Our Ref: HEMforWCDP
Your Ref:

Date: 25th October 2019

Dear Sir / Madam,

Contract Ref: HEMforWCDP
Contract Title: Hydroecology Modelling Tool (HEM) development to inform environmental assessment in water company drought planning.

You are invited to quote for the above in accordance with the enclosed documents.

Instructions on what information we require you to provide is in Section 4 of the following Request for Quotation document.

Your response should be returned to the following email address by Monday 18th November at 17:00 hours.

jo.dennis@environment-agency.gov.uk

Please confirm by email whether you intend to submit a quote.

If you have any queries, please do not hesitate to contact me.

Yours sincerely

Jo Dennis
Advisor, National Hydroecology Team

E-mail: jo.dennis@environment-agency.gov.uk
Telephone: 02030 252 740

The Environment Agency, Horizon House, Deanery Road, Bristol, BS1 5AH

Request for Quotation

Ref: HEMforWCDP

Title: Hydroecology Modelling Tool (HEM) development to inform environmental assessment in water company drought planning.

Section 1

Who is the Environment Agency?
We are an Executive Non-departmental Public Body responsible to the Secretary of State for Environment, Food and Rural Affairs. Our principal aims are to protect and improve the environment, and to promote sustainable development.

Further information on our responsibilities, Corporate Plan and how we are structured can be found on our Website.

https://www.gov.uk/government/organisations/environment-agency/about

What do we spend our money on?
We are a major procurer of goods and services within the UK, spending circa £600M per annum, our major spend areas are:

- Flood and Coastal Risk Management (design, construction and maintenance)
- ICT and Telecommunications
- Vehicles and Plant
- Environmental Consultancy and Monitoring
- Temporary Staff and Contractors
- Facilities Management, Energy and Utilities
- Flood Management and Water Related Services

What do we need from our suppliers?
Suppliers are vital in supporting the delivery of our corporate plan. We aim to support the economy and society whilst delivering more environmental outcomes for every pound we spend. In many areas we are leading the way on environmental and technical developments. It is our role to ensure that suppliers clearly understand our corporate aims and objectives and know that we are committed to delivering the best value most sustainable solutions, taking into account the whole life cost of our procurement decisions. We promote diversity and equality and treat all of our suppliers fairly.

Our procurement strategy may be of interest to you as a potential supplier. It sets out our priorities and key commitments in a range of areas such as delivering our corporate plan, Government policy, supplier management and sustainable procurement:

https://www.gov.uk/government/organisations/environment-agency/about/procurement#procurement-strategy

Government changes and collaboration
On 28 January 2016 Defra launched the first single strategy for the whole of Defra. It provides the framework across the Defra group for how we design and deliver our goals and track delivery and measure success. At the heart of the strategy is also the first single vision for the Defra group: 'creating a great place for living'.
For further information on the 'creating a great place for living: Defra's strategy to 2020', please visit:
https://www.gov.uk/government/publications/defras-strategy-to-2020-creating-a-great-place-for-living

By bidding for this requirement, you may also be approached by other members of Defra Group Commercial, the Defra network or other public sector organisations that are specifically named in the tender document.

Further information

For further information and to see our commitments to Diversity and Equality, please visit our website.

https://www.gov.uk/government/organisations/environment-agency/about/procurement
https://www.gov.uk/government/organisations/environment-agency/about/equality-and-diversity

Also, are you up to date on environmental legislation? See links below for further information.

Waste and Environmental Impact - https://www.gov.uk/browse/business/waste-environment
Environmental Regulations - https://www.gov.uk/browse/business/waste-environment/environmental-regulations'

Section 2

The Customer

Summary

Water companies are required to monitor, assess and, where possible, mitigate for the environmental impact of their supply side drought management actions. This includes setting out environmental assessment, monitoring plans and mitigation measures as part of the drought planning process.

In our role as statutory consultees and advisors to Government on water company drought plans (WCDPs) we have identified that completing environmental assessment to understand the impact of supply side drought management actions (including drought permits/orders) is a significant challenge for many water companies.

Some of the key challenges include:

- limited time series of baseline environmental datasets to enable understanding of the environment under 'non-drought' and previous drought conditions
- assessing the sensitivity of the environment to flow changes due to supply side drought management actions
- predicting the likely effect on the environment of flow changes due to supply side drought management actions
- ascribing a level of confidence/certainty

Developing improved hydroecological modelling tools is essential in helping water companies to address these challenges and thus improve environmental assessment in the drought planning process.

This project will develop/refine an existing Environment Agency prototype tool (DRIED-UP) into a Hydroecological Modelling (HEM) tool for water companies to use to help inform their environmental assessments in the next round of statutory drought plans.

The key functionality that will be developed as part of this project is:

1) quantifying ecological (macro-invertebrate) sensitivity to flow alteration (due to supply side drought management actions)
2) understanding uncertainty associated with the environmental assessment/modelling results

3) allowing predictions of ecological (macro-invertebrate) response to alternative flow alteration scenarios due to implementation of different supply side drought management actions.

We expect that the development/refinement of this tool through this project will result in improved functionality and usability through development of options/features and improved graphical displays.

Delivery of this hydroecological modelling tool will help water companies improve their environmental assessments whilst also having the potential to allow them to use their results to better inform choices around their drought management options.

Contract Length

It is anticipated that this contract will be awarded to one supplier for a period of 4 months, to end no later than 31/03/2020 (extension beyond this date not possible). Prices will remain fixed for the duration of the contract award period. Any change to the scope during the contract will be subject to negotiation and agreement in writing between the Project Board and supplier.

The Environment Agency Conditions of Contract for Services (Appendix C) shall apply to this contract.

This contract shall be managed on behalf of the Agency by **Jo Dennis, Advisor – National Hydroecology Team; Tel: 02030 252 740; Email: jo.dennis@environment-agency.gov.uk**

Contact Details and Timeline

Jo Dennis (contact details given above) will be your contact for any questions linked to the content of the quote pack or the process. Please indicate by email at the earliest opportunity if you intend to submit a quotation. Submit any questions by email and note that both the question and the response will be circulated to all tenderers.

We can provide (upon request) a web link to the current model and an example dataset to run if required to help inform and support your tender response.

Key elements of the process have been reviewed. Anticipated dates for planned activities are below:

Activity	**Due Date**
Supplier responses for Request for Quote	18/11/19 by 17:00 hrs
Evaluation of Request for Quote submissions	22/11/19
Award of contract	w/c 25/11/19
Start up meeting	w/c 02/12/19
Project/Contract end date	31/03/20

It should be noted that these timescales and activities may be subject to change.

Section 3

Evaluation Criteria

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

- Price – 60%
- Quality – 40%

Quality

The following quality criteria are weighted in accordance with the importance and relevance attached to each one.

Key Quality Criteria	Weighting	Description
Methodology & Approach	30	Please outline your proposed method and approach to delivering the project
Staff experience	30	Please explain the suitability of staff that will be involved in delivering the project, in particular knowledge, experience and creativity/innovation with R programming and shiny app design and understanding of hydroecology. Please provide pen portraits (up to 1 page per person).
Programme of work	15	Please provide an outline programme of work, indicating key task and milestone delivery
Managing projects successfully	15	Please indicate experience and success in managing bespoke, small-scale model development projects of a similar nature
Measurement of success	10	Please indicate how you will measure the success of project delivery

Price

Suppliers are required to complete a Pricing Schedule (Appendix A) using the same format included in this tender pack. Failure to do this may result in your tender submission being deemed non-compliant.

The criteria listed above will be assessed on a 0 to 10 basis and will reflect the following judgements:

Rating of Response **The tenderer provides a response which in the opinion of the evaluators is:**	**Score**
Excellent: Addresses all of the requirements and provides a response with relevant supporting information which does not contain any weaknesses, giving the Agency complete confidence that the requirements will be met.	10
Very Good: Addresses all of the requirements and provides a response with relevant supporting information, which contains very minor weaknesses, giving the Agency high confidence that the requirements will be met.	8
Good: Addresses all of the requirements and provides a response with relevant supporting information, which contains minor weaknesses, giving the Agency reasonable confidence that the requirements will be met.	6
Satisfactory: Substantially addresses the requirements and provides a response with relevant supporting information which may contain moderate weaknesses, but gives the Agency some confidence that the requirements will be met.	4
Weak: Partially addresses the requirements, or provides supporting information that is of limited relevance or contains significant weaknesses, and therefore gives the Agency low confidence that the requirements will be met.	2
Nil: No response or provides a response that gives the Agency no confidence that the requirements will be met.	0

Section 4

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 Pricing Schedule (Appendix A)
- completed Prior Rights Schedule (Appendix B)
- confirmation that terms and conditions are accepted (Appendix C. Please note that the terms cannot be amended later)
- brief details / pen portrait of the personnel you are proposing to carry out the service (1 page max per person)
- details of how you propose to maintain continuity of personnel throughout the project delivery
- details of proposed methodology and timescales for activity delivery
- details of how you measure your success in each of the deliverables
- detail your recent experience of carrying out similar contracts

Section 5

Specification

1. Background to the Requirement

The current EA DRIED-UP tool was developed in 2016/17 and so far has had limited internal release within the Environment Agency. It is written in R with a web-based user interface developed with the shiny app package which is connected to two underlying hydro-ecological models.

The two models are:

1. **Single-site:** for application where sufficient time series of ecological data are available – using only the data for the site of interest and applies a multiple linear regression model
2. **Standard model:** data for the site of interest is combined with the curated EA DRIED-UP 3 multi-site dataset and the enlarged dataset re-fitted to a multiple linear or additive mixed-effects model (LMM or GAMM). Predicted responses are then made for the site of interest as part of the multi-site model, enabling the site to borrow strength from the dataset as a whole

Each model essentially applies the same input (time series data of daily mean river flow and macro-invertebrate LIFE scores). The hydrological data are then processed and merged with ecological data and additional site characteristics, then passed to the models and an output (mainly graphical) is produced. Data is uploaded to the tool from a standard EA HEV (Hydroecological validation) excel-based spreadsheet.

Either model may in principle be used to:

- Describe the relative sensitivity of macro-invertebrate LIFE score to antecedent low flow, including the uncertainty in this relationship
- Predict historical macro-invertebrate LIFE score both on dates (season-years) with existing data and for season/years without data, e.g. to produce a synthetic (gap-filled) baseline, including uncertainty (confidence intervals)
- Predict macro-invertebrate LIFE score under an alternative hydrological scenario. This functionality is currently limited to creating the scenario as a proportion that is greater or less than the historical flow series
- The standard model additionally includes as an explanatory variable the River Habitat Survey Resectioned Bed and Bank sub-score

The current version of the tool performs core data import, data processing and modelling tasks and provides some graphical output. However, its functionality in terms of output is relatively limited (see Appendix D for tool background information and screenshot examples of current outputs and visuals).

The key aim of this project is to develop and refine the DRIED-UP tool into a new HEM tool in preparation for roll out primarily for use by water companies to inform environmental assessment in the next round of statutory drought plans. The key contractor tasks will therefore involve the development and testing of the tool to evolve it to a point where its data import capability has been refined and the outputs and user interface functionality has been improved. This will then enable the EA to complete a subsequent, separate project on user testing with water companies and their consultants.

The EA will organise and manage the subsequent, separate user testing project before making final refinements to the tool and considering its release for use in the drought planning process.

2. Specific Objectives/Deliverables

Some of the planning and data provision will be done within the EA, the remainder, comprising the tool development project, will be delivered by the contractor as outlined below:

a) Development work and support to be undertaken by the EA:

1. Agree what and how additional data (environmental base data, flow scenario data) are to be provided to the revised tool (these data are not currently imported into the existing DRIED-UP tool). Agree how / whether to change the way that RHS data are entered into the model
2. Assemble and provide datasets and model specifications for three alternative formulations of the standard model (we will provide a full briefing to the successful contractor on how the models work upon project start-up):
    a. Existing linear mixed effects model in tool with DRIED-UP 3 dataset
    b. New DRIED-UP 5 dataset and generalised additive model created in 2018
    c. Linear mixed effects model based solely on national drought monitoring network data (this is simply a subset of the DRIED-UP 5 dataset)
3. Assemble and provide environmental base data for all the sites in the above standard models
4. Decision on and establishment of hosting platform for
    a. the subsequent, separate user testing project
    b. final release of the model (fall-back position is to circulate for user testing as a R scripts)
5. Acquire case study data from water companies to help develop and test the model
6. Write user manual and guidance for tool use
7. Making the final decision whether the tool is suitable for release

We anticipate items 1 to 3 will be completed prior to contract start. Remaining development work for items 4 and 5 will be done alongside the contract delivery. Items 6 and 7 will be delivered by the EA after tool development project completion.

b) Tool development work to be undertaken by the successful contractor:

1. Update data import procedures to allow for the import of the additional data not currently imported by the tool (environmental base data, river habitat survey data and flow scenario data) – EA to specify input file format
2. Revise and improve all graphical and numerical presentation of data to provide high-quality visuals which are consistent across the site-specific and standard models, including making graphics interactive where possible:
    a. Improve graphical model diagnostics, including assessment of ecological sensitivity to low flow and associated uncertainty. Provide the same diagnostics for standard and site-specific model
    b. Improve model prediction graphics (historical and scenario), including where possible uncertainty assessment

    c. Currently the diagnostic visuals for the site-specific model are derived from two separate models (spring and autumn), this needs to be updated so that the diagnostic visual comes from a single 2 season model (as is used for the time-series predictions)
    d. Add ability to switch on and off selected graphical elements
3. Implement the following:
    a. Add year onto correlation plot
    b. Add an option (tick box to make y-axis scales identical for model diagnostic plots)
    c. Ensure all plots have correct legends
    d. Fix bug in data:HEV tab - biology data not plotted if flows are missing
    e. In the interface:
        i. provide a progress bar for lmer model fitting
        ii. a reset button for all sliders
        iii. Implement a re-calculate button to avoid lag when dragging several sliders
4. Incorporate functionality to be able to choose one of three alternate standard (mixed-effects) models each using LIFE observed / expected ratio as the response variable:
    a. existing DRIED-UP 3 model
    b. revised DRIED-UP 5 model
    c. model only based on national drought monitoring sites, this is a subset of the sites in the DRIED-UP 5 model
5. Implement a new tab with a visual assessment of the distribution / normality of the explanatory flow variables – comparing the years for which ecological data are available, with all years in the record
6. Develop functionality of the interface to select limited alternate combinations of predictor variables – to facilitate tool evaluation
7. Derive an algorithm (with associated visualisation) to measure site suitability for the standard model by comparing site environmental characteristics (RICT base data) of the new site of interest with those built into the standard models and implement this in the tool. For example, this could be by undertaking principal components analysis on the base data and producing an ordination plot with the new site of interest highlighted
8. Incorporate the functionality to import an alternative flow scenario and to use the selected model to make predictions for that scenario
9. Tidy and simplify the existing tool code throughout, ensuring all code uses up to date programming practices
10. Document all major changes and choices made to the model and provide sufficient information to support the production of user guidance (by the EA) that will facilitate the subsequent, separate user testing project, as well as support future use, data updates and maintenance of the model. Ensure effective handover of all deliverables.

We anticipate this work will take 4 months to complete and it will be undertaken in close collaboration with the EA Project Manager and the Technical Lead.

Upon satisfactory completion of this tool development project, the contract will be closed. Following the end of this project, the EA will then work with water companies to carry out user testing as a separate, follow on project delivered internally.

Notes:

- We expect that the tool will be developed by the contractor to a suitable point that means there will be minimal requirement for further refinement of the tool after the subsequent, separate user testing project and that these final improvements can be made by EA technical staff (tender respondees are not expected to include costs for post-user testing project amendments to the model).
- The EA will be carrying out a separate, follow on project after the completion of this project to carry out user testing with water companies.
- Whilst the main tasks listed above are well defined, there is scope and opportunity for the contractor to make further suggestions and innovations within the remit of the project.

- We have provided a series of slides as a pdf within the tender pack to give some background information about the current EA DRIED-UP models, outlines for some of the development work required and screenshots of the existing user interface set-up.

Out of scope:

- The model development does not include assessment capabilities for fish, algae or macrophyte community data (only aquatic invertebrates).
- The scope does not include any user testing with water companies or operational rollout of the tool – this will be delivered internally in subsequent projects after the completion of this project.

The deliverables for this project are:

1. Revised HEM tool, provided as R code. Document any potential compatibility issues (version of R, packages used) which meets the 3 key high level functionality requirements outlined in Section 2 and detailed task/objectives requirements set out in Section 5.2.
2. A concise report documenting how the tool development was undertaken and any operational changes.
3. Provide all the technical outputs, guidelines and code relevant to running the developed model.
4. Run a technical telecon at the end of the project with EA project staff to ensure full knowledge transfer.

The contractor will be required to keep in close contact with the EA Project Manager (Jo Dennis) on project management matters and participate in fortnightly technical progress telecons with the EA project team.

Performance will be measured on the quality of final deliverables and engagement throughout the delivery of the tool development project.

3. Timescales/Deadlines

A draft project timeline is outlined below in Section 6 below. There is some flexibility with the deadlines associated with each task. **However the overall HEM tool development project must be completed by 31st March 2020 at the latest.**

4. Skills of Personnel Required

To fulfil the project scope the contractor must have:

- Strong project and contract management skills, with experience in delivering bespoke projects on time and to budget
- Technical expertise and extensive experience in developing apps using R and shiny;
- Ability to work collaboratively and share knowledge
- Innovative and creative
- Staff with adequate experience and time to deliver each task and deliverable of the contract

In addition it would be beneficial for the contractor to have:

- Technical expertise and experience of specialist statistical analysis of datasets using mixed-effects models in R
- Technical expertise and experience in hydroecology and/or environmental assessment in drought plans

Section 6

Contract Management

This contract shall be managed on behalf of the Agency by Jo Dennis (Tel: 02030 252 740, Email: jo.dennis@environment-agency.gov.uk).

We will raise a purchase order to cover the cost of the services and will issue the PO number to the awarded supplier following contract award.

We propose that payment is based on milestones relevant to tasks identified in Section 2b and as follows in the table below.

Task no.	Task and deliverable	Completion timeline	Payment schedule
0.1	Project management and progress/ technical telecons (fortnightly)	Throughout	Throughout
0.2	Start-up meeting (either webex or merge with knowledge transfer face to face meeting below)	Early Dec	Payment 1
0.3	Familiarisation with information, understand and confirm development activities (to include face-to-face knowledge transfer meeting with EA technical tool lead)	Early Dec	
1-3	Update import functionality, revise and improve visuals and diagnostics functions	End Dec	Payment 2
4-6	Model selection function, flow variable assessments and interface functionality development	Mid Jan	
7	Site suitability development and implementation	End Jan	Payment 3
8	Flow scenario development	End Feb	
9	Tidy and simplify tool	End Feb	
10	Document changes, choices made and information to support future use, updates and maintenance	End Feb	
	Submit final written record of model development and test run outcomes to EA for review	Mar	Payment 4
	Submit final working HEM tool ready for subsequent, separate user testing project	Mar	
	Technical hand over and project wrap up telecon	End March	

Before the invoice is issued, a fee note must be emailed in advance to the contract manager for approval. All invoices must quote the purchase order number in order to be processed. A file copy invoice must be provided to the contract manager, on request. The timescale for payment of invoices will be up to 30 days after we have received a valid invoice.

Section 7

Sustainability Considerations

We are committed to continually improving our sustainability performance. The Environment Agency has set itself tough objectives as a clear commitment and contribution to sustainable development throughout England. The Agency recognises that this can only be achieved through commitment from all sectors of society and it is intent on raising awareness amongst industry and commerce.

Contractors must adopt a sound proactive environmental approach, designed to minimise harm to the environment.

Environmental criteria should be considered as part of your tender submission with credit given for innovation. Factors to be considered could include areas such as:

- Paper use: All documents and reports prepared by consultants and contractors are produced wherever possible on recycled paper containing at least 100% post consumer waste and printed double sided.

- Travel: use of public transport, reduce face to face meetings by using email and videoconferencing. Meetings to be held in locations to minimise travel and close to public transport links.
- Packaging: should be kept to a minimum. Re-use and disposal issues must be considered.
- Efficient Energy and Water Use.
- Disposal of Waste: Whilst on site the contractor is responsible for the disposal of their own waste and can only use client facilities with express permission from the on site facilities officer.
- Whilst on site, contractors should comply with the local environmental policy statement which will be made available to you in advance or on arrival.

Diversity and Equal Opportunities
We are committed to promoting equality and diversity in all we do and valuing the diversity of our workforce, customers and communities. As a public body, we publish regular information about what our equality objectives are and how we're meeting them.
https://www.gov.uk/government/organisations/environment-agency/about/equality-and-diversity

Health and Safety
Contractors will be responsible for making sure all required health and safety aspects including risk assessments are undertaken and required management measures are in place to protect worker exposure. This includes management of all partners, consortium members and subcontractors.

IEM2020:

Sustainability Objectives

As the Environment Agency, our overarching aim is to protect and improve the environment for people and wildlife. Over the last 10 years we have achieved significant reductions in our environmental impacts that occur through our everyday operations. This included a 40% reduction in our carbon emissions and a 37% reduction in the number of miles we travel. This year we have launched our new Internal Environmental Management strategy to take us through to 2020, building on these successes and widening our ambition.

Supply chain
Our 2020 approach will have a very strong emphasis on the indirect impacts of our supply chain.

Our supply chain accounts for over 70% of our total environmental impacts.

Working with our supply chain we want to be world class in the area of environmental management. The environmental impacts of our work and that delivered by and through our supply chain must be reduced; environmental risks must be effectively managed and opportunities for enhancements investigated.
As an organisation, our environmental management system (EMS) is accredited to ISO14001 and EMAS standards. Our procurement activities form part of this system; driving environmental performance improvements across the value chain.

Section 8

Additional Information

Copyright and confidentiality
Unless otherwise indicated, the copyright in all of the documentation belongs to the Environment Agency, and the documentation is to be returned to us with your tender. The contents of the documentation must be held in confidence by you and not disclosed to any third party other than is strictly necessary for the purposes of submitting your quote. You must also ensure that a similar obligation of confidentiality is placed upon any third party to whom you may need to disclose any of the documentation for the purposes of the tender.

Accuracy of documentation
You should check all documentation; should any part be found to be missing or unclear you should immediately contact us at the address given in the covering letter. No liability will be

accepted by the Environment Agency for any omission or errors in the documentation which could have been identified by you.

Amendments to documentation
Prior to the date for return of tenders, we may clarify, amend or add to the documentation. A copy of each instruction will be issued to every Tenderer and shall form part of the documentation. No amendment shall be made to the documentation unless it is the subject of an instruction. The Tenderer shall promptly acknowledge receipt of such instructions.

Alternative Offers
Alternative offers may be considered if they constitute a fully priced alternative and are submitted in addition to a quotation complying with the requirements of the Invitation to Quote Documents. If, for any reason you wish to submit an alternative offer without a fully compliant tender please contact us in accordance with the details in the covering letter.

Continuity of personnel
The Contractor shall employ sufficient staff to ensure that the Services are provided at all times and in all respects to the Project Standard. It shall be the duty of the Contractor to ensure that a sufficient reserve of staff is available to ensure project delivery in the event of staff holidays, sickness or voluntary absence

The Environment Agency will be notified immediately of any changes to personnel associated with the project. The Contractor will ensure that every effort is made to replace outgoing staff with personnel of equal calibre and expertise. All new members of staff undertaking work for the Project will need to be agreed by the Environment Agency prior to commencement.

At all times, the Contractor shall only employ in the execution and superintendence of the Contract persons who are suitable and appropriately skilled and experienced.

Intellectual property rights
All results, including material and tools produced, developed or paid for under this contract shall be the property of the Environment Agency.

References
The Environment Agency may request recent and relevant references prior to the award of the project.

Contract award
This Request for Quote is issued in good faith but we reserve the right not to award any or all of this work.

DATA PROTECTION ACT ADDENDUM TO SPECIFICATION

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 the personal data in strict accordance with instructions from the Environment Agency.
- 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 Environment Agency 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 the Agency without the consent of the data subject, unless the Agency is required by law to make such disclosures.

These provisions will apply to any person provided by yourselves to do work for us in addition or substitution after the contract has been awarded.

APPENDIX A - PRICING SCHEDULE

ALL COSTS QUOTED MUST BE EXCLUSIVE OF VAT
All costs must be quoted on this schedule. Any costs not detailed will not be paid.

Staff Costs

Task #	Task Description	**Staff Name** (insert rows if required)	Day Rate £	No. Days	Total £
0.1	Project Management				
0.2	Start-up & familiarisation				
0.3	Familiarisation and task agreement				
1	Update data import procedures for additional data				
2	Revise and improve graphical and numerical presentations to provide high-quality visuals consistent across the site-specific and standard models, including making interactive where possible				
3	Implement changes to plots, debug data:HEV tab and interface changes				
4	Incorporate functionality for model selection				
5	New tab for data distribution / normality assessment				
6	Develop functionality of the interface to select limited alternate combinations of predictor variables – to facilitate tool evaluation				
7	Devise and implement algorithm to measure site suitability				
8	Incorporate the functionality to import an alternative flow scenario and to use the selected model to make predictions for that scenario				
9	Tidy and simplify the existing tool code throughout, ensuring all code uses up to date programming practices				
10	Document changes and choices and provide sufficient information to support the production of user guidance (by the EA), as well as support future use, data updates and maintenance of the model. Handover.				
			TOTAL STAFF COSTS	**# Days**	**£**

Other costs
Please state any other costs that will need to be taken into consideration.

DESCRIPTION	**COST (£)**
1. Other costs (please detail)	
2. Other costs (please detail)	
3. Other costs (please detail)	
TOTAL	

Discounts, rebates and reductions
Please detail below any discounts, rebates and other reductions you are prepared to offer and the basis of those incentives.

DESCRIPTION	**AMOUNT (£)**
TOTAL	

Total Overall Cost
Please detail the total fixed cost for the project.

ITEM	**TOTAL AMOUNT (£)**
Staff Costs	
Other Costs	
Discounts/reductions	
TOTAL Overall Cost	

The following limits will be applicable to all claims for travel and subsistence under this contract:

a. Travel by rail: standard class should be used at all times
b. Travel by car: 45 pence/mile

Hotel bookings should be made through the Environment Agency's corporate travel contract. Details of this contract are available from the Corporate Contracting Team.

When making reservations you should state that you are a contractor working on Environment Agency business.

Hotel charges must not exceed a maximum limit per night bed and breakfast (VAT included) of: £140 in London; £100 in Bristol; £90 in Warrington; £85 in Reading; £75 in Aberdeen, Birmingham, Belfast, Cardiff, Coventry, Edinburgh, Glasgow, Harlow, Leeds, Manchester, Middlesbrough, Newcastle, Oxford, Portsmouth, Sheffield and York; and £70 in all other destinations. Please note that these hotel ceiling rates are subject to change throughout the life of the contract.

Expenditure on dinner during an overnight stay must not exceed a maximum limit of £25, including a drink.

Receipts for all rail travel, hotel and food expenses will be required as proof of expenditure and will be reimbursed at cost. No profit or additional cost shall be applied by the contractor to such personal expenses.

APPENDIX B - PRIOR RIGHTS SCHEDULE

Details of Prior Rights held by the Parties (To be updated as Rights are introduced during the period of the Contract)

Prior Rights owned or lawfully used by a Party, whether under licence or otherwise, which it introduces to the Project for the purposes of fulfilling its obligations under the Contract.

Held by the Environment Agency

Name and description of Prior Rights	Extent of proposed use in the Project	Proprietary owner of the Prior Rights
Existing tool code	Full use and will be further developed	Environment Agency
DRIED-UP 5 data & model (in R code) (2 versions - full and NDMN only)	Full use and will be further developed	Environment Agency
DRIED-UP 3 data and model (in R code)	Full use and will be further developed	Environment Agency
Model specification documentation	Full use and will be further developed	Environment Agency
River Habitat Survey data	For incorporation into model assessments	Environment Agency
Environmental base data	For incorporation into model assessments	Environment Agency
HEV spreadsheets for example sites	For incorporation into model assessments	Environment Agency
Additional data for example sites	For incorporation into model assessments	Environment Agency
Flow scenario data	For incorporation into model assessments	Environment Agency

Held by the Contractor

Name and description of Prior Rights	Extent of proposed use in the Project	Proprietary owner of the Prior Rights

Note: A separate full prior rights schedule will include all items listed above and be updated throughout the project to ensure all information, use and sources / ownership / rights are registered.

Explanation of Contractor's Prior Rights
All Intellectual Property Rights owned by or lawfully used by the Contractor, whether under licence or otherwise before the date of this Contract. It can also mean any invention and know how or other intellectual property (whether or not patentable) owned by one of the parties prior to the commencement of the Project, or devised or discovered by one of them only in the course of other projects during the Project period and not arising directly from the Project.

APPENDIX C – ACCEPTANCE OF TERMS AND CONDITIONS

I/We accept in full the terms and conditions named in Section 2 and appended to this Request for Quote document.

Company Name _____

Signature _____

Print Name _____

Position _____

Date _____