

Summary

Position: Consultant/Senior Consultant Hydrologist

Location: Wallingford

Term: Permanent

We have a fantastic opportunity for an ambitious and collaborative individual to develop and progress their career as a hydrological modeller within our Wallingford office. WHS is a small business and your contribution to the team is valued and recognised – our staff are our most important asset. All members of our team have opportunities for personal development on competitive salaries and wider benefits, with additional tax-free bonus linked to profit share. We provide a wide range of services focussing on the water environment, and our software tools implement national design standards to provide real-world solutions to the challenges of the seasonal behaviour of rivers, flood mitigation, and climate change.

Working in our software development team you will play a key role in the development of our hydrological modelling tools and software. The role will initially focus on further development of our Flood Estimation Handbook (FEH) flood modelling software products ReFH2¹ and WINFAP5² but will also encompass Qube³, our online water resource modelling platform. The FEH software provide national design standard methods for flood estimation and are an integral part of our mission to provide cost effective, sustainable, tools and methods for application throughout the UK. The continued development of methods, in collaboration with the FEH team at UK Centre for Ecology and Hydrology (UKCEH), plays a valuable role in improving our understanding and modelling of flooding within the UK as we move towards an uncertain climatically challenging future.

The successful candidate will have a good first degree (upper second or higher) in a numerate discipline. A relevant postgraduate qualification would be advantageous but is not essential. You will have experience in coding in Python and/or R and a keen interest in hydrology. Experience in the FEH methods is desirable but not essential. The role is at the Consultant or Senior Consultant level depending on skills and experience.

Although the position will ideally be based in our Wallingford office, we will also consider remote working arrangements. The indicative pay band for this role is between £27,000 and £41,000, plus benefits that include 5% matched pension contributions, generous 40.5 day leave entitlement and tax-free bonus entitlement. **Please email your CV and covering letter directly to jobs@hydrosolutions.co.uk by 6th December 2024.**

¹ <https://www.hydrosolutions.co.uk/software/refh-2/>

² <https://www.hydrosolutions.co.uk/software/winfap-5/>

³ <https://www.hydrosolutions.co.uk/software/qube/>

Technical Objectives

This is a multi-faceted role that will develop your skills in a number of areas, ranging from hydrological modelling to supporting implementation within our commercial software. Your initial role will focus on the further development and application of FEH methods, as part of which you will further develop your Python or R coding skills, as well as communication skills through liaison with regulators and users.

In your first year you will:

- Develop your understanding and experience of our hydrological and statistical models, primarily in our FEH flood modelling software suite: ReFH2 and WINFAP5, but also relating to our river flow estimation tool: Qube, and rainfall runoff model: CERF.
- Support our hydrological science development programme through scientific research and the subsequent implementation in our commercial software, for example through user interface design and testing.
- Develop Python and R scripts to support our research and commercial software development. You will be provided with training where required to develop coding skills relevant to commercial software, such as object orientation and unit testing.
- Identify improvements to our software through liaison with customers, interfacing with the consultancy side of the business and application on real world problems.
- Use GIS tools to manipulate modelling datasets.
- Produce well-reasoned and concise technical reports.
- Through our association with the UKCEH, work with leading scientists in their fields to contribute to the further development of models and methods deployed in our FEH software products.
- Manage your training to a personal development plan, agreed with your line manager, including achieving some initial competencies required for a professional membership, for example, chartership under CIWEM. This will include a mix of external and on-the-job training.
- Build upon your knowledge of the regulatory framework that controls activity around the water environment and ensure compliance with relevant regulatory processes.

Additional Opportunities

Depending on your level of experience, or moving on from year 1, you will have the opportunity to take on increased responsibility, for example:

- Contributing to the formulation of the science and commercial development strategy of our software products.
- Identifying opportunities to develop our technical/software capability and diversify our services and products.
- Acting as Project Manager on research and development projects.
- Contributing to client proposals under guidance from senior members of the team.
- Implementing aspects of the tactical marketing plan.

About WHS

Wallingford HydroSolutions (WHS) is an employee-owned water and environmental consultancy, established by the Natural Environment Research Council in 2004. We are well known throughout the UK as the developer of the FEH and Qube (formally LowFlows) software. Our hydrological expertise and software product development is focused in our Wallingford office, whilst our consultancy work across the UK is primarily delivered through our Cardiff office.

We offer the following benefits:

- As a small, employee-owned business we provide a personable and dynamic work environment that rewards achievement and provides opportunity to work across other specialisms.
- WHS has a generous 40.5 day holiday allowance. Staff may trade in up to 10 days annual leave for increased salary or purchase up to 10 days of additional annual leave.
- Staff are encouraged to take an annual 'Environment Day' to support environmental or educational volunteering projects.
- We hold annual staff events days: in the last few years we have thrown axes, shot arrows and used team work to solve puzzles in escape rooms.
- We operate a flexible working hours system.
- We have structured pay scales, and formal criteria for being promoted between grades. Thus the potential for career progression is clear for all staff.
- As an employee-owned trust, we provide tax-free profit share bonuses to all staff and operate a separate performance-related bonus scheme. Distribution of bonus is dependent on achieving a minimum profit level.
- We offer a contributory company pension scheme, with employer matched contributions of up to 5% of salary. This increases by 1% each year following 5 years' service, to a maximum of 10%.
- We are part of the Cycle to Work scheme.
- We provide a Medicash health plan offering a wide variety of benefits including cashback on your everyday healthcare treatments, checks and therapies, access to a virtual GP and face to face counselling.
- As a small company, there is significant opportunity for employees to improve the business, be that through systems improvement or identifying new work opportunities. Equally, there is high visibility to the WHS senior management team of the contributions made by employees, which are appropriately rewarded through profit sharing and career progression opportunities.
- We have a formal appraisal system matched by personal development plans and each member of staff has access to 5 days every year for targeted training and professional development.
- We provide financial support for our staff in gaining professional membership of the appropriate body.
- Our Wallingford office is a Grade II listed building located in a leafy and tranquil business park on the banks of the Thames in South Oxfordshire, with an on-site restaurant, decent coffee, and excellent transport links to Oxford and Reading. On-site sports facilities include table-tennis, tennis, and canoeing, while the nearby Chilterns are criss-crossed with walking and cycling trails.
- Through our affiliation with the UK Centre for Ecology and Hydrology there is the direct opportunity to interact with leading scientists within their fields and to contribute to the further development of models and methods deployed within our software products.
- A good IT infrastructure is essential to our operations as project teams commonly operate out of several offices. We have shared computing infrastructure across all offices and access to cloud-based computing where required. We reserve a computing budget for each staff member to ensure that all staff have access to the latest modelling and software tools required for their work.