

# Role Description

## Senior Hydrologist



Planning,  
Industry &  
Environment

Cluster	Planning, Industry & Environment
Agency	Department of Planning, Industry & Environment
Division/Branch/Unit	Water / Water Allocations
Location	Location Parramatta/Negotiable
Classification/Grade/Band	DPO 4-5
ANZSCO Code	234999
PCAT Code	1119192
Date of Approval	2016 (updated July 2019)
Agency Website	<a href="https://www.industry.nsw.gov.au">https://www.industry.nsw.gov.au</a>

### Agency overview

The Planning, Industry and Environment Cluster brings together the functions from the former Planning & Environment and Industry Clusters.

The new Cluster will drive for 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. In particular, there will be a redoubling of emphasis on regional NSW.

### The primary purpose of the role

You will lead the development and implementation of surface water assessments that direct the allocation of available water to water users. Use of information systems and planning models, also technical innovation in implementing new modeling frameworks, will also underpin the high level technical hydrologic advice you provide to support the policy and planning functions of the department.

### Key accountabilities

- Provide specialist expert advice in hydrology to provide a sound basis for the development of water management planning and policy.
- Provide strategic advice on model usage and hydrology technological development to enable the continual improvement of methods and models.
- Research and apply hydrologic techniques which address policy gaps, inconsistencies, and implementation obstacles.
- Lead, manage and participate in large, complex single and multi-disciplinary projects, contracts and teams to deliver water planning models and modeled outcomes.
- Liaise and work with stakeholders and the community to enhance knowledge and understanding of the application of hydrology and hydraulics to contemporary water resource management issues.
- Research, review and develop guidelines, manuals, courses, and other support materials to contribute to underpinning the continuing development of knowledge and skills across DPIE Water.

- Lead, manage and participate in internal and external research, technology transfer, and other projects to contribute to the continual development of knowledge in hydrology.
- Oversight the preparation of quality evidence-based written reports and correspondence.

## Key challenges

- Taking a leading role in hydrology and the application of water resource assessments and modeling, in a complex, challenging and technical, policy and scientific environment.
- Maintaining a good knowledge of the priorities and strategic directions of Government for water reform and planning to enable the effective targeting of activities and interpretation of outcomes.
- Contributing to the development of policies, strategies, and programs that balance complex and multiple issues with sensitivity to a range of stakeholder interests, resource requirements, and service delivery impacts.

## Key relationships

Who	Why
<b>Internal</b>	
Manager Water Allocation	<ul style="list-style-type: none"> <li>• Work collaboratively on hydrological and hydraulic projects, providing expert advice to guide modeling projects</li> <li>• Communicate and discuss project management and progress</li> <li>• Day to day administrative management</li> </ul>
Team Members	<ul style="list-style-type: none"> <li>• Provide specialist hydrologic advice and evaluation input to multi-disciplinary projects</li> <li>• Provide advice and guidance and share information to develop team capability</li> </ul>
Other Branches	<ul style="list-style-type: none"> <li>• Provide expert advice and products to meet the business needs of other branches</li> </ul>
<b>External</b>	
Water NSW	<ul style="list-style-type: none"> <li>• Provide expert input to water management issues as the agency responsible for operating NSW storages.</li> <li>• Promote effective interagency liaison regarding water management issues.</li> </ul>
Murray Darling Basin Authority	<ul style="list-style-type: none"> <li>• Provide technical input to water management issues as the agency with interest in reviewing and implementation of NSW models.</li> <li>• Promote effective interagency liaison regarding water management modeling issues.</li> </ul>
Other state agencies	<ul style="list-style-type: none"> <li>• Act as a key point of contact and liaise with other agencies to ensure coordinated data collection and analysis, and input into risk analysis</li> </ul>

## Role dimensions

### Decision making

- Prioritises and manages the delivery of water resource assessment and analysis projects for policy and planning, in consultation with stakeholders and the Manager.

- Collaboratively plans and sets priorities for work to be undertaken by project team members, managing workload within agreed work and project plans.
- Provides independent expert advice on hydrologic issues to other teams and management

### Reporting line

Manager Water Allocation

### Direct reports

Nil

### Budget/Expenditure

N/A

### Essential requirements

- Appropriate degree level qualifications in, Engineering, Natural Resources, Environmental Science, or a related discipline
- Knowledge and experience of the strengths and limitations of integrated hydrologic and/or hydraulic models and data, and in critically evaluating model results
- Extensive knowledge and experience in one or more of the following hydrologic disciplines: water resources management modeling, catchment hydrology, and related processes, wetland hydrology, statistics in hydrology, and application of spatial analytical techniques
- Sound working knowledge of the NSW Government's natural resource management agenda

### 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](http://www.psc.nsw.gov.au/capabilityframework)

This role also utilises an occupation-specific capability set which contains information from the Skills Framework for Information Age (SFIA). The capability set is available at [www.psc.nsw.gov.au/capabilityframework/ICT](http://www.psc.nsw.gov.au/capabilityframework/ICT)

### 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
	<b>Act with Integrity</b>	<b>Intermediate</b>
	Manage Self	Adept
	Value Diversity	Intermediate
 Relationships	<b>Communicate Effectively</b>	<b>Adept</b>
	<b>Commit to Customer Service</b>	<b>Intermediate</b>
	Work Collaboratively	Adept
	Influence and Negotiate	Intermediate
 Results	Deliver Results	Adept
	<b>Plan and Prioritise</b>	<b>Intermediate</b>
	Think and Solve Problems	Adept
	<b>Demonstrate Accountability</b>	<b>Intermediate</b>
 Business Enablers	Finance	Intermediate
	Technology	Adept
	Procurement and Contract Management	Intermediate
	<b>Project Management</b>	<b>Adept</b>

### 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
<b>Personal Attributes</b> Act with Integrity	Intermediate	<ul style="list-style-type: none"> <li>• Represent the organisation in an honest, ethical and professional way</li> <li>• Support a culture of integrity and professionalism</li> <li>• Understand and follow legislation, rules, policies, guidelines, and codes of conduct</li> <li>• Help others to understand their obligations to comply with legislation, rules, policies, guidelines, and codes of conduct</li> <li>• Recognise and report misconduct, illegal or inappropriate behaviour</li> <li>• Report and manage apparent conflicts of interest</li> </ul>
<b>Relationships</b> Communicate Effectively	Adept	<ul style="list-style-type: none"> <li>• Tailor communication to the audience</li> <li>• Clearly explain complex concepts and arguments to individuals and groups</li> <li>• Monitor own and others' non-verbal cues and adapt where necessary</li> </ul>

## NSW Public Sector Capability Framework

Group and Capability	Level	Behavioural Indicators
<b>Relationships</b> Commit to Customer Service	Intermediate	<ul style="list-style-type: none"> <li>• Create opportunities for others to be heard</li> <li>• Actively listen to others and clarify own understanding</li> <li>• Write fluently in a range of styles and formats</li> </ul>
<b>Results</b> Plan and Prioritise	Intermediate	<ul style="list-style-type: none"> <li>• Support a culture of quality customer service in the organisation</li> <li>• Demonstrate a thorough knowledge of the services provided and relay to customers</li> <li>• Identify and respond quickly to customer needs</li> <li>• Consider customer service requirements and develop solutions to meet needs</li> <li>• Resolve complex customer issues and needs</li> <li>• Co-operate across work areas to improve outcomes for customers</li> </ul>
<b>Results</b> Demonstrate Accountability	Intermediate	<ul style="list-style-type: none"> <li>• Understand the team/unit objectives and align operationally activities accordingly</li> <li>• Initiate, and develop team goals and plans and use feedback to inform future planning</li> <li>• Respond proactively to changing circumstances and adjust plans and schedules when necessary</li> <li>• Consider the implications of immediate and longer-term organisational issues and how these might impact on the achievement of team/unit goals</li> <li>• Accommodate and respond with initiative to changing priorities and operating environments</li> </ul>
<b>Business Enablers</b> Project Management	Adept	<ul style="list-style-type: none"> <li>• Take responsibility and be accountable for own actions</li> <li>• Understand delegations and act within authority levels</li> <li>• Identify and follow safe work practices, and be vigilant about their application by self and others</li> <li>• Be alert to risks that might impact the completion of an activity and escalate these when identified</li> <li>• Use financial and other resources responsibly</li> <li>• Prepare clear project proposals and define scope and goals in measurable terms</li> <li>• Establish performance outcomes and measures for key project goals, and define monitoring, reporting and communication requirements</li> <li>• Prepare accurate estimates of costs and resources required for more complex projects</li> <li>• Communicate the project strategy and its expected benefits to others</li> <li>• Monitor the completion of project milestones against goals and initiate amendments where necessary</li> <li>• Evaluate progress and identify improvements to inform future projects</li> </ul>