

Occupational Category	2343
Industry Class	8102
Industry Subdivision	81

Position Profile

Position title	Research Fellow – Remote sensing riparian vegetation
Position number	10348
Position classification	Research Focused Academic Level A
Organisational unit	Research Institute for Environment and Livelihoods
Location	Casuarina Campus
Reporting to title	Professor Lindsay Hutley, Research Institute for the Environment and Livelihoods, College of Engineering, IT and the Environment
Special provisions	• Appointment is contingent upon receipt of a satisfactory National Criminal History check. • Ability to travel to regional and remote locations • It is a requirement of the position for the occupier to hold a current NT driver's licence.

SECTION 1: Purpose of the position

The position falls within a collaborative partnership between Charles Darwin University and CSIRO titled 'The development of scientific capability in freshwater ecology and the use of new technologies in natural resource management in northern Australia'.

The position conducts quantitative research, processes data, contributes to project management, undertakes field work in remote locations and contributes to the preparation of research reports and scientific manuscripts to achieve the objectives of the CDU-CSIRO partnership. The role may also participate in teaching, post-graduate supervision and other relevant research projects from time to time subject to agreement of the relevant project partner representatives.

The research undertaken by this position will be closely aligned with existing and developing research strengths of the University and CSIRO as a partner organisation. The position will endeavour to contribute to the CDU-CSIRO collaboration in the Northern Territory with a focus on high quality engagement and research impact as well as facilitating career development, mentoring and retention of world class researchers in the Northern Territory.

SECTION 2: Key accountabilities

The following accountabilities are not exhaustive and may include others as directed from time-to-time.

- Manage and coordinate research projects with the long-term goal of developing a productive and lasting research partnership with CDU and CSIRO.
- Identify potential future opportunities for collaboration and funding and prepare high quality proposals and applications.
- Contribute to attracting and cosupervising high-quality Higher Degree by Research candidates.

- Undertake research into understanding the resilience of aquatic ecosystems, in particular, linking habitat structure and function in savanna riparian zones through multiscale remote sensing.
- Undertake high-level statistical analysis and modelling of complex datasets.
- Authoring Q1 publications and/or other high-level outputs as appropriate.
- Engage with communities, government and other stakeholders through project development and implementation and extension
- Contribute to community and stakeholder needs in freshwater research through technical input where required.
- Enhance the visibility and reputation of CDU and CSIRO through active participation in public outreach activities as an individual and through participation in CDU events.
- Undertake oral and written presentation of research findings including liaison with research collaborators, research end users and other project stakeholders.
- Liaise with government and industry researchers outside the University.
- Lead the write-up of components of the research in leading international journals (and take an active role in the assistance of students with the write-up of their components).
- Present results at national and international scientific meetings; and communicating the research program with the broader community via a range of media.
- Promote workplace safety, equity and diversity and participation in the workplace.
- Organise and implement detailed work plans to ensure delivery of agreed research objectives and project milestones.

Demonstrate a commitment to CDU values, policies and Code of Conduct.

Work Health & Safety

- For areas of operational responsibility:
- Ensure all activities comply with WHS legislation and university policy & procedure.
- Implement & monitor risk management activities (e.g. workplace inspections, incident/hazard investigation and follow-up, implementation of risk controls).
- Analysis of WHS training requirements for staff including the provision of training and monitoring of training to ensure completion and currency.

University Expectations

All staff are expected to:

- Contribute to the efficient and effective functioning of their team or work unit in order to meet University objectives. This includes demonstrating appropriate and professional workplace behaviours in accordance with the Code of Conduct, providing assistance to team members if required and undertaking other key responsibilities or activities as directed by one's supervisors;
- Read, understand and comply with all University policies and procedures;
- Undertake risk management and actively support and participate in the risk management processes adopted by the University which include identifying, analysing and evaluating risk that may impact on the University;
- Work at and travel between other University campuses from time to time as may be required during the course of employment;
- Complete all mandatory training such as required by the University;
- Demonstrate understanding of the principles of anti-discrimination, staff and student equity, work health and safety and other relevant legislation, and show the willingness and capacity to implement equal employment opportunity and work health and safety plans, policies and programs.

SECTION 3: Selection competencies

Essential competencies

1. PhD in remote sensing of landscapes or other appropriate field, or an equivalent combination of postgraduate qualifications and/ or experience.
2. Demonstrated expertise using remote sensing data to analyse spatial and temporal patterns of vegetation water use and experience analysing ecological datasets.
3. Evidence of publishing scientific papers in high impact international journals.
4. Demonstrated ability to identify research and collaboration opportunities and secure research funding.
5. Ability to generate and deliver effective presentations and papers to research colleagues, government policy makers and the wider community.
6. Experience in conducting field research in remote locations.

Desirable competencies

1. Applied understanding of the ecohydrology of riparian ecosystems.
2. Use of Lidar data to assess structural attributes of vegetation.
3. Ability to undertake fieldwork and laboratory analysis, including experience in sampling aquatic ecosystems.
4. Experience in the successful operation of large multi-disciplinary field projects in remote parts of Australia.
5. Experience in working effectively and respectfully with First Nations communities in research.