LIFE R4ever Kent LIFE20 NAT/UK/001013

Request for Quotation

LIFE R4ever Kent Project (LIFE20 NAT/UK/001001013) - eDNA monitoring for freshwater invertebrate species

19 March 2025

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You are invited to submit a quotation for the requirement described in the specification, Section 2.

Please confirm by email, receipt of these documents and whether you intend to submit a quote or not.

Your response should be returned to the following email address by:

Email: Rebecca.Lowe@NaturalEngland.org.uk

Date: **02-APR-2025**

Time: **16:00**

Ensure you include the name of the quotation and ‘Final Submission’ in the subject field to make it clear that it is your response.

Contact Details and Timetable

**Rebecca Lowe, R4Ever Kent Finance Officer** will be your contact for any questions linked to the content of the quote or the process. Please submit any clarification questions via email and note that, unless commercially sensitive, both the question and the response will be circulated to all tenderers.

|  |  |
| --- | --- |
| Action | Date |
| Date of issue of RFQ | 19-MAR-2025 at 16:00 GMT |
| Deadline for clarifications questions | 26-MAR-2025 at 16:00 GMT |
| Deadline for receipt of Quotation | 02-APR-2025 at 16:00 BST |
| Intended date of Contract Award | 09-APR-2025 |
| Intended Contract Start Date | 14-APR-2025 |
| Intended Delivery Date / Contract Duration | 14-APR-2025 to 31-MAR 2026 |

Section 1: General Information

Glossary

Unless the context otherwise requires, the following words and expressions used within this Request for Quotation shall have the following meanings (to be interpreted in the singular or plural as the context requires):

|  |  |
| --- | --- |
|  |  |
| “Authority” | means **Natural England** who is the Contracting Authority. |
| “Contract” | means the contract to be entered into by the Authority and the successful supplier. |
| “Response” | means the information submitted by a supplier in response to the RFQ. |
| “RFQ” | means this Request for Quotation and all related documents published by the Authority and made available to suppliers. |

Conditions applying to the RFQ

You should examine your Response and related documents ensuring it is complete and in accordance with the stated instructions prior to submission.

Your Response must contain sufficient information to enable the Authority to evaluate it fairly and effectively. You should ensure that you have prepared your Response fully and accurately and that prices quoted are arithmetically correct for the units stated.

By submitting a Response, you, the supplier, are deemed to accept the terms and conditions provided in the RFQ. Confirmation of this is required in Annex 2.

Failure to comply with the instructions set out in the RFQ may result in the supplier’s exclusion from this quotation process.

Acceptance of Quotations

By issuing this RFQ the Authority does not bind itself to accept any quotation and reserves the right not to award a contract to any supplier who submits a quotation.

Costs

The Authority will not reimburse you for any costs and expenses which you incur preparing and submitting your quotation, even if the Authority amends or terminates the procurement process.

Self-Declaration and Mandatory Requirements

The RFQ includes a self-declaration response (Annex 1) which covers basic information about the supplier, as well as any grounds for exclusion. If you do not comply with them, your quotation will not be evaluated.

Any mandatory requirements will be set out in Section 2, Specification of Requirements and, if you do not comply with them, your quotation will not be evaluated.

Clarifications

Any request for clarification regarding the RFQ and supporting documentation must be submitted via email no later than the deadline for clarifications set out in the Timetable. The Authority shall be under no obligation to respond to queries raised after the clarification deadline.

The Authority will respond to all reasonable clarifications as soon as possible but cannot guarantee a minimum response time. The Authority will publish all clarifications and its responses to all suppliers via email unless deemed commercially sensitive.

If a supplier believes that a request for clarification is commercially sensitive, it should clearly state this when submitting the clarification request. However, if the Authority considers either that:

* the clarification and response are not commercially sensitive; and
* all suppliers may benefit from its disclosure,

then the Authority will notify the supplier (via email), and the supplier will have an opportunity to withdraw the request for clarification by sending a further message requesting the withdrawal of the clarification request. If not withdrawn by the supplier within 2 working days of the Authority’s notification, the Authority may publish the clarification request and its response to all suppliers and the Authority shall not be liable to the supplier for any consequences of such publication.

The Authority reserves the right to seek clarification of any aspect of a quotation and/or provide additional information during the evaluation phase to carry out a fair evaluation. Where the Authority seeks clarification on any aspect of the quotation, the supplier must respond within the timeframe requested by the Authority.

Amendments

The Authority may amend the RFQ at any time prior to the deadline for receipt. If it amends the RFQ the Authority will notify you via email.

Suppliers may modify their quotation prior to the deadline for Responses. No Responses may be modified after the deadline for Responses.

Suppliers may withdraw their quotations at any time by submitting a notice via the email to the named contact.

Conditions of Contract

The Authority’s

* [Standard Good and Services Terms & Conditions (used for purchases under £50k)](https://www.gov.uk/government/publications/natural-england-terms-and-conditions-for-goods-and-services/8f6ae1d5-b70d-44cf-9ec6-ec766dfc27b0)

can be located on the [Natural England Website](https://www.gov.uk/government/organisations/natural-england/about/procurement) and will be applicable to any contract awarded as a result of this quotation process. The Authority will not accept any changes to these terms and conditions proposed by a supplier.

Suppliers should note that the quotation provided by the successful bidder will form part of the Contract.

Prices

Prices must be submitted in £ sterling, exclusive of VAT.

Please also provide a breakdown of price exclusive of VAT and an inclusive gross total.

Disclosure

All Central Government Departments, their Executive Agencies and Non-Departmental Public Bodies are subject to control and reporting within Government. In particular, they report to the Cabinet Office and HM Treasury for all expenditure. Further the Cabinet Office has a cross-Government role delivering overall Government policy on public procurement, including ensuring value for money and related aspects of good procurement practice. For these purposes, the Authority may disclose within Government any details contained in your quotation. The information will not be disclosed outside Government during the procurement.

In addition, the Authority is subject to the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, which provide a public right of access to information held by public bodies. In accordance with these two statutes, the Authority may be required to disclose information contained in your quotation to any person who submits a request for information pursuant to those statutes.

Further to the Government’s transparency agenda, all UK Government organisations must advertise on Contract Finder in accordance with the following publication thresholds:

* Central Contracting Authority’s: £12,000
* Sub Central Contracting Authority’s and NHS Trusts: £30,000

For this RFQ the Authority is classified as a **Central Contracting Authority** with a publication threshold of **£12,000** inclusive of VAT.

If this opportunity is advertised via Contracts Finder, we are obliged to publish details of the awarded contract including who has won the contract, the contract value, and indicate whether the winning supplier is a small and medium-sized enterprise (“SMEs”) or voluntary organisation or charity. A copy of the contract must also be published with confidential information redacted.

By submitting a Response, you consent to these terms as part of the procurement.

Disclaimers

Whilst the information in this RFQ and any supporting information referred to herein or provided to you by the Authority have been prepared in good faith the Authority does not warrant that this information is comprehensive or that it has been independently verified.

The Authority does not:

* make any representation or warranty (express or implied) as to the accuracy, reasonableness or completeness of the RFQ;
* accept any liability for the information contained in the RFQ or for the fairness, accuracy or completeness of that information; or
* accept any liability for any loss or damage (other than in respect of fraudulent misrepresentation or any other liability which cannot lawfully be excluded) arising as a result of reliance on such information or any subsequent communication.

Any supplier considering entering into contractual relationships with the Authority following receipt of the RFQ should make its own investigations and independent assessment of the Authority and its requirements for the goods and/or services and should seek its own professional financial and legal advice.

Information Security requirements

The Government Security Classification Policy (GSCP) sets out the administrative system used by HM Government (HMG) to protect information and data assets appropriately against prevalent threats through the use of ‘classification tiers’. HMG uses three classification tiers; OFFICIAL, SECRET and TOP SECRET. Each tier provides a set of recommended baseline behaviours and a set of protective controls, which are proportionate to the threat profile for that tier AND the potential impact of a compromise, accidental loss or incorrect disclosure of information held within that tier.

Tenderers and suppliers must ensure that appropriate protective security controls are in place to comply with the GSCP and manage the information shared and received as part of this tender exercise.

A full suite of guidance documents is available on GOV.UK, with specific guidance for tenderers and suppliers set out in [Guidance 1.6 - Contractors and Contracting Authorities.docx (publishing.service.gov.uk)](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1166155/Guidance_1.6_-_Contractors_and_Contracting_Authorities.pdf).

Use of Artificial Intelligence

The Authority expects suppliers to declare where they have used AI software in the creation of Tender responses or intend to use AI software in the performance of the contract. How any AI software was, or will be, used should be to be declared within the technical submission part of the tender. We may require you to answer specific question/s on this topic, particularly where the Authority expects that usage is highly likely or clearly relates to the contract requirements.

Suppliers must follow any guidelines or regulations related to AI use and declarations as indicated in the [PPN 2/24 Improving Transparency of AI use in Procurement](https://www.gov.uk/government/publications/ppn-0224-improving-transparency-of-ai-use-in-procurement/ppn-0224-improving-transparency-of-ai-use-in-procurement-html).

Any information, instructions, or data provided by the Authority to suppliers as part of this tender, the requirements, or contract should not be directly inserted into Generative AI software (such as Gemini, ChatGPT, or CoPilot) without prior permission, unless this information is clearly published in the public domain.

Use of any Authority confidential tender information for training AI software is prohibited. it is advised that Defra’s data or instructions, or anything marked as confidential should not be directly inserted into AIs. For example, putting Authority’s instruction email into Gemini, ChatGPT, or CoPilot is not recommended.

If you intend to use AI to provide goods or services to the Authority, then you are required to complete a declaration which is simply answering the question stated within the 'Information to be returned’. The answer to this question will not be used in scoring your quote.

Protection of Personal Data

In order to comply with the General Data Protection Regulations 2018 the supplier must agree to the following:

* You must only process any personal data in strict accordance with instructions from the Authority.
* You must ensure that all the personal data that we disclose to you or you collect on our behalf under this agreement are kept confidential.
* You must take reasonable steps to ensure the reliability of employees who have access to personal data.
* Only employees who may be required to assist in meeting the obligations under this agreement may have access to the personal data.
* Any disclosure of personal data must be made in confidence and extend only so far as that which is specifically necessary for the purposes of this agreement.
* You must ensure that there are appropriate security measures in place to safeguard against any unauthorised access or unlawful processing or accidental loss, destruction or damage or disclosure of the personal data.
* On termination of this agreement, for whatever reason, the personal data must be returned to us promptly and safely, together with all copies in your possession or control.

General Data Protection Regulations 2018

For the purposes of the Regulations the Authority is the data processor.

The personal information that we have asked you to provide on individuals (data subjects) that will be working for you on this contract will be used in compiling the tender list and in assessing your offer. If you are unsuccessful the information will be held and destroyed within two years of the award of contracts. If you are awarded a contract, it will be retained for the duration of the contract and destroyed within seven years of the contract’s expiry.

We may monitor the performance of the individuals during the execution of the contract, and the results of our monitoring, together with the information that you have provided, will be used in determining what work is allocated under the contract, and in any renewal of the contract or in the award of future contracts of a similar nature. The information will not be disclosed to anyone outside the Authority without the consent of the data subject, unless the Authority is required by law to make such disclosures.

Equality, Diversity & Inclusion (EDI)

The Client is striving to create a diverse and inclusive working environment where every individual has equality of opportunity to progress and to apply their unique insights to making the UK a great place for living. The Service Provider is expected to respect this commitment in all dealings with **Natural England** staff and service users.

Suppliers are expected to:

* support Defra group to achieve its Public Sector Equality Duty as defined by the Equality Act 2010, and to support delivery of [Defra group’s Equality & Diversity Strategy](https://www.gov.uk/government/publications/defra-group-equality-diversity-and-inclusion-strategy-2020-to-2024/defra-group-equality-diversity-and-inclusion-strategy-2020-to-2024).
* meet the standards set out in the [Government’s Supplier Code of Conduct](https://www.gov.uk/government/publications/supplier-code-of-conduct)
* work with Defra group to ensure equality, diversity and inclusion impacts are addressed (positive and negative) in the goods, services and works we procure, barriers are removed and opportunities realised.

Sustainable Procurement

Addressing global sustainability impacts and realising additional community benefits within commercial activity is core to Defra group’s approach, working with its supply chain is key to achieving sustainable outcomes. In addition to supporting Defra group to meet its outcomes we look to understand and reduce negative sustainability impacts associated with our commercial activity and realise benefits.

The Client encourages its suppliers to share these values, work to address negative impacts and realise opportunities, measure performance and success.

Suppliers are expected to have an understanding of the Sustainable Development Goals, the interconnections between them and the relevance to the Goods, Services and works procured on the Client’s behalf

Conflicts of Interest

The concept of a conflict of interest includes but is not limited to any situation where an Involved Person or Relevant Body has directly or indirectly, a financial, economic or other personal interest which might be perceived to compromise their impartiality and independence in the context of the procurement procedure and/or affect the integrity of the contract award.

We expect suppliers to mitigate appropriately against any real or perceived conflict of interest through their work with government. A supplier with a position of influence gained through a contract should not use that position to unfairly disadvantage any other supplier or reduce the potential for future competition

Where the supplier is aware of any circumstances giving rise to a conflict of interest or has any indication that a conflict of interest exists or may arise you should inform the Authority of this as soon as possible (whether before or after they have submitted a quotation). Tenderers should remain alert to the possibility of conflicts of interest arising at all stages of the procurement and should update the Authority if any new circumstances or information arises, or there are any changes to information already provided to the Authority. Failure to do so, and/or to properly manage any conflicts of interest may result in a quotation being rejected.

Provided that it has been carried out in an open, fair and transparent manner, routine pre-market engagement carried out by the Authority should not represent a conflict of interest for the supplier.

Section 2: The Invitation - Specification of Requirements

2.1 Background to Natural England

The Authority is Natural England. Natural England is the government’s advisor on the natural environment. We provide practical advice, grounded in science, on how best to safeguard England’s natural wealth for the benefit of everyone. Our remit is to ensure sustainable stewardship of the land and sea so that people and nature can thrive. It is our responsibility to see that England’s rich natural environment can adapt and survive intact for future generations to enjoy. Further information can be found at: [Natural England](http://www.naturalengland.org.uk/).

2.2 Introduction to the specific work area

LIFE20 NAT/UK/001013 - Restoring and revitalising to ensure a more resilient River Kent and its species

[LIFE R4ever Kent](https://www.fba.org.uk/freshwater-species-research-and-recovery-programme/life-r4ever-kent) project (2021 -2026) aims restore and revitalise the River Kent Special Area of Conservation (SAC) in South Cumbria (Figure 1) and its wider catchment, so it is more resilient to environmental pressures. This unique river, located on the fringes of the English Lake District is home to internationally important populations of bullhead, white-clawed crayfish, freshwater pearl mussel and water crowfoot (Ranunculus) habitat. The project will work with local stakeholders to improve existing habitat, decrease the amount of nutrient and sediment run-off within the catchment, control invasive non-native species, re-naturalise the river where it has been modified and to increase the extent of important species such as the freshwater pearl mussel.

Natural England (lead partner) is working in partnership with South Cumbria Rivers Trust, Environment Agency and Freshwater Biological Association. The project is financially supported by LIFE, a financial instrument of the European Commission.

A key deliverable of the project is to trial new monitoring techniques by implementing the use of environmental DNA (eDNA) sampling for testing for the presence of Freshwater Pearl Mussels (FPM), White-clawed Crayfish (WCC) along with invasive Signal Crayfish and associated disease Crayfish Plague. This work will also deliver vital data to inform further project works, being used to identify any unknown FPM locations across rivers in Cumbria which have not been surveyed, with critically low population levels and finding suitable reinforcement /reintroduction sites. It will also demonstrate the current status of the catchment with regards to remaining clear of the invasive signal crayfish and plague disease which is vital as the project is also aiming to establish Ark sites for the native WCC in the River Kent catchment.

**Location**

River Kent & Tributaries Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI)

**Project title**

LIFE R4ever Kent Project (LIFE20 NAT/UK/OO1001013) - eDNA monitoring for freshwater invertebrate species

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Description automatically generated

Figure 1. River Kent SAC/SSSI

2.3 Project Aims

To use eDNA methods to better determine the presence of white-clawed crayfish across the River Kent SAC and upstream tributaries to aid Ark site selection.

To use eDNA methods to detect the presence of freshwater pearl mussel populations in selected rivers across Cumbria.

To use eDNA as a monitoring method to detect for the presence of crayfish plague and signal crayfish in the catchment.

To contribute to the field validation of freshwater invertebrate species assays to understand the key challenges of eDNA application.

2.4 Crayfish and plague monitoring

There are ongoing investigations into monitoring for invasive non-native signal crayfish and crayfish plague in the River Kent catchment. In the meantime, there is the need for proactive planning for a plague outbreak in the Kent system, the last UK stronghold for our native crayfish. This can be achieved by identifying and establishing Ark sites within the Kent catchment for WCC.

WCC Ark sites:

“An Ark sites is a discrete waterbody, comprising running and/or still water, which supports a healthy, recruiting population of WCC and which can be reasonably expected to sustain a population in favourable condition for the foreseeable future, without significant management intervention. Ark site establishment is a proven conservation measure where safe sites are set up to help conserve this species against crayfish plague and non-native crayfish species.”

A desktop study for ark site suitability within the Kent catchment was completed in summer 2023. The study determined that there is excellent potential for the development of ark sites for WCC, particularly in the headwaters, isolated still-waters, and potentially at a water body scale in four of the water bodies in the catchment.  We are now wanting to undertake further crayfish/habitat surveys of these sites/locations to determine their suitability.

Crayfish plague:

In summer 2022, crayfish plague was detected by eDNA sampling at a series of sites on the main River Kent. At each site there was eDNA evidence for plague (positive results), but with apparently healthy population of WCC (no clinical signs of disease or deaths). These results are difficult to explain as it would be expected that spores would be carried to other areas where they would infect WCC. In order to better understand these results, it is necessary to explore the issues further.

Given the River Kent SAC is notified for WCC, any decision to protect them in-situ, needs to be underpinned by robust evidence of risk. The main factor dictating the level of perceived risk to the WCC population are whether signal crayfish are now in the River Kent, however increased prevalence of signal crayfish throughout Cumbria more widely would also be of concern.

2.5 Methods

There are three parts to this contract:

1. Provision of water sampling equipment and protocols
2. DNA extraction, analysis and reporting
3. Sequencing of qPCR products

**2.5.1 Provision of water sampling equipment and protocols**

Provide the following:

* Water sample collection methodology / protocol to ensure best results based on the key sites listed in table 1 below in consultation with the project officer.
* Water sampling kit and sample collection forms for the number of samples agreed in the protocols (above).
* Postage / courier.  How do the samples get to the lab?

For both elements, consideration should be given to in-field applicability (e.g. single use filters) by Natural England staff and partners and the need to reduce or eliminate the possibility of cross contamination in the field. We prefer not to freeze samples and an alternative method should be considered for preserving the samples prior to shipment to the laboratory for analysis.

We required that enclosed capsule filters are used to allow samples to be filtered on site to reduce the risk of contamination. Natural England would also like to use a larger filter size unit for collecting the DNA from lake samples. Standard Sterivex filter units (pore size 0.45 μm) have been used previously and clogged easily and limit the volume of water filtered.  Please provide a quote for alternative filter unit to be used in the field. Filter size: pore size 1.0 µm

All samples collected will be kept separate. Please can you provide quotes for the following number of filter kits/samples to be analysed:

Sampling kits/filters:

|  |  |  |
| --- | --- | --- |
|  | **Number of kits** | **Filter size(s)** |
| **Sampling kits to be purchased** | **60** | **33 x 1.0um; 27 x 0.45um (Sterivex)** |

Natural England has already purchased the following kits to be used as part of the project.

|  |  |  |
| --- | --- | --- |
| Sampling kits | 41 | 0.45um filter size (Sterivex) |
| Filter kits Smith-Root sampler | 25 | 0.45um filter size (Root-Smith) |

The supplier will distribute the eDNA kits to Natural England’s nominated officer ready for the field survey and sampling window 1st May – 30th September.

Analysis:

|  |  |  |
| --- | --- | --- |
| **Assays** | **Target species** | **Number** |
| 1x target spp. | Freshwater pearl mussel | 86 |
| 2x target spp. | Crayfish plague (original + new assay) | 7 |
| 3x target spp. | White-clawed crayfish, Signal crayfish, New crayfish plague assay | 33 |
|  | **Total =** | **126** |

Sampling locations:

Natural England will be responsible for the collection of water samples over the course of the project from sites across Cumbria (table 1). Replicates will be collected for all samples on the same day.

Table 1. Project locations and number of samples to be taken

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Project** | **River/Sites** | **Target species (Assays)** | **No. sites** | **Replicates** | **Controls** | **Total =** |
| FPM surveillance - Ennerdale | Ennerdale Water + River Liza | FPM | 6 | 2 | 1x +ve control (Ennerdale) 1x -ve control (bottled water) | 14 |
| FPM surveillance - River Eden | River Eden - various sites | FPM | 15 | 2 | 2x -ve control (bottled water) | 32 |
| FPM surveillance - River Duddon | River Duddon | FPM | 7 | 2 | 1x -ve control (bottled water) | 15 |
| Crayfish plague - validation | Crayfish plague control site - Yorkshire | Crayfish plague (original + new assay) | 3 | 2 | 1x -ve control (bottled water) | 7 |
| WCC Ark - River Kent | Kentmere Reservoir Upper Kent + Bryant's Gill | WCC, SC, new plague | 4 | 2 | 1x -ve control (bottled water) | 9 |
| WCC Ark - River Kent | Grayrigg Tarn | WCC, SC, new plague | 2 | 2 | 1x -ve control (bottled water) | 5 |
| WCC Ark - River Kent | Flat Tarn | WCC, SC, new plague | 2 | 2 | 1x -ve control (bottled water) | 5 |
| WCC Ark - River Kent | Selside Tarns (x2) | WCC, SC, new plague | 4 | 2 | 1x -ve control (bottled water) | 9 |
| WCC Ark - River Kent | Black Moss Tarn | WCC, SC, new plague | 2 | 2 | 1x -ve control (bottled water) | 5 |
| Contingency | - | FPM | 12 | 2 | 1x -ve control (bottled water) | 25 |
|  |  |  |  |  | **Total =** | **126** |

2.5.2 DNA extraction, analysis and validation:

In your return, please provide an explanation of the methods you plan to use analyse and validate the water samples for DNA for the following four target species:

* White-clawed crayfish *Austropotamobius pallipes*
* Signal crayfish *Pacifastacus leniusculus*
* Crayfish plague *Aphanomyces astaci*
* Freshwater pearl mussel *Margaritifera margaritifera*

Please provide detailed methods stating:

* DNA extraction - State any kits if used and how the DNA is quantified;
* PCR amplification - Specify the primers/probes used for each target species, PCR cycle conditions, reagents and volumes used; details on QA checks.
* PCR replicates – Specify the number of replicates used and cut off threshold for defining a positive and negative result.
* Please also state for each primer set used what level on the [Thalinger et al. 2021](https://onlinelibrary.wiley.com/doi/full/10.1002/edn3.189) scale you consider it to be validated to.  We recommend that this should be to at least level 3 overall.

2.5.3 Sequencing of qPCR products

To confirm if positive qPCR results are from the intended original target species (i.e. to confirm the absence of non-specific amplification of a non-target species), we require that a number of positive qPCR results are sequenced using Sanger Sequencing. The resulting sequence should be reported in a FASTA format and made available alongside the report. Bioinformatic analysis should be conducted to determine its true identity using software and reference libraries including BOLD ([http://www.boldsystems.org](http://www.boldsystems.org/)) and NCBI BLAST (<https://blast.ncbi.nlm.nih.gov/Blast.cgi>). Sequence similarity scores should be provided.

Crayfish plague sequencing:

In 2024, eDNA surveys were carried out by Natural England for crayfish plague using two published assays. We found positive crayfish plague eDNA results from this study following the [Strand et al. (2014)](https://besjournals.onlinelibrary.wiley.com/doi/10.1111/1365-2664.12218) assay. These positive amplification results are concerning, particularly when considering the size and extent of the native crayfish populations across the river. Due to the short amplicon length amplified by the primers used in the Strand et al. (2014) paper, we were unable to sequence the positive qPCR products to confirm species identity.

We require a selection of eDNA samples from River Kent suspected to represent false positive detections of *A. astaci* to be Sanger sequenced using methods outlined in ([Oidtmann et al., 2006](https://doi.org/10.3354/dao072053)), in order to differentiate between *A. astaci* and other *Aphanomyces* spp. present.

2.6 Project outputs

Project report:

A final written report detailing the activities and analysis undertaken should be provided to the Natural England Project Officer, following the guidelines found here: [NECR/NERR Writing Guidance - Publishing (NECR000)](http://publications.naturalengland.org.uk/publication/5790636781600768)

The contractor should be aware that the data and any report produced will be made available by Natural England on an Open Government Licence.

Reports must all have the following standard cover wording: “LIFE R4ever Kent will restore and revitalise the River Kent SAC and its wider catchment, so it is more resilient to environmental pressures. Freshwater pearl mussel (FPM) (S1029) is a keystone species which requires clean gravel habitats and low suspended solids/nutrient loading. Improved water and habitat quality (including H3260 habitat) will benefit other aquatic/terrestrial species including the endangered White clawed crayfish (S1092) and provide optimum conditions for FPM's salmonid hosts. The project will trial new techniques, provide targeted advice and training and promote better replication/communication. Natural England (lead partner) is working in partnership with South Cumbrian Rivers Trust, Environment Agency and Freshwater Biological Association. The project is financially supported by LIFE, a financial instrument of the European Commission.”

Methods:

The methods section of the final report should include detailed methods. Suggested sections are in the table below:

Table 2. Suggested methodology requirements of the report

|  |  |
| --- | --- |
|  | Single species assays |
| Sampling | State how samples were collected, number of samples and locations of sampling. State how sites were selected, and the dates and times of sample collection. State the volume of material sampled, and storage and processing of samples prior to DNA extraction. |
| DNA extraction methods | State any kits if used. State how the DNA was quantified. Discuss how sample contamination was controlled for and avoided. |
| PCR amplification | State the type of PCR used and the number of PCR replicates per sample. Specify the target gene, primers, probe, PCR cycle conditions, reagents, and volumes used. Specify the proportion of positive PCR replicates required for a positive result. Contractors may only reference another publication without providing these details if the protocol is followed as written, including the same type of PCR, number of PCR replicates per sample, primers, PCR cycle conditions, reagents, and volumes. Describe the positive and negative controls used, and whether these behaved as expected. Specify whether tissue DNA or synthetic DNA was used PCR positive controls and what the concentration range was. State the LOD and LOQ of the assay, and the methods and level of replication used to establish these. State whether samples were tested for degradation and / or inhibition, and if so, how many samples were affected and measures taken to promote amplification. |
| Sequencing | If any sequencing is done for QA purposes, please state the model of the sequencing machine used and the methodology followed. |
| Reference Libraries | Name any reference libraries used |
| QA | Explain the QA checks that have been undertaken on the results, including thresholds that may have been set. |

 Results:

The contractors should provide a detailed results section, explaining the results generated, which should include:

* + The concentration of DNA extracted from each sample.
  + Correct amplification of expected PCR products at each stage.
  + If qPCR or dPCR used, the range and average amplification efficiency and R2 values across all runs. Report the LOD and LOQ for the assay.
  + The proportion of PCR replicates from each sample that gave positive results.
  + Any results from sequencing the PCR products.
  + Correct amplification of positive and negative controls.

Discussion and / or evaluation:

A discussion of any problems and how they were resolved, such as issues with PCR leading to a change of reagents or amplification conditions.

A detailed discussion explaining the results and confidence levels in the results. The limitations of the assay should be discussed. This should include a report from the COASTER tool, to assess confidence levels in this assay and / or reference to the Thalinger scale (please contact the [DNA Team](mailto:monitoring.innovation@naturalengland.org.uk) for more information and assistance with COASTER). The discussion should make clear what conclusions can be drawn from these results.

The contractor should include a discussion on what further work they would recommend based on the results of the current study.

Data outputs:

The following data are required as outputs of the project:

For a single-species assay, the data should be in the form of a comma-separated values (CSV) file detailing the sample location, volume of water filtered, with the results of the assay detailing the number of positive and negative replicates per sample (and the average Cq value and / or copy number of each sample if qPCR or dPCR used) at each location. Although CSV files can be opened and edited in Excel, CSVs can be imported into R for analysis and are more stable than excel spreadsheet files.

You must include a completed Metadata Form showing the outputs of the project – see attached.

All analysis results must be supplied to Natural England by 31st October of each reporting year as one complete submission.

2.7 Pricing

Please supply separate quotes for each part of the work.  Please include provision of collection protocols, courier costs, analysis, comparison work and report writing within these costs. You must make it clear what is to be included in the fixed price or daily rate – expenses, equipment hire, warranty, delivery charges etc. You may insert additional task lines if required.

Please state the total overall cost for this requirement. Prices should exclude VAT.

Table 3. Commercial Response (to be completed by Supplier)

| Activity | Daily rate | Material/equipment costs | Number of hours/days | Total cost per task |
| --- | --- | --- | --- | --- |
| Sample collection kits |  |  |  |  |
| Lab analysis |  |  |  |  |
| PCR sequencing |  |  |  |  |
| Report review/writing |  |  |  |  |
| Courier/postage costs |  |  |  |  |
| Total exc. VAT |  |  |  |  |

2.8 Quotation Submission

Please provide the following supporting documents:

Proposed Methodologies

Health & safety Policies/certificates

CV’s of key personnel who will be directly involved with this contract

Past Work

Section 3: Contract Management and Evaluation

This contract shall be managed on behalf of the Authority by Gavin Measures, Senior Invasive Non-native Species Officer; Tel. 0208 0261658; [gavin.measures@naturalengland.org.uk](mailto:gavin.measures@naturalengland.org.uk).

It is anticipated that a start-up meeting will be held on W/C 28/04/2025. Please assume 2 hours for the meeting. This meeting will be by teleconference, so T&S costs will not be payable.

Payment

The Authority will raise purchase orders to cover the cost of the services and will issue to the awarded supplier following contract award.

The Authority’s preference is for all invoices to be sent electronically, quoting a valid Purchase Order number. Invoices are to be submitted following completion of the final report (each year of the contract). You will be required to include the purchase order number, project name and reference number on all invoices (LIFE R4ever Kent LIFE20 NAT/UK/001013).

It is anticipated that this contract will be awarded for a period of 12 months to end no later than 31/03/2026. Prices will remain fixed for the duration of the contract award period. We may at our sole discretion extend this contract to include related or further work. Any extension shall be agreed in writing in advance of any work commencing and may be subject to further competition.

Evaluation Methodology

We will award this contract in line with the most economically advantageous tender (MEAT) as set out in the following award criteria:

Technical – **50**%

Commercial – **50**%

Evaluation criteria

Evaluation weightings are 50% technical and 50% commercial, the winning tenderer will be the highest scoring combined score.

Quality will be scored based on the opinion of the evaluating officers using the scoring criteria from the table below. The evaluating officer/s decision will be final.

Technical (50%)

Technical evaluations will be based on responses to specific questions covering key criteria which are outlined below. Scores for questions will be based on the following:

| Criteria | Weighting | To include |
| --- | --- | --- |
| Methodology | 30% | An outline of the proposed qPCR methodologies and assays/probes to be used. |
| 30% | An outline of your quality assurance process and the measures to be taken to avoid sample contamination in the field and in the lab. |
| Technical knowledge | 20% | Technical knowledge including resolving problems + knowledge of freshwater invertebrate ecology. |
| Staff experience | 20% | Demonstration of experience in similar projects. |

Scores for questions will be based on the following:

|  |  |  |
| --- | --- | --- |
| Description | Score | Definition |
| Very good | 100 | Addresses all the Authority’s requirements with all the relevant supporting information set out in the RFQ. There are no weaknesses and therefore the tender response gives the Authority complete confidence that all the requirements will be met to a high standard. |
| Good | 70 | Addresses all the Authority’s requirements with all the relevant supporting information set out in the RFQ. The response contains minor weaknesses and therefore the tender response gives the Authority confidence that all the requirements will be met to a good standard. |
| Moderate | 50 | Addresses most of the requirements with most of the relevant supporting information set out in the RFQ. The response contains moderate weaknesses and therefore the tender response gives the Authority confidence that most of the requirements will be met to a suitable standard. |
| Weak | 20 | Substantially addresses the requirements but not all and provides supporting information that is of limited or no relevance or a methodology containing significant weaknesses and therefore raises concerns for the Authority that the requirements may not all be met. |
| Unacceptable | 0 | No response or provides a response that gives the Authority no confidence that the requirement will be met. |

Technical evaluation is assessed using the evaluation topics and sub-criteria stated in the Evaluation Criteria section above.

Separate submissions for each technical question should be provided and will be evaluated in isolation. Tenderers should provide answers that meet the criteria of each technical question.

|  |  |
| --- | --- |
| Methodology | Detailed Evaluation Criteria |
| Q1.1 Provide details of the methodology and approaches proposed to deliver the requirements of this project.  Responses should not exceed six sides of A4, and use Arial font, size 11. | Your response should:  1) Demonstrate a clear understanding of the nature of the requirements.  2) Be a clear, practical, achievable, and cost-effective methodology to deliver these requirements.  3) Have information in sufficient detail to allow a full appraisal of the suitability of the approach to deliver for the project. |

Commercial (50%)

The Contract is to be awarded as a **fixed price** which will be paid according to the completion of the deliverables stated in the Specification of Requirements.

Suppliers are required to submit a total cost to provide the deliverables stated in the Specification of Requirements. In addition to this the Commercial Response template must be completed to provide a breakdown of the whole life costs against **each deliverable** used in the delivery of this requirement.

Calculation Method

The method for calculating the weighted scores is as follows:

* Commercial

Score = (Lowest Quotation Price / Supplier’s Quotation Price ) x 50% (Maximum available marks)

* Technical

Score = (Bidder’s Total Technical Score / Highest Technical Score) x 50% (Maximum available marks)

The total score (weighted) (TWS) is then calculated by adding the total weighted commercial score (WC) to the total weighted technical score (WT): WC + WT = TWS.

Information to be returned

Please note, the following information requested must be provided. Incomplete tender submissions may be discounted.

Please complete and return the following information:

* completed Commercial Response template
* separate response submission for each technical question (in accordance with the response instructions)
* complete AI question [ ''Do you use Artificial Intelligence (AI) or machine learning tools, including large language models within your quote submission or service delivery processes.?''] response which will not be scored, is to be returned within technical response
* completed Mandatory Requirements (Annex 1)
* completed Acceptance of Terms and Conditions (Annex 2)

Award

Once the evaluation of the Response(s) is complete all suppliers will be notified of the outcome via email. The successful supplier will be issued the contract, incorporating their Response, for signature. The Authority will then counter sign.

Annex 1 Mandatory Requirements

Part 1 Potential Supplier Information

Please answer the following self-declaration questions in full and include this Annex in your quotation response.

Part 1.1 Potential Supplier Information:

|  |  |  |
| --- | --- | --- |
| Question no. | Question | Response |
| 1.1(a) | Full name of the potential supplier submitting the information |  |
| 1.1(b) | Registered office address (if applicable) |  |
| 1.1(c) | Company registration number (if applicable) |  |
| 1.1(d) | Charity registration number (if applicable) |  |
| 1.1(e) | Head office DUNS number (if applicable) |  |
| 1.1(f) | Registered VAT number |  |
| 1.1(g) | Are you a Small, Medium or Micro Enterprise (SME)? | (Yes / No) |

Note: See EU definition of SME <https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en>

Part 1.2 Contact details and declaration

By submitting a quotation to this RFQ I declare that to the best of my knowledge the answers submitted and information contained in this document are correct and accurate.

I declare that, upon request and without delay you will provide the certificates or documentary evidence referred to in this document.

I understand that the information will be used in the selection process to assess my organisation’s suitability to be invited to participate further in this procurement.

I understand that the authority may reject this submission in its entirety if there is a failure to answer all the relevant questions fully, or if false/misleading information or content is provided in any section.

I am aware of the consequences of serious misrepresentation.

|  |  |  |
| --- | --- | --- |
| Question no. | Question | Response |
| 1.2(a) | Contact name |  |
| 1.2(b) | Name of organisation |  |
| 1.2(c) | Role in organisation |  |
| 1.2(d) | Phone number |  |
| 1.2(e) | E-mail address |  |
| 1.2(f) | Postal address |  |
| 1.2(g) | Signature (electronic is acceptable) |  |
| 1.2(h) | Date |  |

Part 2 Exclusion Grounds

Part 2.1 Grounds for mandatory exclusion

|  |  |  |
| --- | --- | --- |
| Question no. | Question | Response |
| 2.1(a) | Please indicate if, within the past five years you, your organisation or any other person who has powers of representation, decision or control in the organisation been convicted anywhere in the world of any of the offences within the summary below. | |
|  | Participation in a criminal organisation. | (Yes / No)  If yes please provide details at 2.1 (b) |
|  | Corruption. | ((Yes / No)  If yes please provide details at 2.1 (b) |
|  | Fraud. | (Yes / No)  If yes please provide details at 2.1 (b) |
|  | Terrorist offences or offences linked to terrorist activities | (Yes / No)  If yes please provide details at 2.1 (b) |
|  | Money laundering or terrorist financing | (Yes / No)  If yes please provide details at 2.1 (b) |
|  | Child labour and other forms of trafficking in human beings | (Yes / No)  If yes please provide details at 2.1 (b) |
| 2.1(b) | If you have answered yes to question 2.1(a), please provide further details.  Date of conviction, specify which of the grounds listed the conviction was for, and the reasons for conviction.  Identity of who has been convicted  If the relevant documentation is available electronically please provide the web address, issuing authority, precise reference of the documents. |  |
| 2.1 (c) | If you have answered Yes to any of the points above have measures been taken to demonstrate the reliability of the organisation despite the existence of a relevant ground for exclusion? (i.e. Self-Cleaning) | (Yes / No) |
| 2.1(d) | Has it been established, for your organisation by a judicial or administrative decision having final and binding effect in accordance with the legal provisions of any part of the United Kingdom or the legal provisions of the country in which the organisation is established (if outside the UK), that the organisation is in breach of obligations related to the payment of tax or social security contributions? | (Yes / No) |
| 2.1(e) | If you have answered yes to question 2.3(a), please provide further details. Please also confirm you have paid or have entered into a binding arrangement with a view to paying, the outstanding sum including where applicable any accrued interest and/or fines. |  |

Part 2.2 Grounds for discretionary exclusion

|  |  |  |
| --- | --- | --- |
| Question no. | Question | Response |
| 2.2(a) | The detailed grounds for discretionary exclusion of an organisation are set out on this [webpage](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/551130/List_of_Mandatory_and_Discretionary_Exclusions.pdf), which should be referred to before completing these questions.  Please indicate if, within the past three years, anywhere in the world any of the following situations have applied to you, your organisation or any other person who has powers of representation, decision or control in the organisation | |
| 2.2(b) | Breach of environmental obligations? | (Yes / No)  If yes please provide details at 2.2 (f) |
| 2.2(c) | Breach of social obligations? | (Yes / No)  If yes please provide details at 2.2 (f) |
| 2.2(d) | Breach of labour law obligations? | (Yes / No)  If yes please provide details at 2.2 (f) |
| 2.2(e) | Shown significant or persistent deficiencies in the performance of a substantive requirement under a prior public contract, a prior contract with a contracting entity, or a prior concession contract, which led to early termination of that prior contract, damages or other comparable sanctions? | (Yes / No)  If yes please provide details at 2.2 (f) |
| 2.2 (f) | If you have answered Yes to any of the above, explain what measures been taken to demonstrate the reliability of the organisation despite the existence of a relevant ground for exclusion? (Self Cleaning) |  |

Annex 2 Acceptance of Terms and Conditions

I/We accept in full the terms and conditions appended to this Request for Quote document.

Company \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Print Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Position \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_