

Senior Water Resource Analyst

Group	Planning, Delivery & Environment
Department	Asset Planning
Job Family	Engineering & Technical Advisor
Classification	Band 9
Approved by	Coordinator Water Resource Planning
Date	June 2026
Position Purpose	This position will support the Water Resources Planning team through the maintenance and operating of eWater source models, improving demand forecasting and undertaking advanced analytics for compliance, strategic advice, reporting and decision-making for planning and investment.

Organisation context

Recognising the challenges of climate change, population growth, rapid technological advancement and economic transition, we are shifting our mindset from water utility to being a leader of the region's prosperity.

Our vision for regional prosperity not only encompasses economic, social, and environmental elements, but also recreational and cultural elements, including enhancing Aboriginal values.

Planning, Delivery & Environment group

The purpose of the Planning, Delivery & Environment group is to plan, monitor and deliver quality systems and services to achieve remarkable outcomes for our customers, community and environment. The Group contains four departments:

- Asset Planning
- Enterprise Project Delivery
- First Nations Values
- Sustainability and Healthy Country

Asset Planning Department department

The Asset Planning Department is responsible for the long-term planning of Barwon Water's water, sewerage and recycled water systems and water resources to deliver value to our customers, support regional prosperity and contribute to meeting our zero waste and zero emissions goals.



Organisational relationships

Reports to	Water Resource Planning Coordinator
Directly supervises	N/A

Accountabilities

Success in this role will be evaluated on the following key accountabilities.

Run and maintain water resource modelling using eWater Source

- Run and maintain Barwon Water's system models to support water resource planning activities including yield assessments and scenario planning and analysis.
- Update and calibrate eWater Source models using up to date data and incorporate changes to system configuration and operating rules.
- Help refine system operating rules, model assumptions and methodologies in collaboration with relevant stakeholders.
- Review quality assurance for model inputs and outputs for, document assumptions and maintain version control.

Develop and maintain water demand forecasts

- Develop and maintain short and long-term water demand forecasts.
- Update demand projections incorporating relevant drivers such as population growth, climate and customer demand.
- Input demand forecasts into business processes.
- Represent Barwon Water in the Water Demand Working Group.

Provide data analysis and technical support

- Analyse and interpret data from modelling and forecasting, identify trends, maintain compliance requirements and ongoing updates to datasets.
- Providing timely and actionable insights to support strategic water security initiatives.
- Review data quality, identify anomalies and support continuous improvement in modelling and forecasting inputs, processes and documentation.
- Contribute to continuous improvement in modelling and forecasting processes, templates, documentation and quality assurance practices.
- Maintain appropriate documentation, assumptions, metadata and version control for models, forecasts and technical analyses to support transparency, quality and continuity of work.

Contribute to water resource strategies and water resource projects

- Lead development of the Annual Water Outlook.
- Assist with the technical development of Barwon Water strategies and water resource projects that relate to long-term supply and demand, including Urban Water Strategy, Pricing Submission Corporate Plan and initiatives that require modelling inputs.
- Contribute to the planning, development, implementation, monitoring and reporting of actions for long-term water resource planning.
- Support stakeholder engagement and communication activities related to water resource strategies and projects across the business including the Board and the Executive Leadership Team, community and external stakeholders as required.
- Manage procuring and consultant services to support water resource investigations, including scope definition, scheduling, timelines, financial tracking and reporting.

Health, Safety & Wellbeing

Barwon Water is committed to providing a safe and healthy work environment to all employees. Employees are expected to perform their duties in accordance with the Occupational Health & Safety Act 2004 and all regulations, codes of practice and organisation policies and procedures. In addition, employees are expected to:

- Promote and demonstrate Barwon Water's high standards in relation to health, safety, environment and quality, championing a culture of safety in the workplace.
- Report unsafe work practices, incidents, hazards and near misses, and unacceptable workplace behaviours.

Competencies

Growth & Resilience	Brings a growth mindset and personal resilience.
Action & Accountability	Accountable for driving outcomes with purpose, ambition, accountability and action.
Collaboration	Leads and collaborates with others effectively across the business, organisational boundaries, with customers and established partners.
Communication	Engages and communicates with clarity, vision, purpose and impact.
Managing Ambiguity	Operates effectively, even when things are not certain or the way forward is not clear.
Strategic Focus	Sees ahead to future possibilities and translates them into breakthrough strategies.

Performance level

Action & Accountability	The Senior Water Resource Analyst provides specialist technical services in modelling, demand forecasting and data analysis to support long-term water resource planning. The role is accountable for delivering high quality technical outputs, maintaining models and forecasts, and providing timely analysis and advice to support critical business decisions.
Judgement & Problem Solving	The Senior Water Resource Analyst applies sound judgement to interpret and analyse data, modelling outputs and forecast trends, and to identify appropriate actions, assumptions and technical responses. The role uses established methods and professional knowledge to solve technical problems, while recognising when issues require escalation, peer review or further investigation.
Specialist Knowledge & Skills	The position requires specialist knowledge and skills in hydrology, water resource modelling, demand forecasting and data analysis, with the ability to apply these skills to technical tasks of moderate to high complexity.
Management Skills	The Senior Water Resource Analyst plans and manages their own workload, coordinates technical inputs with other staff and contributes to project tasks and team deliverables as required.
Interpersonal Skills	The role requires strong written and verbal communication skills to explain technical information clearly, work collaboratively across teams and contribute to effective relationships with internal and external stakeholders.

Success profile

- Tertiary education in engineering, science, environmental science, natural resources management or equivalent.
- Experience in water resource modelling, demand forecasting, hydrology or related analytical work.
- Experience using eWater Source or similar water resource modelling platforms.
- Strong analytical skills, including the ability to work with rainfall, streamflow, demand and related datasets to support modelling and decision-making.
- Ability to develop, maintain and explain short and long-term demand forecasts and modelling outputs.
- Proficiency in Excel and other analytical tools for data cleaning, analysis and reporting.
- Strong written and verbal communication skills, including the ability to communicate technical information clearly to non-technical audiences.
- Ability to work collaboratively across teams and contribute to planning, strategy and operational outcomes.
- Knowledge of Python or script writing would be an advantage, but is not essential.

Equal opportunity

Barwon Water offers a work environment free of discrimination, sexual or other harassment, victimisation, vilification and bullying. Employees are expected to contribute to the maintenance of such a work environment.

Risk and Compliance Management

Barwon Water is committed to a structured approach to Fraud and Corruption and Risk and Compliance Management in support of its business objectives, including the delivery of safe and reliable water, sewerage and recycled water services to our customers and community. Barwon Water shares responsibilities for these activities across the organisation and expect employees to perform their duties in accordance with policies and procedures.

Signature

Employee Name (print)

Employee signature

Date

We understand that life balance is an important part of our employees' lives. Barwon Water offers a wide range of flexible arrangements to enable you to balance your work with other commitments and activities including family, health, study, carer responsibilities, hobbies and life/career aspirations. We provide various options such as flexible start and finishing times, working part time, job sharing, working from home and paid leave provisions that can be negotiated to help balance your personal commitments with the demands of the role.