

# Position Description



## Applied Hydrology Manager

**Business Unit:** Water and Catchment Protection

**Reporting to:** Manager Water Modelling & Advice

### Position Purpose

To lead a team of technical hydrology specialists, to deliver timely and accurate hydrological and hydraulic planning investigations, studies and related advice, in accordance with regulatory requirements, and drive excellence in safety.

### Key Accountabilities

1. **Safety:** ensure all activities are undertaken with the safety of our people as the number one priority and always role model safe behaviour.
2. **Values:** behave and make decisions in accordance with the WaterNSW Values at all times.
3. **Leadership:** delivering strategic priorities and developing the culture, capability and performance of our people.
4. Oversee the delivery of complex hydrology and hydraulic studies, including Probable Maximum Flood estimation and extreme flood studies in the assessment of spillway adequacy, dam break studies, flood mapping and operation, water delivery, and emergency procedures and consequence assessments to assist in meeting legal, regulatory and business requirements.
5. Provide high level expert hydrologic advice and support for activities across WaterNSW, including system planning, water delivery, flood and emergency operations and capital works projects; to ensure hydrologic factors are well understood and managed with acceptable risk.

### Key Challenges

- Sound judgement on the use of complex hydraulic/hydrologic engineering applications at their limitations
- Quality assurance of hydrologic/hydraulic information provided for high impact decisions
- Application of state of art technologies on computing for modelling

## Significant Internal Relationships

Stakeholder	Purpose of Relationship
Dam safety team	Provide dam break modelling studies for Portfolio Risk Assessment. Review of Probable maximum Flood studies
Operations	Provide advice on Flood Management Procedures
Projects	Review of application of hydrologic/hydraulic data for designs

Only nominate key internal relationships or groups of employees (ie field based teams) outside of the immediate team with whom this person will have significant regular contact.

## Significant External Relationships

Stakeholder	Purpose of Relationship
n/a	

Only nominate external relationships where this person will be the primary point of contact. Identify at who or at what level the person will be the primary point of contact if not the whole organisation.

## Delegations, Financial Accountabilities & Freedom to Act

As defined in the WaterNSW Financial Delegations as varied from time to time.

## WaterNSW Leadership & Performance Competencies

People	Level	
Coaching and Developing Others	B	<ul style="list-style-type: none"> <li>Supports individual development in line with career aspirations and business requirements</li> <li>Challenges others to achieve their full potential</li> <li>Actively listens to others</li> <li>Supports others to establish meaningful goals</li> <li>Asks questions to create awareness and encourage self-directed problem solving</li> </ul>

Driving Performance	B	<ul style="list-style-type: none"> <li>Ensures the team has the capability and resources required to undertake work effectively</li> <li>Monitors team's progress in achieving goals; takes action to keep the team on track and recognise achievements</li> <li>Works with team members to develop SMART goals</li> <li>Listens to and involves others in team decisions and actions; values and utilises individual differences and talent</li> </ul>
Managing Change	B	<ul style="list-style-type: none"> <li>Understands risks and opportunities of change and is able to take action to ensure the change is successful</li> <li>Understands the range of reactions to change and actively manages these</li> <li>Identifies and addresses stakeholder resistance to change</li> <li>Communicates key information and wider reasons for change</li> <li>Gains stakeholder support and generates enthusiasm about change</li> </ul>

Customer	Level	
Partnering & Advice	B	<ul style="list-style-type: none"> <li>Engages in a productive dialogue with the customer to consultatively identify a solution</li> <li>Provides credible advice for customers based on an understanding of the underlying issue</li> <li>Knows when to draw on additional resources to provide appropriate support and advice for customers</li> </ul>

Business	Level	
Continuous Improvement	B	<ul style="list-style-type: none"> <li>Analyses current processes and practices to identify opportunities for improvement</li> <li>Identifies patterns in data and information and implements improvements based on this analysis</li> </ul>

	<ul style="list-style-type: none"><li>• Has knowledge of and able to apply appropriate continuous improvement tools to achieve the best outcome</li><li>• Undertakes improvement projects within own team or business area to improve outcomes by utilising innovative thinking</li></ul>
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## Mandatory Candidate Requirements

### Qualifications:

- Relevant Tertiary Engineering qualifications and expert knowledge in hydrology/hydraulics/water supply/water data systems through post graduate studies or through demonstrated extensive experience.
- Current NSW Drivers Licence

### Knowledge:

- High level understanding of risk assessment processes including economic and environmental impact of dams.
- High level understanding of floodplain management in the context of the State Emergency Services procedures.

### Experience:

- Experience in planning for water infrastructure operations, configuration and optimisation.
- Extensive experience in flood hydrology and catchment hydrology, floodplain management, statistical hydrology, use of analytical techniques in hydrology and open channel hydraulics.
- Extensive experience in Probable Maximum Flood estimation and extreme flood studies in the assessment of spillway adequacy.

## Favourable Candidate Requirements

- Evidence of understanding of water quality and quantity issues confronting Government and how this directly impacts on the WaterNSW.

## Pre-Employment Checks Required

- Identification
- Qualifications
- Drivers Licence

- Pre-employment Medical
- Police Check