Invitation to Tender

Coastal Geomorphology Study

Caen Wetlands Natural Capital Investment Project

June 2020

Devon Wildlife Trust, Cricklepit Mill, Commercial Road, Exeter, EX2 4AB

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Devon Wildlife Trust seeks to commission an experienced coastal geomorphological consultancy to study how Horsey Island and its environs will evolve under various scenarios, to enable informed decisions to be made about how to manage the site to maximise wildlife opportunities and minimise risks to people and property.

Background Information

1. Devon Wildlife Trust

The Devon Wildlife Trust ("DWT") was established in 1962 in response to a national movement concerned with the ever-growing threat to our native wildlife and the continual erosion of wildlife rich space in the wake of intensive agriculture, pollution and built development.

DWT is part of The Wildlife Trusts, a federation of 46 county and country-based charities, supported by the Royal Society for Wildlife Trusts.

Our purpose can be summarised by the four statements below:

- Create safe havens in which wildlife can thrive and from which it can spread;
- Stand up for wildlife under threat and bring back wildlife that's been lost;
- Inspire love and care for the natural environment, and enable more people to experience, enjoy and understand it;
- Enrich and enhance our knowledge of wildlife, natural systems and the fundamental benefits it brings to society.

2. The Caen Wetlands Natural Capital project

The Caen Wetlands are centred around the River Caen on the northern bank of the Taw estuary, in the heart of the North Devon Biosphere Reserve, one of the most important areas for wildlife in the country and well known and loved by visitors from throughout the UK and beyond. Despite its scenic beauty and stunning wildlife, this is a landscape that is under pressure from climate change, rising sea levels and human impacts. Nowhere is this felt more than on the river estuaries, where mudflats and coastal marshes are being squeezed by rising sea levels and fixed coastal defences. There is little on offer by way of outdoor visitor facilities on this part of the coast and no organised access to these wildlife rich wetland areas that would represent a major attraction throughout the year.

The Caen Wetlands project will carry out detailed feasibility studies to develop an ecotourism offer, surrounded by an attractive and accessible area of estuarine and freshwater wetlands site that spans the River Caen on the northern bank of the River Taw estuary. It includes Horsey Island, one of Devon's most important spots for wetland birds and Devon Wildlife Trust's most recent nature reserve acquisition. The South West Coast Path runs along the perimeter of the site and it is within easy reach of the Tarka Trail. Horsey Island extends to 87 hectares. Until recently the area was protected by flood defences. These failed in 2017

due to a lack of maintenance of a tidal outlet into the tidal River Caen, causing saline water to enter the site when the tide was in. Emergency works attempted to reinstate the flood defence but these ultimately failed. In the short period since Horsey Island's floodbank was breached salt marsh plant communities have colonised the site and it is now an important roost for tens of thousands of wintering waders.

Specifically, this project will explore the feasibility of:

- Restoring at least 141 hectares of land to species rich wetland and coastal habitats;
- Building visitor facilities to enable visitors to access, enjoy and learn about the areas wildlife and the threats it faces;
- Creating a commercially viable business that trades sustainably and supports the area's natural assets; and
- Demonstrating the multitude of benefits coastal wetlands provide including flood risk reduction and carbon sequestration alongside nationally important nature conservation, support for local fish stocks and civic pride.

The project will be led by Devon Wildlife Trust, working with a range of local partners including the North Devon Biosphere Reserve, the Biosphere Foundation, Defra and the Environment Agency.

3. Formal tender

Devon Wildlife Trust on behalf of the Caen Wetlands Project Steering Group is inviting tenders for a coastal geomorphological consultancy to support our decision making regarding how to enable the area's coast to evolve so that wildlife and wider environmental assets are conserved and enhanced, that opportunities to create wildlife spectacles are identified, and that risks to land, property and infrastructure are managed.

3.1 Services Required

Devon Wildlife Trust is commissioning an expert coastal geomorphological consultant to work with our partnership and other stakeholders to provide evidence to support decisions on potential future interventions at Horsey Island and its environs. The consultant will:

1. Assess the condition of Horsey Island outer floodbanks and define the work needed, and its approximate whole life cost, to provide reasonable protection from further failures over a 20 and 50 year period.
2. Provide evidence to enable Devon Wildlife Trust to assess the consequences of, and advise on the most feasible options to achieve, the following scenarios.
    a. Intervening to limit Horsey Island's tidal prism and prevent or reduce further expansion of the breach, through regulated tidal exchange and/or hard engineering.
    b. Intervening to expand the breach horizontally to reduce further vertical channel scour.

c. Allowing the breach in Horsey Island's sea defence to evolve naturally to a state of equilibrium through no active intervention, whilst maintaining the remainder of its outer bank.
d. Allowing further unmanaged breaches of the Horsey Island floodbank, in particular at its south western end (restoring the River Caen to its alignment pre-Horsey reclamation) where erosion has recently occurred, whilst allowing the existing breach to evolve naturally.

These should factor in projections for sea level rise and increased frequency and severity of extreme weather events over 10, 20 and 50 years.

3. Use the results from 2. to assist DWT in prioritising scenarios to assess in greater detail.
4. For prioritised scenarios, provide an analysis of risks to and opportunities for terrestrial, inter-tidal and marine habitats (including the predicted areas of lower, mid and upper saltmarsh (if such resolution is possible), mudflat and sandflat and shallow marine habitats created), farmland, property and infrastructure (including Horsey Island outer sea defence, the Great Bank (Horsey inner bank), the toll road, Braunton Marsh, Chivenor Marsh and its sea wall, RMB Chivenor and the tidal River Caen and its navigability (to Velator Quay)).
5. Identify interventions that could be made to create new habitats and ecological enhancements, in particular wetland features that will attract waterbirds and provide an outstanding visitor experience .
6. Provide estimates based on latest scientific understanding for the changes in stocks and flows of carbon in new coastal habitats arising from each prioritised scenario.
7. Assess the flood risk management benefits and risks arising from each prioritised scenario.
8. Provide expert opinion on the locations most likely to offer visitor facility potential, ie. reasonably stable locations which by their nature or through relatively easy interventions (eg. creation of tidal lagoons) are likely to attract waterbirds and offer good estuarine views.

Devon Wildlife Trust acknowledges that with the available budget it is unlikely to be possible to build a numerical model of the estuary to enable detailed modelling of these scenarios. The Trust requires expert judgement of outcomes based on an understanding of how the estuary operates (including from modelling and other relevant technical work that has been undertaken on the Taw Torridge estuary (see Appendix 1)).

3.2 Key Deliverables and Milestones

Produce a written report on options for Horsey Island and its environs, including each of the following components.

Stage 1

1. Engineers' report on the condition of Horsey Island's outer floodbanks and the work needed, and its approximate whole life cost, to provide protection from further failures over 20 and 50 years.
2. Expertly informed predictions for localised estuarine evolution under each of the following scenarios (referred to hereafter as *the scenarios*) over 10, 20 and 50 years:

a. Intervening to limit Horsey Island's tidal prism and prevent or reduce further expansion of the breach, through regulated tidal exchange and/or hard engineering.
b. Intervening to expand the breach horizontally to reduce further vertical channel scour.
c. Allowing the breach in Horsey Island's sea defence to evolve naturally to a state of equilibrium through a policy of no active intervention, whilst maintaining the remainder of its outer bank.
d. Allowing further breaches of the Horsey Island floodbank, in particular at its south western end (restoring the River Caen to its alignment pre-Horsey reclamation) where erosion has recently occurred, whilst allowing the existing breach to evolve naturally with minimal intervention .

DWT will use this information to prioritise these scenarios and progress those selected to Stage 2.

Stage 2

3. Evidenced predictions for change in areas in coastal habitats, in particular lower, mid and upper saltmarsh (if such resolution is possible), mudflats and sandflats, arising from prioritised scenarios.
4. Estimates based on latest scientific understanding for the changes in stocks and flows of carbon in new coastal habitats arising from each prioritised scenario.
5. Estimates of any flood risk management benefits arising from each prioritised scenario.
6. Concept designs for new habitats and ecological enhancements, in particular wetland features that will attract waterbirds and provide an impressive visitor spectacle.
7. Engineers report for the most feasible way to achieve each of the prioritised scenarios to maximise their benefits and minimise their risks.
8. Register of risks (likelihood and magnitude) to third party assets and access, including infrastructure, archaeology, land and property and navigation, arising from the prioritised scenarios.
9. Proposals, based on predictions for habitat development and opportunities for creation of relatively stable wetlands features, for the best locations for visitor facilities which would enable visitors to experience intertidal wildlife and surrounding landscapes.

4. Timescale and Resources

The services should be completed within 18 weeks from the date of contract award, with a draft report produced at 16 weeks.

5. Fee budget

DWT has been awarded a grant by the Esmée Fairbairn Foundation (EFF) for the development of the Caen Wetlands project. The maximum budget for the coastal geomorphology study, incorporating all of the elements set out in this brief, is up to a maximum of £20,000 including VAT.

6. Intellectual Property and Data Protection

The Caen Wetlands Natural Capital project will serve as a national test case for the development and implementation of green financing. The partnership will therefore require

the successful consultant to provide written reports and information which can be freely shared to enable other organisations to learn from, adapt and adopt our approaches.

The intellectual property arising from the Natural Capital Geomorphology Study contract will be owned by the project partners.

The partners shall comply with all relevant provisions of the GDPR, with the Privacy and Electronic Communications Regulations (PECR) and other relevant data regulations and do nothing which causes, or may cause, the Trust to be in breach of its obligations under the GDPR or PECR. If personal information is required to be processed or shared separate contracts will be formally agreed in advance.

7. Responding to the Tender

We require a written proposal addressed to DWT which includes:

- a short description of how you will approach this innovative project and your response to the service requirement set out above;
- a summary of your experience in coastal geomorphology, and in particular studies similar to this service requirement;
- any additional ideas and experience that you have that is relevant to this work and will assist in successful delivery of this project;
- an overview of the risks associated with meeting the full service requirement;
- a summary of the profiles and experience of the individuals in your team who will be delivering the services;
- your fee proposals.

8. Evaluation criteria
We will use the following evaluation criteria in assessing any proposals:

Criteria	**Weighting**
Understanding of the service requirement	**10**
Previous track record and relevant experience.	**20**
Assessment of risks	**10**
Demonstration of competence and ability to deliver the service requirement and within the proposed timescale.	**20**
Commitment to positive environmental & ethical standards and impacts	**10**
Experience and quality of proposed team	**10**
Fee proposals – value for money	**20**

9. Bidder Information

General
The following further information and documentation is available on request;
• Copy of the Caen Wetlands development grant application to EFF
• Telephone conversation with Gavin Bloomfield, Caen Wetlands Development Lead (see contact details below)

We will expect the consultant to issue their own draft contract containing the terms and conditions of engagement resulting from the work awarded from this tender. DWT reserves the right to review and negotiate these terms and conditions.
Please ensure your bid is in line with the tender instructions in Section 10, if these are not followed your bid will be disqualified.

Contact information
The responsible person for this tender is Gavin Bloomfield, Caen Wetlands Development Lead.
Please send all communication including tender responses and questions via the details below. Please note email is the preferred method of receiving tender responses.

DWT Contact	Gavin Bloomfield
Telephone	07799770467 or 01647 272886
Email	gbloomfield@devonwildlifetrust.org
Address	Caen Wetlands Geomorphology Tender Devon Wildlife Trust Cricklepit Mill Commercial Road Exeter EX2 4AB

Responses
Responses can be submitted in your own format.
The deadline for tender responses is 7 July 2020.

Insurance
Devon Wildlife Trust requires all suppliers to hold a minimum level of £5m Public Liability Insurance and £2m Professional Indemnity Insurance. Copies of insurance policy certificates may be requested before formal engagement.

Covid 19
The partners will adhere fully to all government guidance regarding managing the risk of Covid 19 transmission.
All activities to deliver the service requirement will be individually risk assessed by the delivery body and only authorised to proceed where the risk is assessed as acceptable and all necessary mitigation measured are in place.

10. Tender Instructions
All bids are required to be in line with the instructions detailed below. Any bids which do not follow these instructions will be disqualified from the tender. Please contact the responsible person outlined in Section 9 should you have any queries or concerns.

Consortium Tenders
Any Lead Bidder for a consortium Tender must ensure that any individual or member organisations of the consortium are not included in any other bid in respect of this ITT.

Canvassing
Bidders must not canvas any member or officer or employee of DWT or the Project Steering Group concerning this or any other ITT.

Conflict of Interest
Bidders, for all goods/services where a conflict of interest may exist or arise, must inform DWT and submit proposals for avoiding such conflicts.

Acceptance
DWT does not bind itself to accept the lowest Tender, or any Tender. Instead, DWT shall seek to accept the most advantageous Tender in terms of the evaluation criteria set out in Section 8 of this ITT. If there is a discrepancy between words and figures on the submitted tender the amount in words will prevail.

Form of contract
The ITT and the submission of the Tender shall not in any way bind DWT to enter into a contract with the Bidder or involve DWT in any financial commitment in this respect. A binding commitment shall only occur once DWT has signed a formal contractually binding engagement letter with the preferred Bidder.
DWT reserves the right to terminate any contract awarded if, at any time thereafter, we discover that the bidder has made any material misrepresentation in their tender response.

Amendments
DWT reserves the right to amend or add to this ITT document and any associated documents if we see appropriate to do so.

Appendix 1 Technical Data and Reports available to inform the Caen Wetlands Coastal Geomorphological Study

The Taw Torridge Estuaries: Geomorphology and Management Report to Taw-Torridge Estuary Officers Group (Pethick. 2007)

Horsey Island Potential Managed Realignment Outline Draft Report by Mark Dixon for RSPB (Dixon, December 2014)

Managed Realignment and Habitat Creation Chivenor Grazing Marsh Feasibility Study (Hyder, 2012, for Natural England)

Taw Torridge Flood and Coastal Risk Management Study Technical Summary Report (Environment Agency)

High resolution drone flight mapping (in production)

Lidar data available from Defra's data services platform (more up to date Lidar data may become available during the contract).