

Section 1: Request for Quotation

Frequency, composition and potential impacts of sewerage discharges within proposed HPMAs and MPAs in NE / NW England

You are invited by Natural England and Defra's Network Procurement team, to submit a quotation for the requirement described in the specification below.

Please confirm, by email, receipt of these documents and whether you intend to submit a quote.

Please submit your quotation to the following email addresses:

Hazel.Selley@naturalengland.org.uk and Rebecca.deleij@naturalengland.org.uk

Action	Date
Issue Request for Quotation	TBC
Deadline for receipt of Quotation	3 rd October at 12:00 noon GMT
Deadline for clarification questions	28 th Sept 2022 at 12:00 noon GMT
Evaluation of bids	By 5 th October 2022
Notify bidders of the outcome	By 7 th October 2022
Intended date of Contract Award	By 12 th October 2022
Intended Contract Start Date	W/C 17 th October 2022
Intended Delivery Date / Contract Duration	17 th March 2023

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):

"RFQ"	Means this Request for Quotation and all related documents published by Natural England and made available to suppliers
"Contract"	Means the contract to be entered into by Natural England and the successful supplier.

Conditions applying to the RFQ

You should examine your quotation response to the RFQ and related documents ensuring it is complete prior to submitting your completed quotation.

Your quotation must contain sufficient information to enable Natural England to evaluate it fairly and effectively. You should ensure that you have prepared your

quotation fully and accurately and that prices quoted are arithmetically correct for the units stated.

The supplier by submitting a quotation is deemed to accept the terms and conditions in the RFQ. Failure to comply with the instructions set out in the RFQ may result in the supplier's exclusion from this procurement.

Please note our standard approach is to pay funds upon completion of final work deliverables.

Acceptance of Quotations

By issuing this RFQ Natural England 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

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

Mandatory Requirements

The RFQ includes mandatory requirements and, if you do not comply with them, your quotation will not be evaluated.

Clarifications

Natural England reserves the right to discuss, confidentially, any aspect of your quotation with you prior to any award of Contract to clarify matters.

Amendments

Natural England may amend the RFQ at any time prior to the deadline for receipt. If it amends the RFQ we will notify you in writing and may extend the deadline for receipt in order to give you a reasonable time in which to take the amendment into account.

Conditions of Contract

The terms and conditions will be included in any contract awarded as a result of this RFQ process. Natural England will not accept any material changes to these terms and conditions proposed by a supplier.



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Section 2: Specification

Natural England is the UK Government Department responsible for the environment, food and farming and rural affairs. Natural England's priorities are to secure a healthy natural environment; a sustainable, low-carbon economy; a thriving farming sector and a sustainable, healthy and secure food supply. Further information about Natural England can be found at: [Natural England](#)

Background to 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.

Background to the specific Natural England work area relevant to this project

Our seas are extremely rich and diverse, with the widest range of habitats in Europe. The marine environment contributes substantially to our economic and social well-being, providing a range of ecosystem services, including playing an important role in climate regulation. Unsustainable human activity has damaged the marine ecosystem, threatening wildlife as well as the goods and services it provides. To address these challenges, a pilot project of Highly Protected Marine Areas (HPMAs) will be designated to allow the protection and full recovery of marine ecosystems. HPMAs are defined in the Benyon review¹ and government response as "areas of the sea that allow the protection and recovery of marine ecosystems by prohibiting extractive, destructive and depositional uses and allowing only non-damaging levels of other activities to the extent permitted by international law". By setting aside some areas of sea with high levels of protection, HPMAs will allow nature to recover to a more natural state, allowing the ecosystem to thrive.

HPMAs will be designated under The Marine & Coastal Access Act (2009) and aim to help achieve the Government's commitments in the 25 Year Plan to leave the environment in a better state than we found it. HPMAs will contribute to the government's vision for 'clean, healthy, safe, productive and biologically diverse ocean and seas'. Natural England's role is to provide advice and an evidence base to government and regulators to improve decision making in the marine environment and deliver environmental objectives.

Our priorities:

- Through the provision of evidence-based advice, support government in the designation and management of a network of Marine Protected Areas.

¹ [Benyon review Into Highly Protected Marine Areas: Final report - executive summary - GOV.UK \(www.gov.uk\)](#)

- Set clear and practical long-term aims to help sea users and regulators appropriately integrate their activities with agreed marine conservation objectives
- Improve the evidence base through data collection and analysis to guide and inform effective and practical marine conservation
- Build new partnerships across government, with industry and conservation organisations to improve collaboration and joined up delivery to business, sea users and coastal communities.

There are a number of sewage effluent discharges releasing into rivers and coastal waters, and their potential impacts on protected marine sites are often not well understood. Natural England has been asked for advice on whether sewerage discharges occurring within or close to two candidate Highly Protected Marine may hinder recovery of the marine natural environment. The draft conservation objectives for the pilot HPMA sites are “To achieve full natural recovery of the structure and functions, features, qualities and composition of characteristic biological communities present within HPMA sites and prevent further degradation and damage to the marine ecosystem subject to natural change”. The draft feature description for HPMA sites is as follows: “The marine ecosystem, habitats and species of flora and fauna, abiotic elements, and their supporting ecosystem function and processes, including the seabed, water column and sea surface, within the site boundary”.

We have a background understanding of the types of pressures caused by sewage discharges and the likely sensitivities of different features to those pressures from [Natural England's conservation advice](#). However, this is focussed on designated features and known sensitivities. There is a lack of understanding of the impact of these pressures on wider marine habitats and species within the candidate pilot HPMA sites, those not currently designated within sites and subject to Condition Assessment. There is a need to improve our evidence base on the frequency, and composition of sewerage discharges within or closely adjacent to pilot HPMA sites, alongside locations and proximity to sensitive habitats and species, and the subsequent potential impact on the total marine environment within the site boundaries.

This project will help to collate and update the evidence base on the pressures and impacts from sewerage discharges occurring within or closely adjacent to each of the inshore candidate pilot HPMA sites. Natural England will utilise the outputs to provide recommendations to Defra based on the evidence on minimising and mitigating impacts to non-damaging levels. This information will help to provide a sound evidence base for competent authorities to consider management at a site level using evidence-based advice and to target future research to improve recovery of the environment in HPMA sites and wider MPAs.

Consultation process and the candidate pilot inshore HPMA sites

Consultation on the pilot HPMA sites will run from 6 July to 28 September 2022² and responses and any additional evidence will be analysed by Defra against ecological,

² [Consultation on Highly Protected Marine Areas \(HPMAs\) - Defra - Citizen Space](#)

social, and economic criteria to provide an up-to-date assessment for each candidate HPMAs.

Defra will publish a summary of consultation responses and develop a full impact assessment after consultation. Ministers will then decide which sites to designate and will designate pilot HPMAs within a year of the start of the consultation.

This project is to understand the site-specific impacts of sewage discharges on the habitats and species occurring within the candidate inshore HPMAs. The following information provides some background to the environment within the inshore candidate sites and the reasoning behind the proposed designation:

Allonby Bay

Allonby Bay is situated in the Irish Sea, covering the southern shore at the mouth of the Solway Firth and extends approximately 8km seaward from the shoreline between Maryport and Mawbray. At 38.5km² it follows the mean high-water mark along the length of the enclosed shoreline, out to a maximum depth of 8m.

This candidate pilot HPMAs overlaps with both the Allonby Bay Marine Conservation Zone (MCZ) and the Solway Firth Special Protection Area (SPA), as well as a small section of the Solway Firth Special Area of Conservation (SAC).

Allonby Bay consists of a complex mix of habitats characteristic of an environment that is subjected to dynamic currents and tides. The nutrient-rich sediments, dense mussel beds and intertidal rocky habitats that characterise this area, attract important bird species such as curlew and oyster catchers, with the area seeing large densities of shore birds. The area represents one of the best honeycomb worm reefs in the UK, these worms create a complex sediment network of tubes which provide vital habitat for sheltering crabs and molluscs. The biodiverse habitats in this area provide a food source for flat fish and nursery areas for commercially important juvenile fish species such as bass, cod and herring. These fish species attract diving, foraging seabirds including guillemots, gannets and razorbills.

Lindisfarne

Lindisfarne is a moderately exposed northeast-facing inshore area located on the Northumberland coast and within the 12 nautical mile territorial sea limit of the Northern North Sea region, covering an area of 129km².

The area extends from the intertidal zone north of Goswick, north eastward out to sea and southeast; it then returns inland south of Budle Bay at Bamburgh. The area includes the intertidal habitat on the north shore of Holy Island, Budle Bay and encompasses the outer group of the Farne Islands, excluding Inner Farne.

This candidate pilot HPMAs overlaps with several other Marine Protected Areas (MPAs) in Northumberland, including several Special Protection Areas (SPAs); Berwickshire & North Northumberland Coast Special Area of Conservation (SAC) and Berwick to St Mary's Marine Conservation Zone (MCZ).

Lindisfarne includes some of the most diverse intertidal and subtidal habitats in the North Sea, both in a UK and European context. It is home to a variety of threatened and/or important species as well as several 'blue carbon' habitats which capture and store carbon such as kelp forest, seagrass, saltmarsh and muddy sediment. The rich muddy sediments, full of worms and sand shrimp feed thousands of wintering birds such as waders and geese. The area is also the only regular British wintering site for light-bellied brent geese, during their winter migration from the Arctic.

This bird haven also supports breeding Arctic and little tern, puffins and guillemots on the Farne Islands. The area also provides important foraging and haul out areas for grey seals and the Northumberland colony which provides 3% of the British annual pup production. Deeper sediment habitats, while appearing more barren than intertidal areas, provide habitat and food sources for commercial fish species such as herring and cod, living in the water column.

Requirement

This project has four objectives:

1. Risk identification - Identify and summarise locations of sewage discharge consents within and closely adjacent to pHPMAs, using evidence from the Environment Agency.
2. Frequency - Obtain data where available on historic frequency of sewage discharges within and closely adjacent to the inshore pHPMAs using evidence from the Environment Agency.
3. Composition - Conduct literature searches on any monitoring which has taken place within the sites or relevant to the NE and NW HPMA regions of England on the composition of sewage discharges including chemical and organic matter and summarise accordingly.
4. Impacts - Conduct literature searches on any monitoring of the impacts of sewage discharges and associated pollutants relevant to the NE and NW HPMA regions of England on UK marine species and habitats including impacts of chemical and organic matter and summarise accordingly.

1. Risk identification - Identify and summarise locations of sewage discharge consents within and closely adjacent to pHPMAs, using evidence from the Environment Agency.

The output for this objective should be presented as a map, with a summary table or graph highlighting more significant or larger scale discharges.

2. Frequency - Obtain data where available on historic frequency and composition of sewage discharges within and closely adjacent to the inshore pHPMAs using evidence from the Environment Agency.

This output should be presented in the form of a heat map, and graph or tables to indicate which discharges may be more frequent and significant. Information from any monitoring or analysis of specific discharges should be included with consideration of the scope of analysis and whether it is fully comprehensive. Any indication of a change in frequency over time should be considered and a brief evidence summary provided.

3. Composition - Conduct literature searches on any monitoring which has taken place within the sites or relevant to the NE and NW HPMA regions of England on the composition of sewage discharges including chemical and organic matter and summarise accordingly.

This output should be presented as a report section, based on a literature review of peer reviewed literature via appropriate platforms e.g. Science Direct, and should focus on summarising evidence on the composition of sewage discharges in the NE / NW of England, including both organic and chemical / pollutant compounds that have been observed. This may include chemicals from household products, industrial discharge, pharmaceutical compounds, road run off, and organic and nutrient load.

Where direct evidence is not present, this should be highlighted as an evidence gap and evidence drawn from the wider region of the UK could be considered - taking into account similarities and differences in population of conurbations, treatment of sewage and other factors. This indirect evidence on sewage composition in wider areas of the UK should be highlighted as being of lower confidence since it would not represent actual composition within proposed pHPMAs, yet could be indicative of likely composition.

4. Impacts - Conduct literature searches on any evidence of the impacts of sewage discharges and associated pollutants relevant to the NE and NW HPMA regions of England on UK marine species and habitats including impacts of chemical and organic matter and summarise accordingly.

This output should be presented as a report section, based on a literature review of peer reviewed literature via appropriate platforms e.g. Science Direct and should focus on summarising evidence on the impacts of sewage discharges in the NE / NW of England, including both organic and chemical / pollutant compounds that have been observed. This objective should focus on impacts to UK marine habitats and species, and primarily focus on evidence indicating population level impacts such as evidence of changes in community composition, hindering growth, survival, genetic impacts or endocrine / reproductive impacts. Where direct evidence is not present, further research from the UK or UK species in temperate countries could be considered - taking into account similarities and differences in temperature, treatment of sewage and other factors. Laboratory based studies may also indicate potential effects. This indirect evidence on the impacts of sewage components in wider areas of the UK should be highlighted as

being of lower confidence since it would not represent actual composition of sewage and impacts within proposed pHPMAs, yet could be indicative of potential impacts.

The outputs could be summarised in a table and indications of key compounds of concern – where feasible – could be highlighted.

Scope

This is a desk-based study. Field based data collection is not expected.

Sewage discharges may or may not release pollutants into the environment which could hinder the recovery of Highly Protected Marine Areas. This contract aims to consider available evidence to address this knowledge gap to allow Natural England to provide informed, evidence-led advice to DEFRA on the function and frequency of sewage discharges within pHPMA sites and wider MPAs.

Natural England will assist in the supply of evidence on location of sewage discharges for the delivery of Objective 1 & 2.

The successful contractor will have:

- A thorough understanding of the issues around marine pollution and the available evidence base
- Experience of assessing indirect and travelling pressures of pollutants and sub-lethal impacts on habitats and species which may have population-level effects.

Outputs and contract management

The contract is expected to begin as soon as possible and needs to be complete by 17th March 2023. A progress report is expected in the w/c 12th December 2022 in addition to an inception meeting with the project manager Hazel Selley, to update on any key findings to date.

It will be important that the contractor keeps in good contact with the project manager Hazel Selley via email, MS team calls, or phone, providing brief progress updates every 2 weeks for the duration of the contract, from commencement until completion of the contract.

The draft report should include

- Objective 1: Risk identification - Identify and summarise locations of sewage discharge consents within and closely adjacent to pHPMAs
- Objective 2: Frequency - Obtain data where available on historic frequency of sewage discharges within and closely adjacent to the inshore pHPMAs
- Objective 3: Composition - Conduct literature searches on any monitoring which has taken place within the sites or relevant to the NE and NW HPMA

regions of England on the composition of sewage discharges including chemical and organic matter

- Objective 4: Impacts - Conduct literature searches on any monitoring of the impacts of sewage discharges and associated pollutants relevant to the NE and NW HPMA regions of England on UK marine species and habitats

A final project report should then be produced including the above information addressing any comments raised by the project team after review.

The key suggested milestones and outputs for the contract are set out in the table below:

Date	Milestone	Description
w/c 17 th October 2022	Contract starts and start-up meeting	Start-up MS teams meeting
w/c 12 th December 2022	Progress report and meeting.	Summary of key findings to date
3 rd March 2023	Draft report	Draft outputs provided for all Objectives
17 th March 2023	Final report	Final outputs provided (following two weeks for review and feedback on receipt of draft outputs by project managers)
31 st March 2023	Contract ends	Contract ends and due funds paid

5. Intellectual Property

Contractors shall make no financial investment in the project and, therefore, shall not benefit from any intellectual property rights arising from the project. The successful tenderers must comply with the terms and conditions of Natural England. Outputs will be owned and maybe published by NE / DEFRA.

6. Data provision

Data that will be provided by Natural England for use in this project:

- Provide assistance in obtaining sewage discharge data from the Environment Agency within and adjacent to HPMA.
- Provide if suitable an indication of known listed / protected habitats and species within pHPMA, however all marine life within sites will be protected following the 'whole site' approach.

7. Sustainability

As a delivery partner, the successful contractor is expected to pursue sustainability in their operations, thereby ensuring Natural England is not contracting with a supplier whose operational outputs run contrary to Natural England's objectives. The successful contractor will need to approach the project with a focus on the entire life cycle of the project. In response to this RFQ, please explain to Natural England what your organisation is doing to incorporate sustainability within its operations. This may include any details you are able to provide in relation to steps you may be taking to reduce your carbon footprint.

Section 3: Requirements for Tender Bid

It is anticipated that this contract will be awarded for a period of 6 months to end no later than 31/03/2023. Prices will remain fixed for the duration of the contract award period, with paid made upon completion of work. We may at our sole discretion extend this contract to include related or further work. Any extension shall be agreed in advance of any work commencing and may be subject to further competition. Bidders must complete and return the following documents:

Tender Response Questions – Bidders must answer the questions in this document to describe their proposal to undertake the performance of the Contract. Bidders submissions must follow the same layout as this document.

Pricing Schedule – Bidders must complete and return this document to describe their prices. Bidders submissions must follow the same layout as this document.

Scoring

Scores will be allocated to bids according to the weighting described below;

- Cost 50%
- Quality 50% (comprising):
 - Methodology 60%
 - Previous experience and track record 30%
 - Risk analysis 10%

Score	Justification
For a score of hundred (100):	Excellent - Response is completely relevant and excellent overall. The response is comprehensive, unambiguous and demonstrates a thorough understanding of the requirement and provides details of how the requirement will be met in full.
For a score of seventy (70):	Good - Response is relevant and good. The response demonstrates a good understanding and provides details on how the requirements will be fulfilled.
For a score of fifty (50):	Acceptable - Response is relevant and acceptable. The response provides sufficient evidence to fulfil basic requirements.
For a score of twenty (20):	Poor - Response is partially relevant and/or poor. The response addresses some elements of the requirements but contains insufficient / limited detail or explanation to demonstrate how the requirement will be fulfilled.
For a score of zero (0):	Unacceptable - Nil or inadequate response. Fails to demonstrate an ability to meet the requirement.

Tender Response Questions

1. Methodology (60%):
Please describe how you will approach the work for each objective
2. Previous experience and track record (30%):
Please outline any previous experience you have of working in this particular or related area of research.
3. Risks (10%):
 - 3.1 Describe all of risks you have identified that would impact your ability to complete the research to your fullest capability, including how you intend to manage these risks to mitigate impact on the project.
 - 3.2 Describe how you will manage staff absences or other events that may impact the research
 - 3.3 Describe how you will manage the timescales for this project to ensure it is delivered on time.

Pricing Schedule

Tenderers must complete the following pricing schedule. All prices must be quoted in pounds sterling, exclusive of VAT. All prices are to remain fixed for the duration of the contract.

Pricing schedule to be completed and returned in the following format:

Deliverable	Number of days	Day rate of staff PRICE (ex. VAT) £	Total Price (ex. VAT) £
Objective 1			
Objective 2			
Objective 3			
Objective 4			
Total cost			

Contract Management

This contract shall be managed on behalf of Natural England by Hazel Selley
Hazel.Selley@naturalengland.org.uk

The contract will be managed by:

- Start-up meeting
- Progress reporting every 2 weeks by phone or email to the project team
- Inception project meeting

We will raise purchase orders to cover the cost of the services and will issue to the awarded supplier following contract award. To be invoiced after all the work has been completed.

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, Natural England may disclose within Government any details contained in your quotation. The information will not be disclosed outside Government during the procurement.

In addition, Natural England 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, Natural England may be required to disclose information contained in your quotation to any person who submits a request for information pursuant to those statutes.

By submitting a quotation, 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 Natural England have been prepared in good faith Natural England does not warrant that this information is comprehensive or that it has been independently verified.

Natural England 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 Natural England following receipt of the RFQ should make its own investigations and independent assessment of Natural England and its requirements for the goods and/or services and should seek its own professional financial and legal advice.

Protection of Personal Data

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

- You must only process any personal data in strict accordance with instructions from Natural England
- 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 Natural England is the data processor.

The personal information that we have asked you 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 Natural England without the consent of the data subject unless Natural England is required by law to make such disclosures.