

Standard Contract for Goods and/or Services - Order Form

1. Purchase Order Number	TBC			
2. Customer	Customer name : Natural England Registered office address : Foss House, Kings Pool, 1-2 Peasholme Green, York, YO1 7P			
3. Contractor(s)	Contractor name: ABP Marine Environmental Research Ltd Registered office address: Kennedulation London, WC2E 9ES Company Registration Number: 01956748			
4. Defra Group Members	The following Defra Group members will receive the benefit of the Deliverables:			
	Natural England			
5. The Agreement	This Order is part of the Agreement and is subject to the terms and conditions referenced at Appendix 1 and shall come into effect on the Start Date. Unless the context otherwise requires, capitalised expressions used in this Order have the same meanings as in the terms and conditions.			
	The following documents are incorporated into the Agreement. If there is any conflict, the following order of precedence applies (in descending order):			
	a)	this Order;		
	b)	the terms and conditions at Appendix 1; and		
	c)	the remaining Appendices (if any) in equal order of precedence.		
6. Deliverables	Applicable Deliverables	Goods Only: □ Services Only: ⊠ Good and Services: □		
	Goods	None		
	Services	A literature review investigating the decline in mussel (Mytilus edulis) bed habitat in the Wash and across Europe and the Northeast Atlantic and restoration methods - as set out in Appendix 2 – (Specification).		
		To be performed at the Contractor's premises (Quayside Suite, Medina Chambers, Town Quay, Southampton, SO14 2AQ).		
		Date(s) of Delivery: 08/01/25 to 31/03/25.		
7. Start Date	08/01/2025			
8. Expiry Date	31/03/2025			
9. Charges	The Charges for the Goods and/or Services shall be as set out in Appendix 3 – Charges. The Charges are fixed for the duration of the Agreement.			
10. Payment	Payments will be made in pounds by BACS transfer using the details provided by the supplier on submission of a compliant invoice.			

11. Contractor's Liability Cap (Clause 13.2.1)	A sum equal to £5,000,000.		
12. Customer's Authorised Representative(s)	Redacted under FOIA Section 40 Personal Information		
13. Contractor's Authorised Representative	For general liaison your contact will continue to be Redacted under FOIA Section 40 Personal Information		
14. Optional Intellectual Property Rights ("IPR") Clauses	The Customer has chosen Option B in respect of intellectual property rights provisions for the Agreement as set out in the terms and conditions.		
15. Progress Meetings and Progress Reports 16. Address for notices	The Contractor will provide fortnightly progress meetings via email with an interim project team meeting held mid-way through the contract.		
	Redacted under FOIA Section 40 Personal Information		
17. Key Personnel of the Contractor	Key Personnel Role: Key Contact Details: Personnel		
	Redacted under FOIA Section 40 Personal Information		
18. Procedures and Policies	For the purposes of the Agreement:		
19. Special Terms	Natural England Standard Goods and Services Terms and Conditions apply. None		

20. Additional Insurance	None
21. Further Data Protection Provisions	The further data protection provisions contained within Annex 4 of the terms and conditions are applicable to this Agreement where indicated below: Yes: □ No: ⊠

	Signed for and on behalf of the Customer	Signed for and on behalf of the Contractor
	Name:	Name:
R	edacted under FOIA Section	40 Personal Information

Appendix 1: Terms and Conditions

The Customer's Standard Good & Services Terms and Conditions which can be located on the <u>Natural</u> <u>England Website</u> and which are called 'Standard Goods & Services Terms and Conditions'

Appendix 2: Specification/Description

Background to Natural England

Natural England (NE) 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.

Background to the specific work area relevant to this purchase

This project is a key component within Natural England's wider programme of work, including the conservation and enhancement of Marine Protected Areas (MPAs).

Policy relating to this area of work includes;

- Environmental Improvement Plan: Marine Protected Areas (MPAs): By 2042, at least 70% of designated features within MPAs should be in a favourable condition, with the remaining features in a recovering condition.
- Environmental Improvement Plan: Species Abundance: Halt the decline in species populations by 2030 and increase populations by at least 10% by 2042.
- Conservation of Habitats and Species Regulations 2017: Conserve or restore European sites and prevent deterioration and significant disturbance of its qualifying features.

To ensure we maximise our impact on nature recovery, Natural England have identified Priority Places; areas of focus where the opportunity for change is greatest, or where the risks to nature most need to be mitigated. This project will focus on the Wash, which overlaps with the Lincolnshire Coast and Marine Priority Place and the North Norfolk Coast Priority Place.

The literature review will provide the evidence base needed to implement management and restoration methods in practise. As a result of the review, we aim to achieve the following:

- Help to inform management of current mussel populations with aim to improve condition and resilience, and thereby reverse the decline and minimise the impact and/or scale of future mortality events. Furthermore, this should lead to natural expansion of the habitat.
- Help to identify areas suitable for reef formation within and outside of the Wash and North Norfolk Coast SAC for potential restoration projects.
- Help to inform restoration projects to improve the chance of success and create new mussel beds. This should also help to improve connectivity with the existing habitat as a network.
- If the mussel bed declines can be reversed/minimised, this will improve the food supply for SPA birds, particularly oystercatcher, improve water quality and help to support the shellfisheries.

Project background

Mussel beds (*Mytilus edulis*) are an important biogenic reef habitat and are protected as Annex I reef in The Wash and North Norfolk Coast SAC for their biodiversity value. They are also of great environmental and economic value as a prey source for other species (especially oystercatcher), as a key fishery and aquaculture species, and due to their ability to remove nitrogen from the water. However, since 2014 there has been a decline in mussel bed habitat across Europe and the Northeast Atlantic (e.g. Baden et al., 2021; Seuront et al., 2019; Capelle et al., 2021). There has been extensive research into these declines and a number of biotic and abiotic pressures have been identified, including changes in predation, increased sea surface temperature (Jones et al., 2010), extreme weather (Seuront et al., 2019), water quality (Avdelas et al., 2021), predation (Sadler et al., 2018), harmful algal blooms (De Rijcke et al., 2015) and genomics (Dégremont et al., 2014; Benabdelmouna and Ledu, 2011) or a combination thereof (Baden et al., 2021; Capelle et al., 2021).

Restoration efforts in Europe and the Northeast Atlantic have shown mixed results. Field trials have shown that a suitable substrate is essential in exposed or dynamic locations, however interventions such as fences to trap dislodged mussels (Banke et al., 2024; Schotanus et al., 2020a), high-density placing (Schotanus et al., 2020a) and laying culch (Schotanus et al., 2020b) can improve survival. Research also supports co-restoration with certain plant species or native oyster (Gagnon et al., 2020; van der Meer et al., 2019).

This project would review the available research with the aim of identifying the drivers of decline so that we can better understand how to reverse the mussel declines in The Wash. Furthermore, with growing interest in blue mussel bed restoration in the Wash, the review will identify possible restoration methods and help to achieve recovery of resilient and stable populations in future. Restoring mussels would be a win for people and nature, as they are important for biodiversity and ecosystems services including The Wash shellfisheries.

Requirement

The literature review should collate and summarise existing evidence on the decline in mussel bed habitat in the Wash and across Europe and the Northeast Atlantic and potential restoration methods, including:

- An overview of blue mussel (*Mytilus edulis*) as a species and a habitat and the importance of habitat networks; (5%)
- An overview of the historic distribution of blue mussel across broad areas (e.g. mainland Europe, Northeast Atlantic, UK); (15%)
- An overview of the historic distribution of blue mussel in the Wash and North Norfolk Coast; (10%)
- An overview of possible causes of historical decline across broad areas (e.g. mainland Europe, Northeast Atlantic, UK); (20%)
- An overview of possible causes of current decline across broad areas (e.g. mainland Europe, Northeast Atlantic, UK); (15%)
- An overview of restoration projects (including restoration of existing and new populations) in the Northern Hemisphere, evaluating successful and unsuccessful projects and specific methodologies; (20%)
- An overview of the restoration potential in the Wash and North Norfolk Coast; (5%)
- An overview of how The Wash and North Norfolk Coast could be impacted by climate change and other potential threats to restoration efforts in future; (5%)
- Recommendations for future surveys and/or studies to fill any identified evidence gaps. (5%)

The successful contractor should conduct a full review of both grey and academic literature to address the above areas of interest.

Appendix 3: Charges

Description Tasks and / or Products	Cost per product	No of products	Total Cost per Task
Redacted un	der FOIA Section	43 Commerc	cial Information
Total Overall Co	st		£9,835

Appendix 4: Processing Personal Data

Contract:	
Date:	
Description of authorised processing	Details
Identity of Controller and Processor for each category of Personal Data	
Subject matter of the processing	
Duration of the processing	
Nature and purposes of the processing	
Type of Personal Data	
Categories of Data Subject	
Plan for return and destruction of the data once the processing is complete UNLESS requirement under law to preserve that type of data	
Locations at which the Contractor and/or its subcontractors process Personal Data under this Agreement	
Protective Measures that the Contractor and, where applicable, its subcontractors have implemented to protect Personal Data processed under this Agreement against a breach of security (insofar as that breach of security relates to data) or a Personal Data Breach	