# Position Details

## Research Projects- CSOF3

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| The following information is for applicants | |
| Advertised Job Title | Groundwater Hydrologist |
| Job Reference | 87023 |
| Tenure | Specified Term of 3 years  Full-time |
| Salary Range | AU$66,163 - AU$84,207 per annum (pro-rata for part-time)  plus up to 15.4% superannuation |
| Location(s) | Adelaide SA, Brisbane QLD or Perth WA preferred |
| Relocation Assistance | No |
| Applications are open to | * Australian/New Zealand Citizens and Australian Permanent Residents |
| Position reports to the | Team leader – Risks to groundwater resources |
| Client Focus – Internal | 60% |
| Client Focus – External | 40% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact **Dr Kate Holland** via email at [kate.holland@csiro.au](mailto:kate.holland@csiro.au) or phone **+61 8 8303 8736** |
| How to apply | Apply online at <https://jobs.csiro.au/>  Internal applicants please apply via **Jobs Central**  If you experience difficulties when applying, please email [careers.online@csiro.au](mailto:careers.online@csiro.au) or call 1300 984 220. |

**Acknowledgement of Country**

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the areas that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our [vision towards reconciliation](https://www.csiro.au/en/about/Indigenous-engagement/Reconciliation-Action-Plan).

### Role Overview

Research Projects staff in CSIRO collaborate in scientific and technological activities with other research staff usually by assisting with detailed planning, undertaking or assisting with experimental, observational or technology development work, and in carrying out the more practical aspects of the work. The Groundwater hydrologist will join the ‘Risks to groundwater resources’ team in the Land and Water Business Unit.

The ‘Risks to groundwater resources’ team provides integrated assessments of risks to groundwater quantity and quality to support sustainable development and resilient management of groundwater resources and dependent environments. This includes contributions to the [Trusted Environmental and Geological Information](https://www.ga.gov.au/about/projects/resources/trusted-environmental-and-geological-information-program) (TEGI) program to improve the knowledge base and understanding of the environmental and geological systems for the Australian Government’s $28.3 million Strategic Basin Plans initiative.

Other opportunities to engage with researchers and contribute to groundwater characterisation and management projects include, but are not limited to, regional-scale water resource assessments in Northern Australia and the Murray-Darling Basin. By developing and applying data-driven solutions to diverse research problems, the successful candidate will help to develop novel solutions using fit-for-purpose approaches often at a regional scale. It is expected that training will allow the successful candidate to develop skills across the breadth of research and project needs within the Business Unit.

### Duties and Key Result Areas

Contribute to large multidisciplinary projects, including regional-scale integrated assessments through cross-disciplinary integration of groundwater hydrology, surface water and ecology with other disciplines (contaminants, geology and hydrogeology) for integrated risk assessment; and the analysis and interpretation of groundwater models.

* Under limited supervision, contribute to desktop literature review of publicly available reports, datasets, guidance and policy documents related to the assessment and management or mitigation of impacts on water and the environment associated with the exploration and production of hydrocarbons and hydrogen, including renewable energy generation.
* Contribute to the interpretation and communication of research or technological results, collaborate on drafting presentations to, and/or detailed written reports for, clients and the scientific and/or technology community.
* Under limited supervision, collate and integrate spatial, field, remotely sensed and/or modelled data to conceptualise interactions between groundwaters, other water sources and water-dependent ecosystems. This includes spatial data analysis, map making, graph and figure preparation for summary reports and spatial causal network for environmental impact assessment.
* Conduct literature and data reviews, undertake field and laboratory investigations, including associated analysis involving statistical or graphics software.
* Work with discretion to decide on the timing of operations within the work team’s plan and plan to meet experimental and/or project demands.
* Follow data management and data analysis protocols to maintain the integrity of procedures and ensure quality assurance when assisting with generating scientific outputs.
* Independently test possible solutions to resolve identified problems.
* Under limited supervision, respond courteously and efficiently to client requests, maintaining clear communication regarding mutual expectations and monitoring client satisfaction.
* Communicate openly, effectively and respectfully with all staff, clients, external stakeholders and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work collaboratively as part of a multi-disciplinary, regionally dispersed research team to carry out tasks in support of CSIRO’s scientific objectives.
* Prioritise health and safety aspects in field/lab/office environments.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.
* Be prepared to broaden field and desk-top capabilities.

## **Selection Criteria**

#### Essential

*Under CSIRO policy only those who meet all essential criteria can be appointed.*

1. Bachelor’s degree in Science or Engineering, preferably with major subjects in groundwater hydrology, or equivalent relevant work experience.
2. Demonstrated ability to collate, modify and interpret data relevant to groundwater hydrology, and communicate research results via technical presentations and/or written reports.
3. High levels of initiative, adaptability, independence, and demonstrated ability to respond to unforeseen changes at work.
4. Demonstrated proficiency with Microsoft Office applications. Experience with programs such as ArcGIS, R, Python (or equivalent) for scientific analysis.
5. Good oral and written communication skills, coupled with a willingness to cultivate productive working relationships with landholders, industry, government, other stakeholders, as well as colleagues in other science organisations.
6. Demonstrated ability to work collaboratively with colleagues as part of a multi-disciplinary research team, and communicating openly, effectively and respectfully with all staff, clients and suppliers.
7. Exceptional organizational and problem-solving skills with experience in planning and managing logistics to ensure projects run efficiently and smoothly.

## **Desirable**

**Desirable**

1. Bachelor’s degree with honours or master’s degree in a relevant field such as engineering, geology, hydrogeology, groundwater modelling, ecohydrology, environmental science or similar.
2. Demonstrated ability to conceptualise groundwater flow and aquifers, preferably with an understanding of interactions between groundwaters, other water resources and ecosystems. Experience in the development, calibration and/or uncertainty analysis of regional scale groundwater models.
3. Knowledge of wider aspects of water resource characterisation or management, including for the onshore gas industry in Australia, and groundwater-based water supplies.
4. Co-author on scientific journal publications and/or technical/client reports.
5. Proven experience in, and knowledge of, Python programming (or equivalent) for scientific analysis.

## **Required Competencies**

* **Teamwork and Collaboration:** Proactively seeks and considers the ideas and opinions of others from within and outside the team to help form decisions, plans or actions.
* **Influence and Communication:** Puts forward ideas by presenting factual information supported by data, definitions, examples, illustrations or other aids, which will assist in conveying meaning.
* **Resource Management/Leadership:** Provides instruction and assists other staff to complete allocated tasks and activities.
* **Judgement and Problem Solving:** Identifies and considers the implications of a range of available alternatives in order to select the most appropriate response to problems of a familiar or recurring nature.
* **Independence:** Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
* **Adaptability:**Willingness to change ideas or perceptions based on new information, contrary evidence or other people's points of view. Prepared to try out different approaches.

Special Requirements

Appointment to this role may be subject to conditions including provision of a national police check as well as other security/medical/character clearance requirements.

The successful candidate will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and Find out more about CSIRO [Land and Water](https://www.csiro.au/en/Research/LWF)

CSIRO is a values-based organisation.  In your application and at interview you will need to demonstrate behaviours aligned to our values of:

* People First
* Further Together
* Making it Real
* Trusted