline approval, the successful contractor(s) will be required to provide a draft attitudinal survey questionnaire and GAPS interview protocol to be agreed and approved by SCLU. A period of

at least 6 weeks should be built into the project plan to accommodate this approval process.

It is the responsibility of the successful bidder to ensure that the required information is provided in accordance with the time requirements of this project for SCLU approval.

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12 Publication and peer review

The contractor will be responsible for ensuring both the quality of the work as well as the presentation of the material (e.g. proof reading, ensuring clear English) in all publications relating to the research with which it is involved.

12.1 Report

Bidders should be aware that Natural England and Defra intend to publish final reports.

Contractors will be required to produce two comprehensive, externally peer-reviewed final written report suitable for publication as Defra science reports:

- One report should focus on the GAPS project, covering all the objectives, research questions and tasks relating to the GAPS project only (to be produced and published following completion of the GAPS project)
- One report should focus on the remainder of work carried out in the wider project, covering all the objectives, research questions and tasks relating to the whole project (to be produced and published following completion of the entire project). This may discuss and cite the GAPS project report but does not need to focus on reporting on the GAPS project

The format of the presentation of each report will be agreed between the Natural England and the contractor's project managers. Natural England requires the opportunity to comment on draft final reports.

The contractor will be responsible for arranging peer-review of each final report by a minimum of two appropriate reviewers, each of which must be independent of the organisation(s) working on the project. Peer reviewers should be agreed with the Project Steering Group before being approached.

For carrying out the peer review Natural England will provide:

- A form for peer reviewers to complete to guide them through key questions
- A declaration for reviewers to sign regarding the use of confidential information and any conflicts of interest.

A cost for peer review should be included in the tender. This should take into account staff time to organise the peer review, staff time to edit reports in light of the reviews (subject to steering group agreement) and cover costs for reviewers if required.

The peer review and review by steering group can run simultaneously. A minimum of 4 weeks (20 working days) should be allowed for this period of

review, allowing at least 10 working days for review by the external peer reviewers and the steering group and the remaining 10 working days for the contractor to respond to the feedback and finalise the report.

12.2 Other publications

- Natural England is happy to encourage widespread publication and welcomes publication of the research findings in appropriate trade press, peer-reviewed journals and sector-specific journals.

- If the findings of the work are deemed suitable, the contractor will aim to submit a manuscript to a peer-reviewed journal as soon as possible after completion of the final report, co-authored by staff from the contractor and Natural England, as appropriate. A proposed timetable for submission of this manuscript and a publication timeline will be agreed with Natural England in the latter stages of the project.

- Natural England requests that all publication (including oral presentations) of its funded research is notified to the project manager at least two weeks before publication, during or after the project has completed.

(1.1) Commencement Date: 01 June 2022

(1.3) Completion Date: 31 March 2025

2. PERFORMANCE OF THE SERVICES

(2.1) Key Personnel of the Contractor to be involved in the Supply of the Services

See supplier bid documents

(2.2) Performance Standards

As advised in the framework agreement

(2.3) Location(s) at which Services are to be provided:
37 Otago Street
Glasgow
G12 8JJ

(2.4) Standards:

(2.5) Contract Monitoring Arrangements

For the avoidance of doubt the services required are being provided under Framework Agreement 22707

3. PRICE AND PAYMENTS
(3.1) Contract Price payable by the Authority excluding VAT, payment profile and method of payment (e.g. Government Procurement Card (GPC) or BACS)) £2,328,332.50 For full pricing schedule see Appendix 1 Payable by BACS
(3.2) Invoicing and Payment The Supplier shall issue electronic invoices in arrears following completion of appropriate milestones.

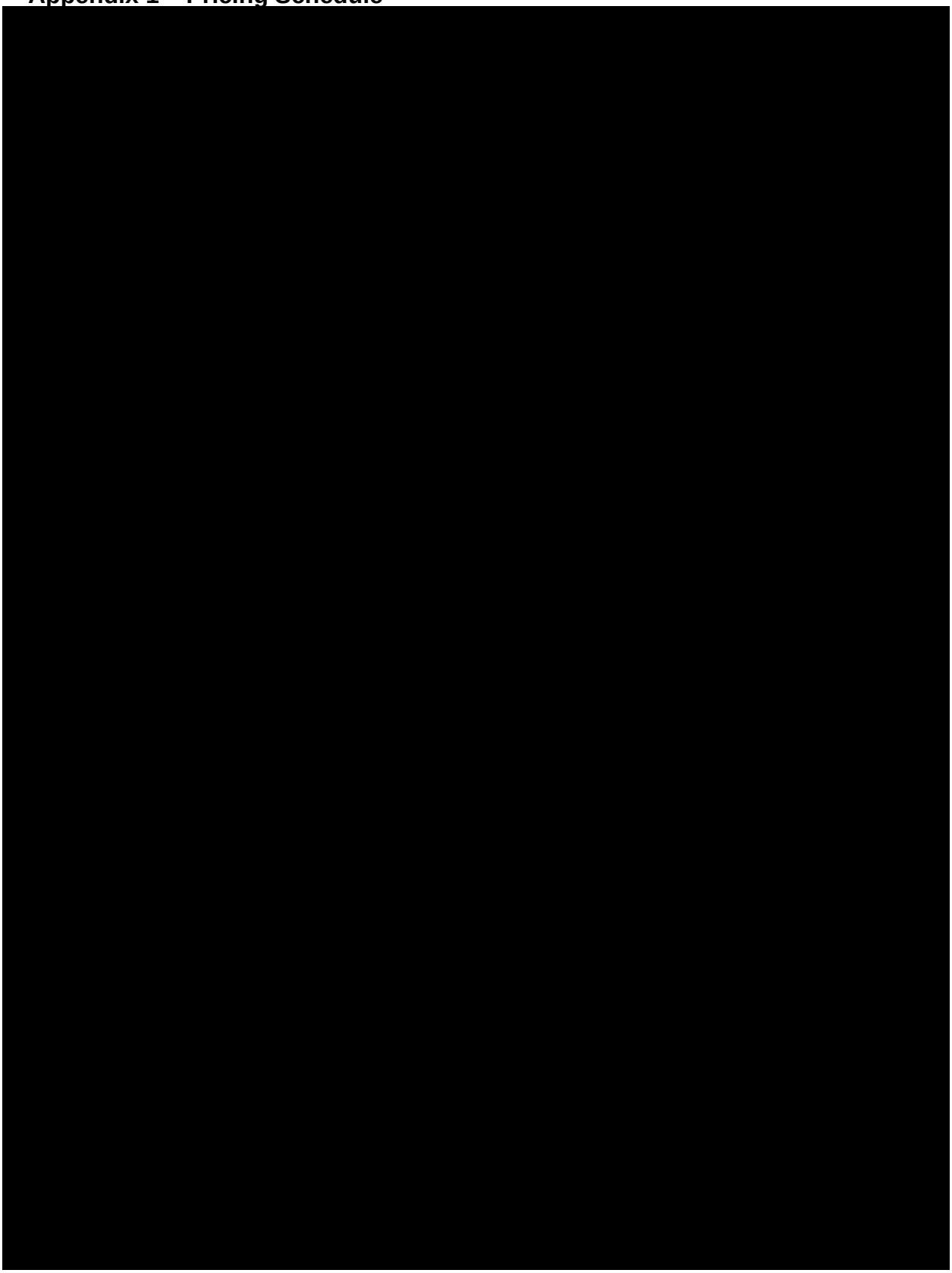
4. Invoicing Requirements
All invoices should be sent to the Natural England Project Officer.

BY APPROVING THIS ORDER FORM THE CONTRACTOR AGREES to enter a legally binding contract with the Authority to provide to the Authority and natural England the Services specified in this Order Form, incorporating the rights and obligations in the Call-Off Contract that are set out in the Framework Agreement entered into by the Contractor and Defra on 28 September 2020.

Electronic Signature

Acceptance of the award of this Contract will be made by electronic signature carried out in accordance with the 1999 EU Directive 99/93 (Community framework for electronic signatures) and the UK Electronic Communications Act 2000. Acceptance of the offer comprised in this Contract must be made within 7 days and the Agreement is formed on the date on which the Contractor communicates acceptance on the Customer's electronic contract management system ("Bravo"). No other form of acknowledgement will be accepted.

Appendix 1 – Pricing Schedule



Appendix 2 – Land Use Consultants bid

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