# Position Details

## Research Projects- CSOF5

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| The following information is for applicants | |
| Advertised Job Title | Biodiversity modeller / spatial ecologist |
| Job Reference | 76834 |
| Tenure | Specified Term of 1 year  Full-time |
| Salary Range | AU$85k - AU$108k per annum (pro-rata for part-time)  plus up to 15.4% superannuation |
| Location(s) | Canberra (preferred) |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents |
| Position reports to the | Team Leader – Quantitative Biodiversity Assessment team |
| Client Focus – Internal | 100% |
| Client Focus – External | 0% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Karel Mokany via email at Karel.Mokany@csiro.au  or phone +61 2 6246 4443 |
| 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. |

### Role Overview

CSIRO’s [Quantitative Biodiversity Assessment team](https://research.csiro.au/macroecologicalmodelling/) undertakes a wide range of spatial biodiversity modelling and assessment research, from regional to global scales. Our team aims to provide the best possible biodiversity information to support policy planning and management decisions.

We are seeking a spatial biodiversity modeller or quantitative ecologist to join the team in helping to deliver a range of biodiversity research projects. With collaborative guidance and support from other team members, this position will undertake a variety of research activities, applying different biodiversity assessment approaches, delivering to multiple research projects.

You will join the high-performing Living Landscapes Research Program in CSIRO Land and Water. The Living Landscapes Research Program develops tools and technologies to support government, industry and communities to realise a sustainable Australian environment where biodiversity flourishes, ecosystems function and adapt, and ecosystem services provide for the needs of future generations. The program contributes to the development of integrated science solutions to complex environmental problems by deploying cutting-edge biophysical expertise on whole-of-system approaches to monitoring, assessment, evaluation and reporting on land and ecosystem outcomes.

The candidate will make a substantial contribution to CSIRO Land and Water’s goals relating to Thriving Natural Systems and Sustainable Industries, by helping provide the biodiversity science necessary to inform management of our unique biodiversity, across Australia and around the world.

### Duties and Key Result Areas

Under the broad direction of the Quantitative Biodiversity Assessment Team Leader, and in collaboration with other CSIRO researchers, the appointee will:

* Contribute to planning and designing quantitative assessments that meet project objectives.
* Proactively explore potential solutions to biodiversity modelling and assessment challenges as they emerge.
* Contribute to and lead the preparation and associated documentation of various spatiotemporal data for application in biodiversity modelling and assessment.
* Rapidly learn new concepts and analytical techniques.
* Adapt and implement existing code-based spatial biodiversity assessments.
* Develop new approaches and associated code to implement custom biodiversity modelling and assessment activities.
* Generate summary products to communicate the outcomes of biodiversity assessments in ecologically meaningful ways, including maps, figures, and summary text.
* Manage concomitant research activities across multiple projects.
* Work collaboratively as part of a multi-disciplinary, regionally dispersed research team to carry out tasks in support of CSIRO’s scientific objectives.
* Participate as an active member of CSIRO Land and Water’s Quantitative Biodiversity Assessment Team.
  + 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.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. A doctorate in a relevant discipline area, such as spatial biodiversity modelling or quantitative spatial ecology.
2. Demonstrated experience in biodiversity modelling or quantitative spatial ecology.
3. Evidence of advanced statistical modelling or data analytics skills, and programming capabilities in one or more languages relevant to spatial modelling and analysis (e.g. Python, R).
4. The ability to work effectively as part of a multi-disciplinary, regionally dispersed research team, plus the motivation and discipline to carry out autonomous research.
5. Demonstrated high level written and oral communication skills.

## **Desirable**

1. Experience using high-performance computing clusters, and/or cloud computing, and managing data analytics workflows.
2. Knowledge and research experience in Australian ecosystems.

## **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 team 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:** Sets up and maintains effective and efficient work teams and manages performance and resources, to achieve objectives. Chooses appropriate management strategies and communication styles to maintain high levels of motivation and productivity. Gives feedback for development purposes and provides support and direction for improvement.
* **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response 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 changes.

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.

If the successful candidate is not an Australian Citizen or Permanent Resident, they may be required to undergo additional security clearances, which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test- https://ielts.com.au/)

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [CSIRO Land & Water](https://www.csiro.au/en/about/people/business-units/land-and-water) 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