# Position Description

Research Director - Land and Water

Water Security Program

Information for applicants

##

Australia’s National
Science Agency



## CSIRO Land and Water

CSIRO Land and Water is delivering the knowledge and innovation needed to underpin the sustainable management of our land, water, ecosystems, biodiversity and cities. Through an integrated systems research approach, we provide the information and technologies required by government, industry and the Australian and international communities to protect, restore, and manage natural and built environments.

CSIRO Land and Water’s vision is for a future where:

* natural environments thrive and are valued
* water needs are met securely
* resilient communities plan for and learn from change
* sustainable food production underpins wellbeing
* responsible industries have minimal long-term impact
* cities are liveable and designed to adapt
* zero emissions and zero waste are the norm
* decision making is directly informed by science

CSIRO Land and Water’s purpose is to contribute to this vision through long-term investment in innovative, science and technologies in the fields of:

1. **Sustainable industries** – where industries prosper, landscapes are productive, and zero waste and pollution is achieved through a circular economy
2. **Water** **security** – where water is safe, trusted and secure, and equitably managed during extremes of drought and flood
3. **Thriving natural systems** – where biodiversity flourishes, ecosystems function and adapt, and ecosystem services are maintained
4. **Resilient communities and liveable cities** – where government, industry and communities navigate disruption and harness innovation, creating equitable and prosperous societies.

Across these thematic areas, we focus on cross-cutting goals:

1. Responding to **climate change –** where industries and societies minimise risks and build resilience through proactively transitioning to a low-carbon economy and supporting natural systems to adapt
2. Developing **sustainable urban and regional futures –** where navigating development choices in urban areas and regions is enabled by innovation and systems foresight
3. Partnering for vibrant **Indigenous futures –** where Indigenous Peoples are equal partners in producing and harnessing science to guide and fulfil their aspirations in a sustainable way
4. Developing **responsible and novel technologies –** where novel disruptive technologies are actively and ethically explored to innovatively address sustainability challenges with and for society.

<https://www.csiro.au/en/Research/LWF>

## Water Security Program purpose statement

# The **Water Security Program** provides trusted solutions to share and secure water for people, industry and water-dependent ecosystems, and support adaptation into the future. This Program delivers water systems research, development and applications in Australia and internationally on:

* **Water futures** – assessment, accounting, forecasting and prediction of water resources to inform decisions from enterprise to basin scale
* **Water security** – safe and cost-effective water sources, storage and connectivity options to support agriculture, industry and communities
* **Water ecosystems** – measurement and ecological prediction to design effective management strategies for healthy and functioning water ecosystems
* **Water impacts** – understanding cumulative impact on water resources and water-dependent assets from changing climate and development to inform sustainable development actions
* **Water use pathways** – integrated scenario development and trade-off analyses to support water operations, management, planning and policy choices

## Water Security Program capability statement

The **Water Security Program** holds CSIRO’s capability in hydrology, hydroclimate, hydrogeology, environmental engineering, water ecosystems, basin planning and environmental informatics.

This Program has four research groups:

* **Water futures & pathways** enhances water knowledge through measurement, modelling, and undertaking integrated scenario and trade-off analyses to offer solutions to complex and contested water–society challenges
* **Groundwater management** develops scalable characterisation methods, water sourcing technologies and quantitative assessment of environmental, social and economic risks to support adaptive groundwater management and water banking
* **Water ecosystems management** provides interdisciplinary, technology-focussed science to advance monitoring, prediction and evaluation and risk analysis of ecological responses in aquatic ecosystems
* **Environmental informatics** expedites access to the right information, in the right form, at the right time as a foundation for environmental research, policy development and management decisions

### About the Research Director Role

The Research Director sets the vision and strategy for the Water Security Program and is responsible for leading a portfolio of multi-disciplinary, collaborative research projects that deliver on the goals of the Land and Water Business Unit.

CSIRO’s mandate is to deliver world-class research that provides innovative solutions for industry, government and the community. The research effort is, therefore, mission-directed and impact-focussed and it is essential that the Research Director has, or can readily develop, strong links with industry partners and relevant government agencies. Experience in building cohesive, dynamic and creative research teams that integrate across disciplinary and organisational boundaries is essential. It should be expected that the portfolio of research will evolve over time on the basis of need, strategy and performance.

The Research Director must be an entrepreneurial and collaborative science leader who has demonstrated commitment to progressing inclusion and promoting diversity. They will form part of the Land and Water Leadership Team and be accountable for the delivery of specific elements of the Business Unit’s overall impact, science and financial objectives as well as the ongoing development of its strategy. The Research Director works as part of the cohesive and collegial Leadership Team to realise the Land and Water Business Unit’s vision, and works collaboratively with other Research Directors and researchers across the broader organisation in developing an agenda for tackling the nation’s greatest challenges.

## Key Result Areas and Duties

### Impact Science Leadership

* In consultation with research partners and research users, lead the strategic science and delivery to address national challenges and build capacity to innovate for science discovery;
* Identify new opportunities and markets in Australia and overseas, and engage key stakeholders and clients to build support for investment in opportunities;
* Sustain and enhance the R&D culture of science excellence, creativity, innovation and flexibility;
* Integrate science with project and impact delivery through an effective “Path to Impact” framework;
* Identify opportunities for science to contribute to overcoming stakeholder adoption challenges;
* Catalyse innovation – form/support science networks, review and sponsor exploratory and capability development projects;
* Build a pipeline of contracts (3‐5 year focus) including identification of cross-Business Unit opportunities and manage the Program’s portfolio of Intellectual Property;
* Guide the set of projects needed to deliver against Land and Water’s strategy

### Capability Leadership

* Communicate the Program vision to inspire staff and sustain and nurture awareness of Land and Water’s science quality and impact in the broader Australian community;
* Strive for “Zero Harm” (physical and psychological) and actively promote a healthy, safe and environmentally sustainable workplace, in doing so model appropriate and professional behaviour in the workplace and manage people matters proactively;
* Attract, develop and retain world class talent which meet current and future needs - in the short and longer term;
* Support the Research Group and Team Leaders to build effective teams and groups, manage career development for staff and succession planning;
* Build the long‐term science capability to support the delivery of the Program’s research and impact, including forecasting demand, monitoring science trends and stakeholder needs, and building a high-performance culture;
* Effectively lead change initiatives across the Program and the Business Unit.

### Engagement & Partnership

* In consultation with research partners and end users, develop a roadmap for a deeper and more effective national partnership across industry environment issues;
* Build strategic relationships within the organisation to execute CSIRO’s strategy and Land and Water’s strategy, including fostering mobility and cross‐Business Unit deployment of staff, and developing productive relationships.
* Develop and maintain national and/or international research collaborations and professional networks to keep abreast of emerging advances in relevant science fields and industry challenges.
* Communicate Land and Water strategy and Program goals to internal and external stakeholders;
* Effective engagement with customers/clients/partners and identifies opportunities for future collaboration within and beyond CSIRO.

### Resource Leadership

* Lead and manage the Program’s financial resources, people, infrastructure and other assets to ensure their effective, sustainable and efficient use;
* Ensure best practice governance and management of commercial activities and intellectual property in the Program.
* Manage delivery against milestones and appropriate quality standards;
* Promote high standards of project management in the Program;
* Contribute to the development of science plans for future infrastructure.

## Key Capabilities

* Highly collaborative and team player, who understands what collaboration requires and also the impact that can be achieved through delivering science through a team, rather than individually
* Demonstration of collegial approach to solving problems, and respectful interactions. Able to contribute to broader Land and Water teams through effective and collaborative leadership role on the Land and Water Leadership Team.
* Highly effective stakeholder management skills and demonstrated effectiveness in aligning business capability with Government, industry and other stakeholders’ needs;
* Personal effectiveness to drive and coach for performance;
* A poised, credible and confident demeanour that reassures others; conveying an image consistent with the organisation’s vision and values;
* Emotional intelligence – establishing and sustaining trusting relationships and leveraging insights to effectively manage one’s own responses and reactions;
* Passion for results by driving high standards for individual, team and organisational achievement;
* Well-honed leadership abilities to drive implementation of strategy, exercise sound judgement and decision-making, build and empower successful teams, and facilitate change;
* Ability to influence and gain commitment.

## Experience

* Demonstrated leadership and excellence in a relevant field of science, as demonstrated by high‐quality peer reviewed, published science since PhD (at least five years), with an international research reputation and credibility, and with a strong track record of uptake, adoption and impact delivered to industry and other end users.
* Led large multi‐disciplinary teams across several science areas and/or geographic locations;
* Developed, implemented and successfully delivered a portfolio of relevant research, including financial and risk management;
* Involvement in strategic planning and implementation of change;
* Demonstrated experience in growing, reshaping and revitalising a capability area.

## Selection Criteria

### Pre-Requisites

1. **Education/Qualifications:** A doctorate and/or equivalent research experience in a discipline area relevant to the program such as hydrology, hydrogeology, earth sciences, environmental sciences.

### Essential Criteria

1. Evidence of an ability to strategically develop programs and opportunities that respond to national and global research challenges, drawing from knowledge in:
* Water futures and pathways / surface water and basin management
* Conjunctive water use
* Water ecosystem management
1. Evidence of successful development and leadership of a pipeline and portfolio of science, research and innovation on a national and international scale.
2. Evidence of strong industry and/or government engagement and strategic relationship management that grows new impact opportunities and supports positive and sustainable commercial outcomes.
3. The ability to work effectively as an integral member and leader of a multi-disciplinary, regionally dispersed research team, and foster an environment in which there is a high level of co-operation within and between teams.
4. Demonstrated ability to establish productive teams, manage performance, undertake strategic planning and financial management, operationalise the strategic vision for staff, and gain commitment to the direction chosen.

### Desirable Criteria

1. An exceptional record of science innovation and creativity plus the ability to apply well developed research skills to scientific investigations of significant consequence.

## About CSIRO

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is one of the world’s largest and most successful publicly-funded research and development organisations with locations across Australia and internationally. CSIRO is committed to complementing its world-class science capabilities with outcome-focused research that will generate economic, environmental and social benefits for Australia in a global context. At CSIRO you can be part of helping to solve big, complex problems that make a real difference to our future. We spark off each other, learn from each other, trust each other and collaborate to achieve more than we could individually in a supportive, rewarding, inclusive and truly flexible environment.

**CSIRO is a values-based organisation. You will need to demonstrate behaviours aligned to our values of:**

1. Integrity of Excellent Science
2. Trust & Respect
3. Creative Spirit
4. Delivering on Commitments
5. Health, Safety & Sustainability

This position is a three-year term.

The preferred location for this position is Canberra, Brisbane, or Melbourne. Other locations will be considered. The position will require travel between locations.

### Special requirements

To be eligible for this position you must be willing and able to undertake significant domestic and international travel**.**

A National Police Check is required to be lodged by the successful applicant and clearance to be received before commencing.

### CSIRO’s Commitment to diversity

 We’re working hard to recruit diverse people and ensure all our people feel supported to do their best work and empowered to let their ideas flourish. For more on our Diversity and Inclusion strategy go to www.csiro.au/Diversity.

### Flexible working arrangements

We work flexibly at CSIRO, offering a range of options for how, when and where you work. Talk to us about how this role could be flexible for you. For more information go to [www.csiro.au/Careers/The-CSIRO-Experience/Balance](http://www.csiro.au/Careers/The-CSIRO-Experience/Balance)

Relocation and immigration assistance will be provided to the successful candidate where required.

### Contact

For further information about this role contact Terri Ward at terri@towardco.com or call +61 447 667 439

### How to Apply

As part of their application, candidates are requested to provide the following in Microsoft Word format:

* **Curriculum Vitae**
* **Cover Letter –** outlining the motivation and relevant capabilities and experience you could bring to this role
* **Contact details for three Referees –** Referees will only be contacted after prior consultation with the candidate. It is the candidate's responsibility to ensure that their referees are willing to provide reports when contacted by CSIRO.
* **Date of commencement –** An indication of the earliest date on which the candidate could commence in the position.

**Please send your application directly to Terri Ward at** **terri@towardco.com****.**