Role Description
Senior Scientist (Remote Sensing)

Cluster	Planning, Industry & Environment
Agency	Department of Planning, Industry and Environment
Division/Branch/Unit	Environment, Energy & Science / Biodiversity Conservation & Science / Science, Economics and Insights Division
Location	Various
Classification/Grade/Band	Environment Officer Class 9
Role Number	Generic
ANZSCO Code	234311
PCAT Code	1119192
Date of Approval	May 2018 (updated July 2021)
Agency Website	www.dpie.nsw.gov.au

Agency overview

Our vision is to create thriving environments, communities and economies for the people of New South Wales. We focus on some of the biggest issues facing our state. We deliver sustainable water resource and environment management, secure our energy supply, oversee our planning system, maximise community benefit from government land and property, and create the conditions for a prosperous state. We strive to be a high-performing, world-class public service organisation that celebrates and reflects the full diversity of the community we serve and seeks to embed Aboriginal cultural awareness and knowledge throughout the department.

The Environment, Energy and Science (EES) Group within DPIE brings together a range of functions including national park management, biodiversity and conservation, climate change, sustainability, resilience and adaptation, renewable energy and energy security.

Primary purpose of the role

The Remote Sensing Senior Scientist is responsible for providing advanced technical, scientific and analytical support and guidance to implement remote sensing based programs for monitoring land use and vegetation changes.

Key accountabilities

- Develop and deliver state wide monitoring programs using high quality remote sensing techniques that meets organisational objectives and appropriate standards of scientific rigour.
- Develop and maintain a range of collaborative networks across the department, universities, government agencies and other research providers to support the delivery of science programs and keep up to date with the latest science.
- Provide expert advice and communication to relevant stakeholders across the department regarding the status of projects which contribute to the development and the direction of the department.

- Maintain the highest standards of open communication, collaboration, data and knowledge management in accordance with policies to support effective knowledge sharing within the department.
- Prepare a range of project related documents, including briefing papers, discussion papers, reports, research papers, submissions and responses to information requests, develop and present scientific and technical presentations that explain complex processes clearly and are suitable for a range of audiences.
- Contribute to the development of project management methodologies and processes that improve productivity, encourage innovation and develop teamwork to enhance the delivery of science across the department.
- Manage aspects of scientific project implementation, including monitoring project plans, coordinating resources, managing budgets, maintaining an awareness of time and budget constraints and maintaining WHS procedures to ensure that science projects are delivered to agreed timelines and quality.

Key challenges

- Working within the project team to deliver high quality remote sensed imagery analysis and assessment, meeting expected milestones and deliverables.
- Maintain an extensive working knowledge of remote sensing techniques and imagery analysis. Supported by maintaining a diverse network of contacts in NSW public sector agencies, research institutions, the private sector and non-government organizations

Key relationships

Who	Why
Internal	
Manager	- Escalate issues, report on progress, prepare briefings and provide technical advice. - Receive advice, guidance and support
Work Team / Other Internal Staff	- Work collaboratively to contribute to achieving business outcomes. - Foster effective working relationships to promote innovation, issue resolution information sharing and identify opportunities to support and develop corporate programs.
External	
External Stakeholders	- Develop and maintain relationships. - Collaborate to build skills and expertise. - Negotiate and liaise with a variety of stakeholders to support delivery of business initiatives.

Role dimensions

Decision making

Set own priorities within the parameters and directions of priority programs, maintaining a degree of independence in developing a suitable approach in assisting on allocated projects and providing regular progress reports to the Manager.

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Reporting line

Senior Team Leader, Remote Sensing and Regulatory Mapping.

Direct reports

Nil

Budget/Expenditure

Nil

Key knowledge and experience

- Demonstrated experience in delivering statewide rigorous environmental science projects in remote sensed imagery interpretation.
- Experience in project management including budgets, reporting and allocation of resources.

Essential requirements

- Scientific qualifications, knowledge and demonstrated experience of remote sensed imagery interpretation, analysis and assessment.

Capabilities for the role

The [NSW public sector capability framework](#) describes the capabilities (knowledge, skills and abilities) needed to perform a role. There are four main groups of capabilities: personal attributes, relationships, results and business enablers, with a fifth people management group of capabilities for roles with managerial responsibilities. These groups, combined with capabilities drawn from occupation-specific capability sets where relevant, work together to provide an understanding of the capabilities needed for the role.

The capabilities are separated into **focus capabilities** and **complementary capabilities**.

Focus capabilities

Focus capabilities are the capabilities considered the most important for effective performance of the role. These capabilities will be assessed at recruitment.

The focus capabilities for this role are shown below with a brief explanation of what each capability covers and the indicators describing the types of behaviours expected at each level.

Capability group/sets	Capability name	Behavioural indicators	Level
FOCUS CAPABILITIES			
Personal Attributes	**Manage Self** Show drive and motivation, an ability to self-reflect and a commitment to learning	• Keep up to date with relevant contemporary knowledge and practices • Look for and take advantage of opportunities to learn new skills and develop strengths • Show commitment to achieving challenging goals • Examine and reflect on own performance • Seek and respond positively to constructive feedback and guidance	Adept

		• Demonstrate and maintain a high level of personal motivation	
	Communicate Effectively Communicate clearly, actively listen to others, and respond with understanding and respect	• Tailor communication to diverse audiences • Clearly explain complex concepts and arguments to individuals and groups • Create opportunities for others to be heard, listen attentively and encourage them to express their views • Share information across teams and units to enable informed decision making • Write fluently in plain English and in a range of styles and formats • Use contemporary communication channels to share information, engage and interact with diverse audiences	Adept
	Work Collaboratively Collaborate with others and value their contribution	• Encourage a culture that recognises the value of collaboration • Build cooperation and overcome barriers to information sharing and communication across teams and units • Share lessons learned across teams and units • Identify opportunities to leverage the strengths of others to solve issues and develop better processes and approaches to work • Actively use collaboration tools, including digital technologies, to engage diverse audiences in solving problems and improving services	Adept
	Think and Solve Problems Think, analyse and consider the broader context to develop practical solutions	• Research and apply critical-thinking techniques in analysing information, identify interrelationships and make recommendations based on relevant evidence • Anticipate, identify and address issues and potential problems that may have an impact on organisational objectives and the user experience • Apply creative-thinking techniques to generate new ideas and options to address issues and improve the user experience • Seek contributions and ideas from people with diverse backgrounds and experience • Participate in and contribute to team or unit initiatives to resolve common issues or barriers to effectiveness • Identify and share business process improvements to enhance effectiveness	Adept
	Technology Understand and use available technologies to maximise efficiencies and effectiveness	• Identify opportunities to use a broad range of technologies to collaborate • Monitor compliance with cyber security and the use of technology policies	Adept

  Business Enablers		• Identify ways to maximise the value of available technology to achieve business strategies and outcomes • Monitor compliance with the organisation's records, information and knowledge management requirements	
	Project Management Understand and apply effective planning, coordination and control methods	• Understand all components of the project management process, including the need to consider change management to realise business benefits • Prepare clear project proposals and accurate estimates of required costs and resources • Establish performance outcomes and measures for key project goals, and define monitoring, reporting and communication requirements • Identify and evaluate risks associated with the project and develop mitigation strategies • Identify and consult stakeholders to inform the project strategy • Communicate the project's objectives and its expected benefits • Monitor the completion of project milestones against goals and take necessary action • Evaluate progress and identify improvements to inform future projects	Adept

Complementary capabilities

Complementary capabilities are also identified from the Capability Framework and relevant occupation-specific capability sets. They are important to identifying performance required for the role and development opportunities.

Note: capabilities listed as 'not essential' for this role are not relevant for recruitment purposes however may be relevant for future career development.

COMPLEMENTARY CAPABILITIES

Capability group/sets	Capability name	Description	Level
Personal Attributes	Display Resilience and Courage	Be open and honest, prepared to express your views, and willing to accept and commit to change	Intermediate
	Act with Integrity	Be ethical and professional, and uphold and promote the public sector values	Intermediate
	Value Diversity and Inclusion	Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives	Intermediate
Relationships	Commit to Customer Service	Provide customer-focused services in line with public sector and organisational objectives	Intermediate
	Influence and Negotiate	Gain consensus and commitment from others, and resolve issues and conflicts	Intermediate
Results	Deliver Results	Achieve results through the efficient use of resources and a commitment to quality outcomes	Intermediate
	Plan and Prioritise	Plan to achieve priority outcomes and respond flexibly to changing circumstances	Intermediate
	Demonstrate Accountability	Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines	Intermediate
Business Enablers	Finance	Understand and apply financial processes to achieve value for money and minimise financial risk	Intermediate
	Procurement and Contract Management	Understand and apply procurement processes to ensure effective purchasing and contract performance	Intermediate

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