# **Position Description**



# Analytics and Modelling Infrastructure Manager

Portfolio: Strategy and Performance

Reporting to: Manager Operating Strategy

#### **Position Purpose**

Manage and lead the Analytics and Modelling Infrastructure team to deliver advanced data analytics capability services and enable the development, operationalisation, integration and implementation of data analytics enable the development and implementation of modelling tools and supporting systems in accordance with regulatory and customer 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. Strategy: Lead the coordination and delivery of our data and modelling infrastructure strategy, working in collaboration with internal and external stakeholders for the seamless integration data from enterprise and external systems, software management and automated workflow systems and to ensure effectiveness and alignment with WaterNSW digital strategy.
- Innovation: Work collaboratively with external Research and Industry Partners, leading the
  development of technology solutions to enhance and optimise water resource modelling
  and data analytics capability.
- 6. **Data Analytics:** Lead the provision of advanced data analytics capability services, including analyses, preparation, and visualisation, designing solutions to solve business problems using data, and providing key insights to support business decision making.
- 7. **Capacity building:** Capacity building in software management systems and machine learning methods to empower respective modelling teams to develop their customised modelling and service delivery systems ensuring they are consistent with WaterNSW technology stack and Digital Strategy.
- 8. **Risk Management:** Continuously improve procedures and processes to manage risk for a strategic suite of water quality and quantity models development and operations, leading

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- the design and implementation of digital architectures and standards to enable the delivery of our modelling systems strategy.
- 9. **Governance**: Implement effective program controls and governance to ensure projects are prioritised and resourced for the delivery Operating Strategy initiatives, data and modelling services to agreed outcomes on time and on budget
- 10. Determine the objectives and priorities of the Analytics and Modelling Infrastructure Team and develop a corresponding Business Plan to achieve alignment with the strategic direction of Operating strategy Team, collaborating across the industry and with key customers and stakeholders.
- 11. Manage and lead the Analytics and Modelling Infrastructure team, developing the team to maximise its capability, effectiveness, engagement, and achieve business objectives.

### **Key Challenges**

- Collaboration and coordination with multiple stakeholders on technical matters. Achieving alignment across multiple system, applications, and end users with competing priorities
- Sound judgement for maintaining consistency of technical solutions with WaterNSW Digital Strategy
- Application of state of art technologies for access to data, quality assurance, software management systems, workflow systems and automation, and capacity building in digital technologies
- Develop and implement change management practices in digital technologies, related to the development and documentation of software management systems, commissioning of new systems, maintenance and/or decommissioning of legacy systems.

## **Significant Internal Relationships**

Stakeholder	Purpose of Relationship
Operations Performance & Support	Provision of technical advice, project client and key stakeholder
Digital	Alignment of OS strategies, key stakeholder, and service provider
Modelling teams and Strategic Research Team (OS)	Delivery of services, project client and key stakeholders



# **Significant External Relationships**

Stakeholder	Purpose of Relationship
External vendor and partners.	Solution development projects and service provision



# 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	
Driving Performance	С	Motivates teams by linking individual and team work to the achievement of organisational goals
		<ul> <li>Capitalises on opportunities to encourage and reward successful performance.</li> </ul>
		Sets up consistent procedures and communication processes to establish goals, clarify responsibilities, engage team members, leverage their strengths, share feedback, and adjust plans.
		<ul> <li>Identifies which activities with the biggest strategic impact and which trade offs to make to effective establish business plans.</li> </ul>
		Establishes clear measures for team and business unit; monitors performance against these measures to keep performance in control and on trac
Coaching & Developing Others	С	Builds a safe and open team environment where robust feedback and growth is valued
		Supports and assists ongoing opportunities for growth and development
		Has the courage to provide honest, candid development feedback and coaching on an ongoing basis
		Ensures the team has a robust talent and succession pipeline
Communicating with Influence	С	<ul> <li>Generates interest in complex ideas and concepts</li> <li>Builds support by taking the time to educate and consult others</li> </ul>
		Uses storytelling effectively to meaningfully convey key messages



Collaboration & Engagement With Customers and	C	<ul> <li>Proactively builds relationships internally and externally to positively impact the business</li> </ul>
Stakeholders		<ul> <li>Actively engages with customers and stakeholders to understand concerns and leverage opportunities for adding value</li> </ul>
		<ul> <li>Initiates and maintains extensive networks to enable the achievement of business objectives</li> </ul>

Business	Level	
Analysis & Problem Solving	С	<ul> <li>Takes a broad view when analysing complex and ambiguous situations</li> <li>Recognises patterns and draws linkages between data and/or situations</li> <li>Develops long term solutions that address the root cause of problems and prevent recurrences</li> <li>Selects and uses problem solving tools appropriate to the problem and the context</li> <li>Evaluates the effectiveness of implemented solutions</li> </ul>
Continuous Improvement	С	<ul> <li>Uses data to prioritise improvement opportunities and reduce variance in organisational processes</li> <li>Undertakes improvement projects that cross business unit boundaries to improve the end to end process and customer experience</li> <li>Coaches and supports team members and colleagues on the selection of and use of continuous improvement tools</li> <li>Challenges the status quo to identify improvement or innovation opportunities when appropriate.</li> </ul>

# **Mandatory Candidate Requirements**

### **Qualifications:**

Relevant Tertiary Engineering, IT, Computer Science, Information System qualifications
 Current NSW Drivers Licence

## **Knowledge:**



- Ability to engage with technical and non-technical stakeholders to communicate and present data-driven business insights.
- In depth understanding of data analysis, data preparation, and/or data visualisation and knowledge of tools and techniques for processing data.
- Knowledge of IT Program Delivery Methodologies (Waterfall & Agile) and end-to-end project delivery lifecycle
- Knowledge of the development and application of modelling tools for water resources management
- Ability to interpret and document data model, data structures and understand data flows across multiple systems.

#### **Experience:**

- Demonstrated project/program management experience, with the ability to inspire collaboration and innovation in diverse project teams.
- Experience working with large and complex datasets, designing solutions to solve business problems using data, and providing key insights to support business decision making.
- Experience leading a high performing team.
- Experience in preparing project plans, cost estimates, business cases and technical reports.

#### **Favourable Candidate Requirements**

- Experience in the use of spatial information systems
- Expert knowledge in hydrology/hydraulics/water supply/water data systems
- Knowledge of WaterNSW operating environment and regulatory requirements in the water industry.

#### **Pre-Employment Checks Required**

- Identification
- Qualifications
- Drivers Licence
- Pre-employment Medical
   Police Check