# Position Details

## Research Scientist/Engineer- CSOF5

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| The following information is for applicants |
| Advertised Job Title | River Basin Modeller (Research Scientist) |
| Job Reference | 84949 |
| Tenure | IndefiniteFull-time |
| Salary Range | AU$102,724 - AU$111,165 per annum (pro-rata for part-time)plus up to 15.4% superannuation |
| Location(s) | Clayton, Victoria. |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * All Candidates
 |
| Position reports to the | Team Leader, Water Forecasting Team |
| Client Focus – Internal | 30% |
| Client Focus – External | 70% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact David Robertson via email at david.robertson@csiro.au or phone +61 3 9545 2431 |
| 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 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

The role of Research Scientist/Engineer staff is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. You may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. You will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts.

You will undertake innovative research and lead components of high impact external projects related to the analysis of river systems and how their management can be enhanced under uncertain future hydroclimatic conditions, with an emphasis on managing extremes.

You will provide a critical link between researchers engaged in developing ensemble hydroclimate forecasts and projections, and river managers and operators in the development and assessment of river management and regulation strategies that seek to enhance economic, environmental, social and cultural values.

You will contribute to the strong multi-disciplinary capability in the Water Security Program of the L&W Business Unit, which undertakes research into hydrology and water resources, water-agriculture-livelihood interactions, integrated basin management, and adaptation to a changing climate

You will work on a range of externally-funded projects in south-eastern Australia, including the Murray-Darling Water and the Environment Research Program (MD-WERP) funded by the Murray-Darling Basin Authority, and river forecasting projects for a range of clients.

### Duties and Key Result Areas

The role of the successful applicant is to contribute to the analysis of river basin systems to identify enhancements to management and operations under uncertain future scenarios. The duties are:

* Undertake assessments of river systems operation and management strategies under historical and uncertain future hydroclimate scenarios.
* Conduct original research on river systems operation and management to support adaptation to climate change and management of real-time risks.
* Conduct original research in hydrological science and modelling, particularly related to improving predictions of extreme events.
* Strong delivery to high impact external projects like the Murray-Darling Basin Water and Environment Research Program (MD-WERP), Water Forecasting applications, and Digital Water and Landscapes.
* Communicate research outcomes to scientific and industry forums through scientific publications, reports, and presentations.
* Work closely with industry clients to ensure delivery of research outcomes and transferring technologies and/or guidelines for adoption.

## **Selection Criteria**

#### Essential

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

1. A PhD (or an equivalent combination of qualifications and research experience) in a relevant field such as hydrological science, environmental science or engineering.
2. Experience researching hydrological science, river systems planning, the application of forecasts for operational water management, and/or water resources adaptation to a changing climate.
3. Demonstrated experience in programming and working with large datasets that cover large spatial and temporal scales.
4. Strong oral communication skills including the ability to make scientific presentations to audiences with scientific and non-scientific backgrounds.
5. A demonstrated publication history of authorship on scientific papers in peer reviewed journals and/or conference papers and reports.
6. Demonstrated ability to work in a multi-disciplinary team in order to meet deadlines and respond productively to changing requirements,
7. An ability to work independently to define and carry-out specific work goals.

**Desirable**

1. Experience in operational water management and/or forecasting

## **Required Competencies**

* **Teamwork and Collaboration:** Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other teams as well as industry colleagues.
* **Influence and Communication:** Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others’ reactions.
* **Resource Management/Leadership:** Allocates activities, directs tasks and manages resources to meet objectives. Provides coaching and on the job training, recognises and supports staff achievements and fosters open communication in the team.
* **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate responses by adapting/creating and testing alternative solutions.
* **Independence:** Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
* **Adaptability:**Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of change.

Special Requirements

Include if relevant:

* The successful candidate will be asked to obtain and provide evidence of a National Police Clearance or equivalent. Please note that individuals 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/) for more information.

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