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| **Cluster** | Planning, Industry & Environment |
| **Agency** | Department of Planning, Industry & Environment |
| **Division/Branch/Unit** | Water |
| **Location** | Parramatta/ Negotiable |
| **Classification/Grade/Band** | DPO 4-5 |
| **ANZSCO Code** | 234999 |
| **PCAT Code** | 1119192 |
| **Date of Approval** | 2016 (updated 9 February 2021; July 2021) |
| **Agency Website** | [www.dpie.nsw.gov.au](http://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 Water Group leads the NSW Government in providing confidence to communities and stakeholders with the transparent stewardship of water resources, provision of services and reforms that support sustainable and healthy environments, economies and societies across NSW.

Primary purpose of the role

This role provides specialist expertise and undertakes regarding hydrologic and hydraulic analysis using statistical and model simulation techniques for the purpose of informing water management policy and planning in NSW.

# Key accountabilities

* Project manages and contributes to the planning and coordination of investigations and analysis of hydrology and hydraulics project data sets to inform water management outcomes.
* Critically analyse, interpret, and communicate results from hydrologic and/or hydraulic models and/or other hydrologic analysis 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 hydrology and hydraulics to contemporary water resource management issues.
* Share and transfer specialist knowledge, expertise and skills to pertaining to water modelling to staff and external clients.
* Provide expert advice to inform the development and implementation of hydrologic and/or hydraulic models and/or other hydrologic analysis techniques to contribute to the continual improvement of techniques.
* Contribute to technology and knowledge transfer on hydrology technological development by developing and reviewing review guidelines, manuals, courses and other support materials.
* As a member of various sized single and multidisciplinary projects and teams, plan, undertake and deliver projects to which provide evidence for water management planning and policy.

Key challenges

* Delivering fit for purpose hydrologic and hydraulic models within the timelines available given the high level of demand for services for a range of hydrologic investigations relating to water resource management purposes.
* Maintaining and applying expertise of current water modelling and hydrologic and hydraulic methodologies and practices, ensuring continuity of current knowledge within the team, across DPI Water, and informing stakeholders and clients
* 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** |  |
| Manager, project lead | * Receive guidance and direction from project lead responsible for supervising and reviewing work program. |
| **External** |  |
| Water NSW | * Provide technical input to water management issues as the agency responsible for operating NSW storages. * Promote effective interagency liaison regarding water management issues. |
| Murray Darling Basin Authority, other government agencies | * Provide technical input to water management issues as the agency with interest in reviewing and implementation of NSW models. * Promote effective interagency liaison regarding water management modelling issues. |

# Role dimensions

## Decision making

* Plans and sets priorities for team work to be completed managing the day to day workload independently within agreed work and project plans.
* Recommends changes to work procedures and operating processes and systems.
* May be required to guide and supervise staff assigned to assist with project activities.
* Refers to the Manager. on matters to agree on a suitable way forward

## Reporting line

Reports to Manager Water Modelling

## Direct reports

Nil

## Budget/Expenditure

N/A

Essential requirements

* Degree level qualifications in Engineering, Natural Resources, Environmental Science, or a related discipline.
* Extensive experience in one or more of the following hydrologic disciplines: water resources management modelling, catchment process modelling, statistics, computer programming, application of spatial modelling, open channel hydraulics.
* 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](https://www.psc.nsw.gov.au/workforce-management/capability-framework/the-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.

| FOCUS CAPABILITIES | | | | |
| --- | --- | --- | --- | --- |
| **Capability group/sets** | **Capability name** |  | **Behavioural indicators** | **Level** |
|  | **Act with Integrity**  Be ethical and professional, and uphold and promote the public sector values | | Represent the organisation in an honest, ethical and professional way  Support a culture of integrity and professionalism  Understand and help others to recognise their obligations to comply with legislation, policies, guidelines and codes of conduct  Recognise and report misconduct and illegal and inappropriate behaviour  Report and manage apparent conflicts of interest and encourage others to do so | Intermediate |
| **Manage Self**  Show drive and motivation, an ability to self-reflect and a commitment to learning | | Adapt existing skills to new situations  Show commitment to achieving work goals  Show awareness of own strengths and areas for growth, and develop and apply new skills  Seek feedback from colleagues and stakeholders  Stay motivated when tasks become difficult | Intermediate |
|  | **Commit to Customer Service**  Provide customer-focused services in line with public sector and organisational objectives | | Focus on providing a positive customer experience  Support a customer-focused culture in the organisation  Demonstrate a thorough knowledge of the services provided and relay this knowledge 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  Cooperate across work areas to improve outcomes for customers | Intermediate |
| **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 | | Undertake objective, critical analysis to draw accurate conclusions that recognise and manage contextual issues  Work through issues, weigh up alternatives and identify the most effective solutions in collaboration with others  Take account of the wider business context when considering options to resolve issues  Explore a range of possibilities and creative alternatives to contribute to system, process and business improvements  Implement systems and processes that are underpinned by high-quality research and analysis  Look for opportunities to design innovative solutions to meet user needs and service demands  Evaluate the performance and effectiveness of services, policies and programs against clear criteria | Advanced |
| **Demonstrate Accountability**  Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines | | Assess work outcomes and identify and share learnings to inform future actions  Ensure that own actions and those of others are focused on achieving organisational outcomes  Exercise delegations responsibly  Understand and apply high standards of financial probity with public monies and other resources  Identify and implement safe work practices, taking a systematic risk management approach to ensure own and others’ health and safety  Conduct and report on quality control audits  Identify risks to successfully achieving goals, and take appropriate steps to mitigate those risks | Adept |
|  | **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** |
|  | Display Resilience and Courage | | Be open and honest, prepared to express your views, and willing to accept and commit to change | Intermediate |
| Value Diversity and Inclusion | | Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives | Intermediate |
|  | Communicate Effectively | | Communicate clearly, actively listen to others, and respond with understanding and respect | Adept |
| Influence and Negotiate | | Gain consensus and commitment from others, and resolve issues and conflicts | Intermediate |
|  | 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 |
|  | Finance | | Understand and apply financial processes to achieve value for money and minimise financial risk | Intermediate |
| Technology | | Understand and use available technologies to maximise efficiencies and effectiveness | Intermediate |
| Procurement and Contract Management | | Understand and apply procurement processes to ensure effective purchasing and contract performance | Intermediate |