

Role Description

Ecohydrologist



Planning,
Industry &
Environment

| | |
|---------------------------|-----------------------------------------------------------------------|
| Cluster | Planning, Industry & Environment |
| Agency | Department of Planning, Industry & Environment |
| Division/Branch/Unit | Water / Policy, Planning & Science / Water Science |
| Location | Negotiable |
| Classification/Grade/Band | DPO 2-3 |
| Role Number | 51025347 |
| ANZSCO Code | 234411 |
| PCAT Code | 1119192 |
| Date of Approval | September 2019 |
| Agency Website | https://www.dpie.nsw.gov.au |

Agency overview

The Planning, Industry and Environment Cluster was formed in 2019. The Cluster drives greater levels of integration and efficiency across key areas such as long-term planning, precincts, housing, property, infrastructure priorities, open space, the environment, our natural resources – land, water, mining – energy, and growing our industries. There is a strong emphasis on regional NSW.

Primary purpose of the role

Plan and undertake analysis of hydrology influences on aquatic ecology in rivers and the riparian zone including design, and analysis using statistical and simulation techniques for the purpose of informing water management policy and planning in NSW.

Key accountabilities

- Plan and undertake investigation and analysis in the area of ecohydrology or water quality to provide data and information to inform water management outcomes
- Critically analyse, interpret and communicate results from hydrologic or water quality studies as they relate to river health, flow monitoring and evaluation techniques to provide reliable and accurate information on which policy can be developed
- Liaise and work with stakeholders and the community to enhance knowledge and understanding of the application of developments in ecohydrology to contemporary water resource management
- Contribute to the development and implementation of ecological, hydrological or water quality management strategies to contribute to the continual improvement of water resource management.
- Research and review guidelines, manuals, courses and other support materials to inform technology developments in ecology, hydrology and communication of scientific information to enhance knowledge transfer.
- Participate in single and multidisciplinary project teams to deliver timely water resource management outcomes

Key challenges

- Delivering fit for purpose scientific information and models within the timelines available given the high level of demand for services for a range of aquatic ecology or water quality investigations relating to water resource management
- Translating complex scientific and technical concepts into simplified language to enable clear and concise report developments and implementation of analysis
- Working in an area which is complex due to changing technical, policy and scientific developments to process, critically analyse, interpret and report results in a manner that will clearly inform stakeholders.

Key relationships

| Who | Why |
|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Internal | |
| Lead Ecohydrologist or Lead Water Quality and Science Support | <ul style="list-style-type: none">• Receive guidance and direction on specific tasks.• Provide regular updates on projects and assessment activities |
| Manager Water Science Programs | <ul style="list-style-type: none">• Receive guidance and direction on work program and priorities |
| External | |
| State and federal government agencies, Authorities and inter- governmental entities | <ul style="list-style-type: none">• Provide timely advice to ensure water eco-hydrology issues are appropriately considered across all portfolios |
| Water providers, peak bodies and other stakeholders | <ul style="list-style-type: none">• Provision of information and advice to promote informed communities |

Role dimensions

Decision making

This role independently plans and sets priorities for work to be completed and manages the day to day workload within agreed work and project plans. It exercises discretion in preparing briefings and other forms of written advice and refers to the manager decisions that require a change to programs or projects or where a higher level of delegation is required.

Reporting line

Lead Ecohydrologist

Direct reports

Nil

Budget/Expenditure

TBA

Essential requirements





- Appropriate degree level qualifications in ecology, hydrology, Engineering, Natural Resources, Environmental Science, geomorphology or a related discipline. Sound working knowledge of Government's natural resource management policies.
- Understanding of the use of hydrology or other relevant models to assess changes to aquatic ecology as a result of changes to water access
- Experience in assessing the suitability of hydrologic and hydraulic model outputs for natural resource management requirements

Capabilities for the role

The NSW Public Sector Capability Framework applies to all NSW public sector employees. The Capability Framework is available at www.psc.nsw.gov.au/capabilityframework

Capability summary

Below is the full list of capabilities and the level required for this role. The capabilities in bold are the focus capabilities for this role. Refer to the next section for further information about the focus capabilities.

| NSW Public Sector Capability Framework | | |
|----------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------|
| Capability Group | Capability Name | Level |
|  Personal Attributes | Display Resilience and Courage | Intermediate |
| | Act with Integrity | Adept |
| | Manage Self | Adept |
| | Value Diversity | Intermediate |
|  Relationships | Communicate Effectively | Adept |
| | Commit to Customer Service | Intermediate |
| | Work Collaboratively | Intermediate |
| | Influence and Negotiate | Adept |
|  Results | Deliver Results | Intermediate |
| | Plan and Prioritise | Intermediate |
| | Think and Solve Problems | Adept |
| | Demonstrate Accountability | Intermediate |
|  Business Enablers | Finance | Intermediate |
| | Technology | Adept |
| | Procurement and Contract Management | Intermediate |
| | Project Management | Adept |

Focus capabilities

The focus capabilities for the role are the capabilities in which occupants must demonstrate immediate competence. The behavioural indicators provide examples of the types of behaviours that would be expected at that level and should be reviewed in conjunction with the role's key accountabilities.

NSW Public Sector Capability Framework

| Group and Capability | Level | Behavioural Indicators |
|----------------------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal Attributes Act with Integrity | Adept | <ul style="list-style-type: none"> • Represent the organisation in an honest, ethical and professional way and encourage others to do so • Demonstrate professionalism to support a culture of integrity within the team/unit • Set an example for others to follow and identify and explain ethical issues • Ensure that others understand the legislation and policy framework within which they operate • Act to prevent and report misconduct, illegal and inappropriate behaviour |
| Personal Attributes Manage Self | Adept | <ul style="list-style-type: none"> • 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 • Demonstrate a high level of personal motivation |
| Relationships Communicate Effectively | Adept | <ul style="list-style-type: none"> • Tailor communication to the audience • Clearly explain complex concepts and arguments to individuals and groups • Monitor own and others' non-verbal cues and adapt where necessary • Create opportunities for others to be heard • Actively listen to others and clarify own understanding • Write fluently in a range of styles and formats |
| Relationships Commit to Customer Service | Intermediate | <ul style="list-style-type: none"> • Support a culture of quality customer service in the organisation • Demonstrate a thorough knowledge of the services provided and relay to customers • Identify and respond quickly to customer needs • Consider customer service requirements and develop solutions to meet needs • Resolve complex customer issues and needs • Co-operate across work areas to improve outcomes for customers |
| Results Think and Solve Problems | Adept | <ul style="list-style-type: none"> • Research and analyse information, identify interrelationships and make recommendations based on relevant evidence • Anticipate, identify and address issues and potential problems and select the most effective solutions from a range of option • Participate in and contribute to team/unit initiatives to resolve common issues or barriers to effectiveness • Identify and share business process improvements to enhance effectiveness |
| Results Demonstrate Accountability | Intermediate | <ul style="list-style-type: none"> • Take responsibility and be accountable for own actions • Understand delegations and act within authority levels • Identify and follow safe work practices, and be vigilant about |

NSW Public Sector Capability Framework

| Group and Capability | Level | Behavioural Indicators |
|------------------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Business Enablers Project Management | Adept | their application by self and others <ul style="list-style-type: none"> • Be alert to risks that might impact the completion of an activity and escalate these when identified • Use financial and other resources responsibly |
| | | <ul style="list-style-type: none"> • Prepare clear project proposals and define scope and goals in measurable terms • Establish performance outcomes and measures for key project goals, and define monitoring, reporting and communication requirements • Prepare accurate estimates of costs and resources required for more complex projects • Communicate the project strategy and its expected benefits to others • Monitor the completion of project milestones against goals and initiate amendments where necessary • Evaluate progress and identify improvements to inform future projects |