Data Analyst Apprentice (Level 4), Hydrologist

Candidate Information Pack







**Job title: Data Analyst Apprentice (Level 4), Hydrologist**

**Job location: Lincoln, Peterborough, Kettering**

**Date: 01 October 2021**

**Reference: 19659**

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1. Our organisation

**Our organisation**

We are the Environment Agency. We protect and improve the environment. Acting to reduce the impacts of a changing climate on people and wildlife is at the heart of everything we do. We reduce the risks to people, properties and businesses from flooding and coastal erosion. We protect and improve the quality of water, making sure there is enough for people, businesses, agriculture and the environment. Our work helps to ensure people can enjoy the water environment through angling and navigation. We look after land quality, promote sustainable land management and help protect and enhance wildlife habitats. And we work closely with businesses to help them comply with environmental regulations. We can’t do this alone. We work with government, local councils, businesses, civil society groups and communities to make our environment a better place for people and wildlife.

Of course, none of this will be possible without the professionalism and dedication of our staff – our most important asset. We are committed to being an organisation where people can be themselves at work and where everyone’s wellbeing is nurtured and championed. We aspire to be the best employer in the country for equality, diversity and inclusion (EDI) and want all our staff to feel valued and respected and to see this as a great place to work. From our EDI executive champions to our EDI employee networks, everyone has a part to play to embed equality, diversity and inclusion in our organisation. We are committed to valuing the diversity of our workforce, customers and communities. Diversity: it’s in our nature.

We are committed to helping our people to find new ways of working and to maintain our focus on creating a better place for people and wildlife.

We are not a perfect organisation, but we’re on the journey. Come and join us!

For more information on the Environment Agency and what we do, please visit:

[**www.environment-agency.gov.uk/aboutus**](http://www.environment-agency.gov.uk/aboutus)

[Website](http://www.gov.uk/environment-agency) | [Twitter](https://twitter.com/envagency) | [Facebook](https://www.facebook.com/environmentagency) | [LinkedIn](https://www.linkedin.com/company/environment-agency) | [Instagram](https://www.instagram.com/envagency) | [Flickr](https://www.flickr.com/photos/environment-agency) | [YouTube](http://www.youtube.co.uk/user/EnvironmentAgencyTV)



2. Salary and benefits

Join us and you will enjoy multiple benefits (there are more at the end of this pack), including:

**Grade Rate:**  £20,149 per annum (Staff Grade 4)

Your salary will rise to £28,785 on successful completion of the apprenticeship and your employment with us will continue.

**Location:** Preferred base locations: Peterborough, Kettering or Lincoln office.

**Hours of work:**  37 hours FTE, permanent

**Leave entitlement:** Your leave allowance in this role will be 25 days or equivalent, depending on working pattern, plus bank holidays. Your allowance will be pro-rata if you work part time or you are on an assignment to a role at a higher grade that attracts an increased entitlement. Your entitlement depends on your grade, your contracted hours, and your length of continuous service.

We also offer up to two days paid environmental outcome days each year. These give you the opportunity to take part in community activities with a clear environmental outcome for people and wildlife.

**Pension:** We will enrol you into the Environment Agency Pension Fund (EAPF) on commencing employment, if your employment contract is for 3 months or more. The EAPF is part of the Local Government Pension Scheme (LGPS). It is a career average scheme, which means you will build up benefits based on your pay each scheme year rather than your final salary.

We will base your pension contributions on your actual pay and you will receive tax and national insurance relief on your contributions.  The



2. Salary and benefits continued

pension contribution rates currently range between 5.5% to 12.5%.  Whilst you are in the scheme we will also pay an employer contribution into your pension pot. We currently pay 19%, so this is a very generous scheme.

**Work/life balance:** We understand and promote the importance of striking a good balance between your work life and your personal life, and so we support flexible working to help you, as well as offering an excellent Employee Assistance Programme.

As government restrictions continue to lift, Defra group is exploring future ways of working with flexibility in mind. This means, that subject to business need, successful candidates will be offered the option to combine working at home with working at their contractual Defra group workplace, with occasional travel to other work locations. Further information relevant to this post will be available for candidates invited to interview.

**Networks:** We have a wide variety of employee led networks, offering advice and guidance to the organisation, and support and understanding to the needs of our employees.

**Professional development:** We will encourage you to keep developing your skills and knowledge. Alongside the Data Analyst (Level 4) Apprenticeship, there are a wide variety of other learning and development opportunities. We also pay for membership of a professional body, where you can further develop as part of your ongoing professional development.

**Relocation:** If you need to relocate to take up this role, we might be able to offer financial help with this. This will depend on your circumstances, so if it’s something you are interested in, please discuss it with us to find out what the options are.



2. Salary and benefits continued

**Tenancy deposit loan:** Our Tenancy Deposit Loan scheme assists employees directly employed by the Environment Agency in meeting the costs of a deposit for a privately rented home, which can sometimes act as a barrier to moving.

 The scheme gives access to an interest free loan to pay for some or all of a deposit on a privately rented home. The loan can be paid back over a period of up to 12 months, directly from the monthly salary.

3. The role

Our advert describes the day to day activities of the role, the team it operates within and the skills/experience we’re looking for from applicants. This information should be read in conjunction with the job family role profile that we’ve provided.

In the Environment Agency, our roles are grouped by grade and similar characteristics into one of seven job families.   Job families describe the work undertaken in broad terms. This enables us to use generic profiles to broadly describe 80% of the key accountabilities, skills and experience for each job family at each grade.

The role of Hydrologist (Technical Officer) fits into our Technical and Scientific Services job family at Staff Grade 4.

**So what is a Hydrologist?**

Hydrology is the study of water in the environment. Water is one of the most important natural resources and although plentiful, is not always in the right place at the right time or of the right quality.

A hydrologist applies scientific knowledge and mathematical principles to solve water-related problems in society and provide environmental protection. To do this, they use a variety of hydrological data from different parts of the water cycle, such as river flows and levels, groundwater levels and rainfall. A hydrologist analyses this data to work out the best use of water supplies for various purposes, including: for cities or for irrigation; for controlling river flooding or soil erosion; for protecting water quality (such as cleaning up pollution); for planning long-term water storage reservoirs; for flood risk assessments and for flood/drought warnings.

In the Environment Agency, hydrologists typically focus on water resources, which means we are concerned with establishing how much water is available for different users, such as public water supply, agriculture, industry, navigation and the environment.

With the reality of climate change, there is increasing pressure on water resources. In becoming a hydrologist at the Environment Agency, you will play your part in helping us tackle the climate emergency through our long-term goals, namely: a nation resilient to climate change; healthy air, land and water; green growth and a sustainable future.



3. The role continued

Your responsibilities will be varied and always rewarding.

They include:

* managing water resources in drought incidents;
* producing weekly and monthly water situation reports;
* managing water transfer schemes, including making decisions on whether to transfer water and for how long;
* using river flow and groundwater data from multiple hydrometric stations to assess how much water is available to end users in different catchments;
* modelling and forecasting river flows;
* quality assuring river flow data, ensuring it is fit for purpose;
* responding to consultations on abstraction licence and hydropower scheme applications.

Key to all this is building relationships with our customers and partners – within the Environment Agency and outside in society - who are affected by how water resources are managed in this part of England.

To provide you with the skills to do this, as well as learning ‘on-the-job’ in the workplace, you will do the Data Analyst (Level 4) Apprenticeship, which will take approximately 15 months to complete

from its start date.

You will be supported along the way by your line manager and a Talent Coach assigned to you by our Training Provider. You will be given 20% of your time as ‘skills development training’ to complete the qualification. This includes all teaching, learning and assessments, which are currently delivered remotely, although face to face workshops may be reintroduced at some time in the future. You’ll be responsible for completing coursework on time, maintaining up to date evidence for your assessments and putting into practice what you’re learning.



3. The role continued

**Data Analyst (Level 4) Apprenticeship**

A Data Analyst collects, organises and studies data to provide business insight. They are typically involved with managing, cleansing, abstracting and aggregating data, and conducting a range of analytical studies on that data.

Through this apprenticeship, you will gain a good understanding of data structures, database systems and procedures and the range of analytical tools used to undertake a range of different types of analysis.

Successfully completing this apprenticeship is the academic equivalent of a foundation degree, a Higher National Certificate or the first year of an undergraduate degree.

During the formal elements of the apprenticeship and the training you receive ‘on the job’ you will learn how to:

* Identify, collect and migrate data to/from a range of internal and external systems
* Apply the Environment Agency’s data and information security standards, policies and procedures to data management activities
* Perform database queries across multiple tables to extract data for analysis. Using business administration systems
* Use a range of analytical techniques such as data mining, time series forecasting and modelling techniques to identify and predict trends and patterns in data
* Perform data quality assurance
* Summarise, present and make recommendations from the results of data analysis
* Clearly define customer requirements for data analysis
* Develop skills in logical and creative thinking

In parallel with this you will be capturing evidence of how you are applying your new skills in the context of being a Hydrologist, for your ‘Evidence Portfolio’. This portfolio, project work and a technical interview form part of the part of the independent ‘End Point Assessment’ at the end of the apprenticeship.

Full details of the Apprenticeship Standard can be found here:

<https://www.instituteforapprenticeships.org/apprenticeship-standards/data-analyst-v1-1>



3. The role continued

To bring role of Hydrologist to life a little more, here are the experiences of two current staff members:

**Leonor Cortes**

“I joined the Environment Agency in the Hydrology & Operations team in 2013 as a Hydrologist (Technical Officer) and after gaining job experience I progressed to Technical Specialist in the team. Working for the Environment Agency has given me the opportunity to work in many topics related to water resources, data management and environmental protection, thanks to the diverse work that our team does.

The hydrology work in our team is very varied, as we provide services to many parts of the business within the EA and also external stakeholders. This includes monitoring and reporting on water resources in the area, including support to the drought team. Other important areas of work in our team are the operation of transfers between sources to support water supply and operation of support schemes to sustain low flows in certain rivers, done according to the licence conditions and environmental needs.

Our team also provides hydrology expertise and concepts in assessing the licence applications of the areas, which include fish passes, hydropower, abstractions and discharges, to the National Permitting team and we also provide support to the investigations to fulfil the Water Framework Directive objectives in the area, providing hydrology support information, and designing monitoring requirements; work that has been for me very satisfying, as we are helping to improve and protect the environment in these affected rivers.

The list of hydrological activities continues, but very briefly I can mention, we contribute to the Catchment Abstraction Management Strategies in the area, maintain and operate rainfall-runoff models for key sites in the area, flow-data quality assurance, manage, update and use hydrological tools and data sets, and support River Basement Management Planning, among others.

The Environment Agency is a great place to work, the people are friendly and passionate about what they do. There are many opportunities for personal development and training, which is an important aspect of our role and one of the most rewarding aspects of my role is providing coaching and mentoring support to other officers, to enable them to develop their technical ability and really fulfil their potential.”



3. The role continued

**Rebekah Morris**

“As a Technical Officer in Hydrology and Operations I have a varied role that also changes with seasonal requirements. I am responsible for collating and writing water situation reports, responding to data requests and working alongside other teams to monitor and manage water resources including consultations on licensing. Through the summer months I coordinate the day-to-day operation of groundwater support schemes and help to manage water resources availability in areas of high demand. There are always longer term projects on the go to get involved in too and experienced colleagues to help you train and learn new skills on the job.

The Environment Agency is a really supportive environment to work in, and from the application process onwards it’s been a positive experience where you very quickly become part of a team – no matter what your previous experience has been. There’s a great combination of independence and teamwork, and you are encouraged to pursue your own professional development alongside, and as part of, your day job. I’ve been fortunate to have the option to return to work part-time after taking maternity leave – the flexibility and real emphasis on wellbeing, combined with a diverse and suitably challenging work means it does feel like a job I don’t want to let go! “

4. Further Information

The Environment Agency values a diverse workforce and welcomes applications from all sections of the community who wish to join a workforce which embraces difference and welcomes everyone.

We are determined to create and maintain a diverse workforce (including our Board and Executives) that better reflects the UK’s economically active population. Therefore, we particularly welcome applications from Black, Asian and Minority Ethnic (BAME), disabled, female and LGBT+ candidates who are under-represented across our workforce.

We will consider flexible working patterns for all our vacancies, including job share, so please include clearly any information regarding your preferred working arrangements on your application. Whilst this role is mostly office based, there will be occasional need to go to other locations for meetings or site visits. Our flexible working arrangements can also allow for some working from home.

Application and interview questions are mostly competency based. Competencies are certain qualities which are important for this role. Competency (or capability) based questions are where we are looking for you explain an example (or examples) where you have demonstrated the particular competency. Your answers to competency based questions at application will decide interview selection. There is more information on this in section 5.

**The interview assessment will be done via Microsoft Teams and is likely to take place during November 2021.**

For further information, contact Jon Lampard at jon.lampard@environment-agency.gov.uk

4. Further Information continued

**Eligibility to apply and continuity of employment**

To be eligible for this apprenticeship, you:

* have been a UK resident for 3 years or longer;
* are 16 years or above (no upper age limit);
* must provide proof of attainment of Maths & English at Level 2 (equivalent to Grades A-C at GCSE);
* have two A levels, one of which is in Maths or ICT (or similar);
* do not hold a similar level, or higher level qualification unless that qualification is in a significantly different subject area.

Employment agency workers and contractors are considered to be external candidates and should therefore only apply for positions that are being advertised externally. They are also not eligible to claim continuity of employment should they be successful in securing a position with the Environment Agency.

If you have been a member of a Regional Flood and Coastal Committee in the last 12 months we will not be able to continue with your application based on agreed appointment rules related to employing ex-RFCC members. We would welcome an application from you once the 12 month period have passed.

For applicants who currently work in local government or other bodies listed in the Redundancy Payments (Continuity of Employment in Local Government etc.) (Modification) Order 1999, you may be eligible for continuous service for the purpose of calculating any future redundancy payment. In addition, if you can demonstrate that you have worked at the Environment Agency immediately before joining the Civil Service and are now being re-employed by the Environment Agency within a period of three years of leaving, you may also count your Civil Service employment for the purpose of calculating your service related entitlements as outlined above. If you are unsure of your status then you should contact your own HR Team.



4. Further Information continued

**Pre-employment Checks**

We apply the Baseline Personnel Security Standard (BPSS) check when recruiting staff to our posts. This includes a basic criminal records check.

For the great majority of roles in the Environment Agency this will be sufficient and only certain roles will require a higher level of clearance. Should this be necessary, you will be advised of this during the recruitment process.

Positions based at our London office or roles that require frequent travel to London require CTC level security clearance. This will be confirmed to you during the recruitment process.

**Want to find out more?**

To find out more about what it’s like to work at the Environment Agency, please visit: <https://www.gov.uk/government/organisations/environment-agency/about/recruitment>









5. How to apply

We use an online recruitment system. To make the application process simple and straightforward, and so that you know how it works and what we need from you, we’ve put together a few hints and tips. Make sure you have all the information you need about the vacancy. For some jobs, you’ll be asked to download a candidate pack, like this one, where you’ll find specific application instructions.

The first thing you need to do is sign up to our recruitment system. You will need a valid e-mail address to log in and apply for opportunities, as all communication from us will be via e-mail. You can do this via the vacancy you are interested in by selecting **‘Apply’** at the bottom of the advert.

Once you’ve clicked this link you’ll then be asked:

* Do you have the right to live and work in the UK?
* Do you have the required qualifications or equivalent experience, which were stated in the job advert?
* Are you currently an employee of this organisation?

Simply answer yes or no and you can carry on with your application. You’ll then see the **‘Register’** page. Simply complete the details and select **‘Submit Registration’** and register to the system. You only need to sign up to the system once; you’ll just be able to login next time.

When it comes to the actual application, you need to fill out each section, please be aware that the system will automatically time out if you are inactive for more than 60 minutes. This will result in any unsaved information being lost so make sure you save what you are doing regularly. Once you’ve finished, your details and information will be saved on the system for any future applications – of course, you can edit your details at any point.



5. How to apply continued

When you apply to the Environment Agency for a job we will ask you to provide your personal data on our application form. We need this information so that we can establish your identity and your right to work in the UK.

You can read our Data Protection Statement on the application process page of our recruitment system.  It is also available for reference on each page of the actual application.

**Competence Questions/Statement**

We’re keen to know what makes you right for the job you’re applying for and why we should ask you in for an interview. The competence questions/statements are your chance to convince us!

You should demonstrate how your skills, qualities and experience meet the requirements of the job (as described in the job advert and candidate pack). And instead of simply telling us, show us: use real life examples of where you’ve used a certain skill or how you’ve practically applied your experience.

There’s a 250 word limit per competence including spaces. It’s a really important part of the selection process so make sure you keep your statement relevant and concise. Think about what we need to know about you and what you’d bring to the role and our organisation.

**Application questions**

For some roles, we’ll ask you some specific questions, like if you have a preferred work location. If you’re disabled and you’d like to be part of our Guaranteed Interview Scheme, you can add this information in here.



5. How to apply continued

**Equality and Diversity**

We’re committed to reflecting the communities we serve and we’d like you to tell us about yourself and your background.

**Submitting your application**

Once you’ve filled out and completed everything, you’ll be prompted to submit your application. Simply click the button and you’re done.

Please be aware that once you’ve submitted your application, with the exception of the ‘Personal Details’ section you will not be able to edit your application further. If you decide to withdraw your application, you will not be able to submit another application for the same vacancy.

If, at any stage, you have questions or problems, please contact the recruitment team on 0845 241 5350 or email moj-recruitment-vetting-enquiries@gov.sscl.com

**Setting up ‘job alerts’**

If you have been unsuccessful with your application you can set up email alerts for future vacancies. You will automatically receive an email when a job that matches your criteria becomes available. To do this simply click on **‘create a new job alert’**, enter your job criteria and save.

# ENVIRONMENT AGENCY BENEFITS



The Environment Agency offers an attractive and competitive benefits package, including:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Core Benefits****Basic Salary**Based on skills and experience, in which salary ranges are subject to review each year as part of the pay award.**Pension Scheme**A career average revalued earnings (CARE) pension scheme. Contributions are based on your full time equivalent pay, ranging between 5.5% and 12.5%. The EA contribution is currently 19% of your pay.**Holidays**Annual holiday entitlement starting at 25 days plus statutory bank holidays (pro-rata for flexible workers). We also offer up to two days paid environmental outcome days each year**Enhanced statutory policies**Enhanced maternity, adoption and paternity leave, and sickness absence provisions. | **Training & Development****Performance Management**Individual performance plans, learning and development matched to your agreed career objectives and progression plans.**Learning & Development** A range of training courses, leadership development initiatives and access to L&D materials are available, covering technical, managerial and personal skills.**Examination Leave**Paid leave for exams and revision for approved studies.**Professional subscriptions**We will pay the membership fees for one relevant professional association. | **Work/life Balance****Flexible Working** Flexible working patterns including job share.**Travel & Transport Benefits**A range of travel and transport benefits. Discounts on Haven Holidays and HotelStay. **Shopping & Leisure Benefits**A variety of discounts at online stores and leisure experiences available via Mylifestyle.  | **Health & Wellbeing****Occupational Health**Access to Duradiamond Healthcare advisory service.**Eye Care** Free eye tests.**Employee Assistance Service** Access to Workplace Wellness available to you and your family**Sports & Social Club**Opportunity to benefit from a wide range of subsidised events and discounts.**Health Discounts**Optional discounts provided by a number of external providers and health clubs **Local Benefits**These vary from region to region. | **Finance** **Interest Free Loans**For season tickets, bicycles and safety equipment.**Special Leave**Additional paid leave is available for employees taking part in public duties, trade union activities, special/trained forces and for health & safety representatives.**Financial Education Club** Providing guidance on how to manage your finances including information on credit scores, pensions, buying your first house and getting debt-free.**Tenancy deposit loan scheme**Access to an interest free loan to pay for some, or all of a deposit on a privately rented home.*The following benefits only apply to eligible roles:***Lease Car Scheme****Relocation Assistance****Free Car Parking** |