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| **Cluster** | Planning, Industry & Environment |
| **Agency** | Department of Planning, Industry & Environment |
| **Division/Branch/Unit** | Water |
| **Location** | Negotiable |
| **Classification/Grade/Band** | DPO 2-3 |
| **Role Family** | Standard/Science & Engineering/Support |
| **ANZSCO Code** | 234999 |
| **PCAT Code** | 1119192 |
| **Date of Approval** | September 2019 (updated 9 February 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 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

Plan and undertake hydrologic and hydraulic analysis using data analysis, and statistical techniques to calculate the current water availability to inform water allocation and management policy and planning for NSW.

# Key accountabilities

* Plan and undertake hydrology and hydraulics analysis of water movement, rainfall and water yield to inform water allocation, water storage and water usage across the state
* Undertake the analysis of water flow and rainfall data providing insight into predictive water planning, drought management, predicting potential water storage and allocation
* Manage and manipulate large data sets, estimating water yields, taking into account the utilisation of water in a specific natural drainage areas ('catchment's) to inform the development of water policy and plans
* 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.
* Research and review guidelines, manuals, courses and other support materials to contribute to technology transfer on hydrology technological development and contribute to the continual improvement of techniques.
* 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 datasets within the timelines available given the high level of demand for services for a range of hydrologic investigations relating to water resource management purposes.
* Translating complex scientific and technical concepts into simplified language to enable clear and concise report development 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 and Senior Hydrologist | * Receive guidance and direction from Project Managers responsible for supervising and reviewing work program. |
| Manager, Water Allocations | * Direct line manager responsible for setting the work program and priorities. |
| Director, Water Planning Implementation | * Provide information as Director responsible for all operational management of allocation and implementation activities. |
| **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 | * 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

* Independently plans and sets priorities for 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.
* Manages the delivery of individual projects under the guidance of the manager
* Drafts reports, briefs and other work for review by the manager; and decides the scope, content and format of information.
* May be required to guide and supervise staff assigned to assist with project activities.
* Decisions are made in the context of best management practice in developing and implementing water management model and analytical techniques.
* All decisions in this regard are made in consultation with the Project Manager and Manager

## Reporting line

Reports to Manager, Water Allocations

## Direct reports

Nil

## Budget/Expenditure

N/A

Key knowledge and experience

* Knowledge and experience in one or more of the following hydrologic disciplines: water resources management and water allocation, statistics, computer programming, spatial modelling, open channel hydraulics.
* Awareness of the strengths and limitations of relevant analytical techniques and data management.
* Experience in assessing the suitability of hydrologic and hydraulic datasets, data analysis and outputs for natural resource management requirements.
* Knowledge of the NSW Government's natural resource management agenda.

Essential requirements

* Degree level qualifications in Engineering, Natural Resources, Environmental Science, or a related discipline.

# 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 |
|  | **Communicate Effectively**  Communicate clearly, actively listen to others, and respond with understanding and respect | | Focus on key points and speak in plain English  Clearly explain and present ideas and arguments  Listen to others to gain an understanding and ask appropriate, respectful questions  Promote the use of inclusive language and assist others to adjust where necessary  Monitor own and others’ non-verbal cues and adapt where necessary  Write and prepare material that is well structured and easy to follow  Communicate routine technical information clearly | Intermediate |
| **Commit to Customer Service**  Provide customer-focused services in line with public sector and organisational objectives | | Recognise the importance of customer service and understanding customer needs  Help customers understand the services that are available  Take responsibility for delivering services that meet customer requirements  Keep customers informed of progress and seek feedback to ensure their needs are met  Show respect, courtesy and fairness when interacting with customers  Recognise that customer service involves both external and internal customers | Foundational |
|  | **Plan and Prioritise**  Plan to achieve priority outcomes and respond flexibly to changing circumstances | | Understand the team and unit objectives and align operational activities accordingly  Initiate and develop team goals and plans, and use feedback to inform future planning  Respond proactively to changing circumstances and adjust plans and schedules when necessary  Consider the implications of immediate and longer-term organisational issues and how these might affect the achievement of team and unit goals  Accommodate and respond with initiative to changing priorities and operating environments | Intermediate |
| **Demonstrate Accountability**  Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines | | Take responsibility for own actions  Be aware of delegations and act within authority levels  Be aware of team goals and their impact on work tasks  Follow safe work practices and take reasonable care of own and others’ health and safety  Escalate issues when these are identified  Follow government and organisational record-keeping requirements | Foundational |
|  | **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 |
| Manage Self | | Show drive and motivation, an ability to self-reflect and a commitment to learning | Intermediate |
| Value Diversity and Inclusion | | Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives | Foundational |
|  | Work Collaboratively | | Collaborate with others and value their contribution | Intermediate |
| Influence and Negotiate | | Gain consensus and commitment from others, and resolve issues and conflicts | Foundational |
|  | Deliver Results | | Achieve results through the efficient use of resources and a commitment to quality outcomes | Intermediate |
| Think and Solve Problems | | Think, analyse and consider the broader context to develop practical solutions | Intermediate |
|  | Finance | | Understand and apply financial processes to achieve value for money and minimise financial risk | Foundational |
| 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 | Foundational |