

Role Description

(Non-Manager)



Our purpose – Helping South Australians Conserve, Sustain and Prosper.

Role Title: Senior Ecological Modeller

Division: Biodiversity and Nature Economy

Classification Level: PO3

Branch/Unit: Biodiversity Science, Coasts and Information / Environmental Science and Research Partnerships

CHRIS Position Number: NEW

Reports to (Title): Team Leader and Principal Advisor Ecosystem and Landscape Analytics

About the Agency – [Department for Environment and Water](#)

About the Role

The Senior Ecological Modeller undertakes quantitative ecological modelling and data analyses, and provides professional ecological advice and services to inform environmental decision making in South Australia. The role develops and maintains strong partnerships both within and outside the Agency, to inform planning, implementation and evaluation of DEW policy and programs that require ecological input. The role requires a sound and broad understanding of applied conservation and restoration ecology and prioritisation. The role also undertakes priority environmental projects and analyses as required.

Key Role Outcomes

- Environmental policy, planning and management decisions in DEW are informed by appropriate ecological analysis, delivered in a timely and appropriate way to support these decisions.
- Ecological analysis is undertaken in partnership with relevant internal and external stakeholders.
- Agreed work programs are planned, delivered and implemented in a manner that is timely, efficient, collaborative and fit-for-purpose.
- Team and organisational goals are achieved through the provision of quality professional services in accordance with established frameworks and approaches.

Essential Criteria (including qualifications)

[Must be addressed by candidates in written application letter (max 3 pages) in addition to CV unless advertisement advises otherwise]

- A degree in environment, conservation or related Natural Resource Management discipline, and relevant higher qualification(s) or extensive relevant discipline experience is essential.
- In-depth knowledge and experience in the provision of fit-for-purpose, collaborative and applied ecological science that supports the planning, delivery and evaluation of environmental programs and projects.
- High level skills in the collation, management and analysis of large datasets, and in quantitative ecological modelling to inform conservation and restoration planning and prioritisation (including demographic modelling, population assessments, species distributions and trends, habitat and impact assessments, threat evaluation, and statistically robust survey designs).

- High level skills and experience in the use of statistical analysis, modelling tools (particularly R and Python), as well as GIS software.
- Proven experience in project/program management including planning, executing, monitoring and reviewing, using project management methodologies.
- Experience in developing and maintaining strong partnerships and collaborations with diverse stakeholders, to achieve mutual outcomes.
- Demonstrates good communication skills (verbal and written) in applied ecological science.

Key Relationships/Interactions

- Establishes and maintains close working relationships with Principal Scientists, Senior Ecologists, other modelling/data scientists and relevant stakeholders within DEW, as well as relevant staff from other DEW Regions and Branches.
- Liaises and links in with Universities and Research institutions involved in the production of ecological science and knowledge that can be applied to landscape, ecosystem and species conservation and restoration planning and prioritisation in SA.

Special Conditions

- May be required to participate in responses to state emergencies or associated duties.
- You must be an Australian citizen, permanent resident, or provide evidence that you hold a valid working visa that allows you to work in Australia without restrictions.
- A current class “C” driver’s licence and willingness to undertake 4wd training is essential.
- May be required to undertake intra or interstate travel, occasional overnight absences, and work outside of the normal hours of work.

Core Competencies	Elements	Behavioural Indicators
Shapes Strategic Thinking and changes	• Thinking and Acting Strategically	• Makes strategic judgements and presents options based on implications of analytical thinking.
Achieves Results	• Delivering effective outcomes • Makes decisions	• Sets priorities for self and manages workflow in order to achieve outcomes on time. • Evaluates impact and consequences of taking a particular course of action, taking into account stakeholder concerns as well as the impact across the Agency.
Drives Business Excellence	• Facilitating Quality and Continuous Improvement	• Recognises problems as opportunities for improvement and facilitates discussion and/or development of processes to address these.
Forges Relationships and Engages Others	• Establishing and Maintaining Networks • Communicating and managing Conflict	• Builds collaborative relationships based on an understanding of stakeholder priorities/objectives. • Clearly communicates own perspective frankly and diplomatically on an issue.

Exemplifies Personal Drive and Professionalism	• Displaying Flexibility and Resilience • Demonstrating Commitment to Learning and Development	• Engages positively with ambiguous situations and demonstrates flexibility in thinking. • Balances competing demands in a calm manner. • Keeps up to date with relevant trends/developments. • Extends own knowledge base through a range of mechanisms suited to their learning style.
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Work Health and Safety

Participate in workplace safety procedures and programs

- Leads and/or participates in health and safety discussions in the workplace.
- Identifies hazards, assesses risks and implements procedures for controlling risks.
- Provides workplace safety information and advice where relevant.
- Applies procedures for dealing with incidents and emergency events as required.

Corporate Responsibilities

- Demonstrate appropriate and professional workplace behaviours that are in line with the [Code of Ethics](#) and the [South Australian Public Sector Values](#).
- Maintain a commitment to Equal Employment Opportunity, Diversity, Ethical Conduct, and record keeping within legislative requirements, according to the principles of the *Public Sector Act 2009*.
- Exhibit and promote the behaviours in line with *The way we work* outlined in the [DEW Corporate Plan](#).
- Actively participate in the Department's Performance Review and Development Program.
- Demonstrate appropriate and professional workplace behaviours that align closely with the White Ribbon message.
- Champion positive behaviours and conduct during all interactions with children and young people and act in accordance with the Child Safe Environment Policy and Procedure at all times.

Date Delegate approved original classification:	23 June 2026	Original Class method:	Comparison
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