

**C21744 ECOLOGICAL SERVICES FRAMEWORK 4 (EcoSF4)**  
**PROJECT FORM AND CONFIRMATION OF INSTRUCTIONS**  
**PART 1**  
**PROJECT DETAILS, SPECIFICATION AND EVALUATION CRITERIA**

**To be completed by Contracting Authority Project Manager**

Project title: Derwent Lamprey Survey

Atamis project ref (if applicable): n/a

Date: 23/06/2025

<b>Name of Contracting Authority (Environment Agency; Natural England)</b>	Natural England						
<b>Project Manager:</b>	Redacted under FOIA Section 40 Personal Information		<b>Project manager's phone number:</b>	Redacted under FOIA Section 40 Personal Information			
<b>Budget holder:</b>	Redacted under FOIA Section 40 Personal Information		<b>Cost code:</b>	Redacted under FOIA Section 40 Personal Information			
<b>Commercial Contact (if applicable):</b>	N/A		<b>Project manager's email:</b>	Redacted under FOIA Section 40 Personal Information			
<b>Project Start Date</b>	6th August 2025						
<b>Project Completion Date</b>	31st March 2026						
	<b>Direct Award</b>		x		<b>Mini-comp</b>		
<b>Call off from Lot number (please tick)</b>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4 <input checked="" type="checkbox"/>
<b>Proposal return date: (no less than 10 working days from current date)</b>	7 <sup>th</sup> July 2025						

**Evaluation criteria:** (for work over £50k project managers need to prepare and complete an evaluation model on receipt of tender submissions). Please note price and quality weightings are flexible within the following range: **Quality 70% - 30% and Price 30% - 70%**, and you may alter the quality sub-criteria weightings. Optional: If a minimum score threshold is set for any criteria this must be stated in the table. If not used, please delete the wording.

**Contractors:** Failure to meet the minimum score threshold stated will result in the bid being removed from the process with no further evaluation regardless of other quality or price scores.

<b>Price</b>	<b>Weighting</b>	30% - 70%
<b>Quality</b>	<b>Weighting</b>	70% - 30%
<b>Quality Sub-Criteria Weightings: (Indicative only)</b>		
Approach & Methodology	Contractor to produce a detailed specification of the contractor's approach to the work to deliver the project outcomes.	30%
Proposed Staff (inc Pen Portraits) and Contractor's experience/accreditations.	Background on staff to be involved in the work, including suitability for role and experience,	25%

	qualifications and any professional accreditation.	
Project Management (including project plan)	Including project implementation plan including timetable for works.	25%
<b>Health &amp; Safety</b>	Risk assessments (including but not limited to working near water and biosecurity) to be provided on award of the contract.  Details of Professional Indemnity Insurance, and if relevant Employers Liability Insurance	5%
<b>Sustainability Considerations (e.g. Travel management, reduction of carbon footprint, bio-security etc.)</b>	<i>Including consideration of travel to site.</i>	5%

**Specification** (Details to be provided by the Contracting Authority Project Manager)  
*You should set out the information/details you require the Contractor to return in their Proposal for each section. \*Page limits should consider the amount of information being requested and be enough for the Contractor to provide the level of detail you need to undertake a comprehensive evaluation.*

**Please detail the Contractor’s required Limitation of Liability. If no sum is stated, the Contract Price for the Services performed or to be performed under the Contract or five million pounds whichever is the greater will apply.**

**1. Description of work required – overall purpose & scope (including reporting requirements)**

**1. Background to the River Derwent & Bassenthwaite Lake SAC**

The River Derwent is a Special Area of Conservation (SAC). The Derwent is the largest oligotrophic, or nutrient poor, river in England that still retains high water quality and a natural channel. The middle to lower reaches of the Derwent are characterised by extensive areas of gravels and fine silts, which provide excellent conditions for spawning and nursery area for River and Brook Lamprey (*Lampetra* spp.) and Sea Lamprey (*Petromyzon marinus*).

Sea lamprey (*Petromyzon marinus*) are a designated feature of the site. Very little is known about the sea lamprey, except that the Solway Firth forms an essential part of the species’ migratory route. It is thought that the mature adults begin their upstream migration in May to spawn in many of the rivers which feed into the Solway, although little else is known about their behaviour. There have historically been extensive sea and river lamprey nursery grounds below Bassenthwaite Lake. This study should aim to target sea lamprey.

River lamprey are also a designated feature of the River Derwent & Bassenthwaite Lake SAC. The Solway provides an important marine migration routes for this species to their spawning and nursery grounds in a number of rivers. The mature adults begin their upstream migration to spawn in many of the rivers which feed into the Solway in November, although they do not actually spawn until May. It is thought that the migration is triggered by both water temperature and pheromones from juvenile lamprey. After spending several years as ammocoetes, juvenile lampreys are thought to begin their descent into the Solway Firth between October and March. There is limited information on the Derwent river lamprey population.

**2. Aims**

The aim of this study is to provide up-to-date data on ammocoete populations and habitat of the Derwent river and sea lamprey, and spawning activity of sea lamprey, to inform the condition assessment of the species. It is envisaged that this study will focus on the freshwater part of the life-cycle through studies on the ammocoete populations and associated habitats in the River Derwent below Bassenthwaite Lake (hereafter referred to as the lower Derwent)

This study aims to assess the following attributes of Derwent lamprey population through surveys of ammocoete populations;

1. Locate how far lamprey ammocoete populations penetrate upstream

2. Provide mapped GPS locations of important sites and maximum penetration for ammocoetes for the Derwent population.
3. Sample ammocoete populations and provide an indication of the success of the spawning population in 2025 and assess the following features (ammocoete density, population age structure and distribution within the catchment, see Appendix 1).
4. Record appropriate habitat measures whilst on site to give an indication of condition.
5. Compare the location of ammocoete populations located in the field with any known suitable habitat and historic ammocoete locations and, if possible, assess if there has been a contraction of the population.

If possible, the study will also seek to assess adult spawning activity of sea lamprey to verify extent of spawning activity in the lower Derwent.

### 3. Objectives

The primary objectives of the contract are:

- 3.1 To determine adult spawning activity by direct observation or redds surveys in the lower Derwent for sea lamprey between July and August 2025.
- 3.2 To undertake ammocoete surveys for river and sea lamprey on the lower Derwent.
- 3.3 In the light of the results obtained; to provide a preliminary assessment of the condition of river and sea lamprey, in accordance with Common Standards Guidance.

### 4. Proposed Methods

The methodology of Harvey and Cowx (2003) should be followed. In summary:

#### Site Sampling

The recommended methodology in Harvey & Cowx (2003) is for each sample site to be a 100m length of river bank in which a minimum number of three quadrats of optimal or sub-optimal habitat are electric-fished three times to give quantitative results. However, the protocol recognises that quadrats require very particular habitat to be usable and that this will not always be available e.g. where there are undercut banks or stands of weeds. In such places it is recommended that semi-quantitative electric-fishing should be utilised.

#### Quantitative Sampling

1. A one m<sup>2</sup> quadrat, with fine mesh walls deeper than the water to be sampled, to be used.
2. Three runs of two minutes actual electric fishing time per quadrat, with 5 minutes rest between each run, to be made over the area within the quadrat.
3. Pulsed DC of appropriate voltage to be used.
4. Electric-fishing to be in 20 second bursts, with the anode 10 to 15cms above the substrate
5. A minimum of three quadrats within a 100m length of water to be sampled
6. If a quadrat cannot be properly placed (e.g. due to macrophyte or debris cover) then the semi-quantitative method is to be used instead.

#### Semi-quantitative Sampling

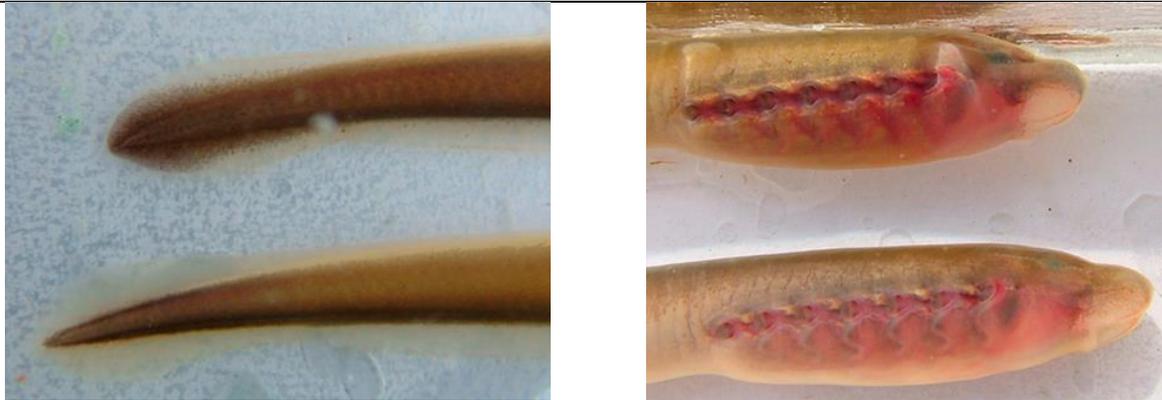
- A. Single, timed, electric-fishing runs to be made over measured sections
- B. Three such sections to be sampled within a 100m length of bank
- C. Other procedures to be as for the quantitative method

Such sampling methods will provide part of the data required for Specification No. 3. All locations within sites where electric-fishing samples are taken, whether they produce juveniles or not will have their GPS co-ordinates recorded.

#### Measurements and identification of ammocoete larvae and of macrophthemia

As it is the River, Brook and Sea Lamprey that are listed for the River Derwent & Bassenthwaite Lake SAC, it is important that species identifications be made wherever possible and especially that of *L. fluviatilis* from *L. planeri*, the Brook Lamprey. Ammocoetes of the two *Lampetra* species cannot be separated in the field, but the presence of larvae >130mm is a definite indicator of *L. planeri*. If samples were taken in which no ammocoetes were >120mm, it could be a possible indicator of a *L. fluviatilis* dominated population.

Larvae captured during sampling will be anaesthetised using best practice and measured to the nearest 1mm on a measuring board. The bodies of macrophthemia (transformed larvae) up to 130mm in length will be measured to the nearest 1mm and the width of their eyes to the nearest 0.02mm with a Vernier calliper (it can be assumed that specimens >130mm are *L. planeri*). These measurements are taken so that the relative proportion of the eye to the body can be used to aid in the distinguishing of *L. fluviatilis* and *L. planeri*. Digital photographs will also be taken of both the bodies and eyes of macrophthemia against a 1mm scale as these can be used to check the measurements taken on site. Such photographs, when enlarged, also show up another distinguishing feature, the more obvious lateral line organs on the head of *L. planeri*.



Unlike the two *Lampetra* species, Sea Lamprey larvae can be identified in the field by their pigmentation: The differences in the pigmentation in the blade of the tail between a *Petromyzon* (upper) and a *Lampetra ammocoete* are shown in the photo to the left. Differences in the pigmentation of the hood between a *Petromyzon* (lower) and a *Lampetra ammocoete* larvae are shown in the photo to the right.

Measurement of each ammocoete and macrophthalmia sampled will allow length-frequency distributions to be constructed, which will show if there are multiple age classes present at sites where sufficient specimens are caught to allow this. This will meet part of Specification No. 3

#### Habitat Recording & Site Photography

Data on the position, substrate, bankside conditions, average water depth and habitat quality will be recorded for each of the three locations within each survey site. The features recorded, and the definitions of Optimal and Sub-optimal habitat quality, will be those of the ERA National Lamprey Survey of Scotland 2003/4 (ERA, 2004) to give compatibility with that survey and which subsume those given in Appendix 1 of Harvey & Cowx (2003) and the recording sheets used for both quantitative and semi-quantitative samples are given in Appendix II. Water conductivities will be taken at each location with a portable conductivity meter. Photographs will be taken of each of the three sampling locations within the 100m survey sites, and of the substrate at each location so changes can be identified in future sampling.

### **5. Reporting**

Natural England will be provided with an electronic copy of the final report. The final report should contain:

- Executive summary
- Introduction
- Methods
- Results, including maps where appropriate
- Condition assessment
- Description of any impacts to the site resulting from human activity
- Recommendations for further work
- Catalogue of data provided
- References
- Appendices

#### 5.1 Providing data

- All GIS datasets need to be provided in ESRI ArcGIS format compatible with ArcGIS 10.8.2 (or the most current, at the time of reporting) and have attached metadata
- Copies of the original data spreadsheets or databases are to be provided in the appropriate Microsoft Office format.
- Photographs to be provided in their raw format and georeferenced.

Provide in your tender an implementation plan showing how long you expect these different parts of the contract to take to complete. We would ask for work to start as soon as the contract is awarded and to be delivered by the 13th March 2026.

### **6. Ownership of project outputs**

You agree to:

1. grant to Natural England a perpetual and royalty-free licence to use, copy, keep and disseminate the Outputs as they see fit and to grant sub- licences of the same kind;
2. obtain and maintain in force all authorisations of any kind required for you to use, copy, keep and disseminate the Outputs and to grant such licence to us;

3. contract to the effect that any creation by you or on your behalf of material which forms Outputs is undertaken on terms that either the copyright in the material is assigned to you or that the copyright owner may not commercially exploit it;
4. grant licences in respect of the Outputs under the Creative Commons model licence 'Attribution Non-Commercial' but not on other terms without our prior written consent;
5. not otherwise exploit the Outputs commercially without our prior written consent from Natural England.

**2. Information to be returned by the Contractor under the relevant sections of Part 2.**

**Approach and Methodology** (including Health & Safety, Sustainability and Quality Assurance unless being evaluated separately): Contractor to produce a detailed specification of the contractor's approach to the work to deliver the project outcomes.

**Project Management (including programme plan):** Including project implementation plan including timetable for works and how long you expect each the different parts of the contract to take to complete.

**Health and Safety Requirement:** The contractor will need to provide all relevant risk assessments on award of the contract. This includes working near water and biosecurity risk assessments.

The contractor shall have in place (or be willing to have in place) an appropriate level of Professional Indemnity Insurance of no less than £500,000. Public Liability Insurance of no less than £2,000,000 and Employers Liability Insurance for this work and to provide Certificates of Insurance as confirmation of the level of cover and any exclusions.

**Sustainability:** Please provide brief details on how sustainability will be factored into delivery of the project e.g., travel arrangements to site.

**2. Required skills / experience from the contractor and staff.** Include any essential qualifications or accreditations required to undertake the work. Please provide details for any sub-contractors being used.

For work in the field, we require an experienced electrofishing survey lead able to confidently identify lamprey in the field. They must be appropriately licenced to complete the works using the methods detailed.

For desk based analysis, we require an ecologist, preferably with a fisheries background, with strong data analysis and reporting skills and a sound understanding of the Common Standards Monitoring (CSM) guidance for protected sites (SSSI, SAC).

**Information to be returned by the Contractor under the relevant sections in Part 2 Section 2**

**3. Proposed programme of work and payment table (Detailing specific tasks, key milestones, deliverables & completion date where appropriate) Payment schedule should detail the % amount that will be paid after delivery of each task (We always hold back a minimum of 30% until the project is complete. Set out how you want the Section 7 cost proposal table broken down (eg. by key task/sub-tasks; deliverable etc).**

Task no.	Task and deliverable	Completion date
1	Project Management and start up meeting	September 202
2	Desk-based study - survey site selection, historical data	September 202
3	Habitat walkover surveys - Cocker, Derwent, Whit Beck, Sandy Beck	October 2025

4	Lamprey electric fishing surveys - Cocker, Derwent, Whit Beck, Sandy Beck	November 2025
5	Submission of final report to NE	December 2025
6	Project/stakeholder meeting to discuss the findings of the project.	On completion of final report – before 13th March 2026

**Note: The following information is managed at framework level and should not be repeated unless there are specific requirements that relate to your project. General requirements should be covered in Section 1 and be included in the Contractors reply to the Approach and Methodology section unless you are using the optional evaluation criteria. Delete sections if not required.**

#### 4. Health and Safety Requirements

*Note: Only include if high risk activities being undertaken e.g. working at height, near or over water). Do not request RAMS or similar risk assessments are returned with submissions. These should only be requested at contract award.*

N/A

#### Information to be returned by the Contractor in Part 2 Section 4

N/A

#### 5. Quality Assurance

*Note: Only use if there are specific QA requirements that need to be evidenced e.g. specific UKAS accreditations, chain of custody, reporting protocols etc. Do not request details of standard ISO accreditations*

N/A

#### Information to be returned by the Contractor in Part 2 Section 5

N/A

#### 6. Sustainability Considerations

*Note: Only include if project has high risk/impact sustainability considerations e.g. travel, carbon footprint, specific bio-security risks etc. that need to be managed.*

N/A

#### Information to be returned by the Contractor in Part 2 Section 6

N/A

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**C21744 ECOLOGICAL SERVICES FRAMEWORK 4 (EcoSF4)  
SCHEDULE B PROJECT FORM AND CONFIRMATION OF INSTRUCTIONS**

**PART 2  
TASK QUOTATION SHEET**

**To be completed by Framework Contractor**

Framework Contractor name	JBA Consulting
Contractor Project Manager name	Redacted under FOIA Section 40 Personal Information

**Redacted under FOIA Section 40 Personal Information**

Note: Your proposal must not exceed 6 sides of A4 plus the Costs Proposal in Section 7 (unless otherwise indicated in project client's specification above). Attachments must not be included unless requested with the exception of a programme diagram and full cost schedule if you consider these would support your proposal.

Do not make or append Caveats and Assumptions in your proposal – any points of uncertainty must be raised as a clarification point prior to submitting the proposal. Where assumptions are to be made, these will be stated by the Authority's Project Manager.

1. Approach & Methodology

**Redacted under FOIA Section 43 Commercial Information**











<b>Total expenses cost</b>	£4,563.30
<b>Total overall cost</b>	£29,884.75

**8.-Terms & Conditions**

**Note to contractor** – All call off contracts under the Ecological Services Framework 4 are subject to the terms and conditions agreed at framework award including the GDPR Schedule (to be completed for each call-off, if appropriate).

<b>Notes</b>	<p>You must have a purchase order number from the Contracting Authority before you start any work in connection with this proposal.</p> <p><b>If you have carried out a protected species survey, data collected must be uploaded onto the NBN network. Please take account of this in your quote.</b></p>
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By signing this form (*Insert Contractors Name*) agree to provide the services stated above for the cost set out in your Cost Proposal and in accordance with the Ecological Services Framework 4 Agreement Terms and additional appendices (if used).

<b>Contractor Project Manager:</b>	Redacted under FOIA Section 40 Personal Information
<b>Signature:</b>	
<b>Date:</b>	

9. Confirmation of Instructions (Contracting Authority Project Manager to complete)			
Notes	All agreed post submission amendments to scope, proposal, timetable or costs must be updated in the sections above prior to accepting the proposal.		
	<p><b>A commission code (also known as an approval reference number) must be obtained from the Framework Manager prior to confirming award and must be quoted on your purchase order.</b></p> <p>An Atamis reference should be obtained from Commercial if the project has been issued via Atamis, and quoted on your purchase order.</p>		
Authorisation	Name	Signature	Date
Contracting Authority Project Manager			
Authorised Contracting Authority Signature (usually the budget holder)			
DgC Authorised Signature (if required)			
Commission Code (i.e. 'approval reference number')	EcoSF4/25/71		
Purchase order no.	10070047030		
Atamis Ref (if applicable)	n/a		

The completed Project Form should be returned to the Contractor as authorisation to commence work. A copy must be provided to the named Commercial Lead if the award has been conducted via Atamis.

**C21744 ECOLOGICAL SERVICES FRAMEWORK 4 (EcoSF4)  
SCHEDULE B PROJECT FORM AND CONFIRMATION OF INSTRUCTIONS**

**PART 3  
CHANGE CONTROL SCHEDULE**

Notes	<p><b>To be completed by Contracting Authority Project Manager</b> Any extensions, price changes or amendments to existing orders need to be discussed with the Framework Manager and Defra group Commercial before being agreed with the Contractor. Please remember to amend your Purchase Order in SOP if necessary.</p> <p>The table below should be used to record and authorise the agreed changes throughout the project. A Change Control Notice (CCN) should be completed for substantial changes to the project and a summary provided in the table below.</p> <p>Send a copy of the revised Project Form and CCN (if used) to the Contractor once the change has been agreed and approved. A copy should also be sent to your Commercial Lead if an Atamis reference has been provided.</p>
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**10. Change Control**

All amendments to project scope, timetable or costs must be submitted to and approved by the Contracting Authority PM prior to implementing the change.

Change Details	CCN Ref. (if applicable)	Revised completion date (if applicable)	Revised Project Cost (if applicable)	Approved by (Contracting Authority's PM) / Date
Amended payment schedule				<small>Redacted under FOIA Section 40 Personal Information</small> 