# Operations Data Scientist

## Process Engineering

## Position information

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| Group: | Planning, Operations and Delivery |
| Reports to: | Senior Data Process Improvement Analyst |
| Classification: | AO5 |

## Your role

As the Operations Data Scientist, you will be at the forefront of transforming our operations and elevating our operations intelligence capabilities. You will lead data modelling, integration, and analytics useful for plant optimisation efforts. Leveraging your analytical skills, you will turn complex data into actionable insights, empowering us to make evidence-based decisions that enhance our operations and benefit our customers and communities in Southeast Queensland.

In this role, you will work closely with the process engineering team and collaborate with other teams, using various analytics tools to develop models and visualisations. Your ability to communicate findings to diverse stakeholders will ensure that your data efforts continue to shape the success of our water utility operations and our commitment to clean and reliable water services.

## Seqwater’s vision, values and promise

Water is essential for life. At Seqwater, it is our job to provide water for more than three million people across South East Queensland. We live and work in the communities we serve, and we proudly work together to deliver on our vision of *Water for Life*. We do this by living our values and keeping to our promise - *Safe for Life*.

Integrity, respect, care and courage are at the heart of the way we work and interact with our colleagues, stakeholders, customers and the communities every day.

## About your group

The Planning, Operations and Delivery Group provide the ongoing asset management, operation and maintenance of Seqwater’s water infrastructure assets and catchment areas, including the design and delivery of small to large upgrade and renewal projects (<$40m) to ensure the ongoing provision of bulk water supply services to meet customer service requirements and regulatory obligations.

## Key relationships

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| Leads others: | Contractors or consultants as required |
| Internal customers: | Technical Support and Improvement team  Planning Operations and Delivery group  Digital Technology & Information group |
| External customers: | Universities, Consultants, Suppliers, third party stakeholders |

## Key responsibilities

Utilise advanced statistical and machine learning techniques to analyse large datasets related to water utility operations.

Develop and implement predictive and prescriptive models to optimise various aspects of the utility's operations.

Identify key data trends and patterns to drive business insights and inform decision-making.

Integrate data from various sources, including PI Historian, SQL databases, to generate intelligent insights for operations

Ensure data quality and consistency by implementing data cleansing and validation procedures.

Collaborate with IT and data engineering teams to establish robust data pipelines.

Create process models and digital simulations to improve the efficiency and reliability of water utility operations.

Collaborate with cross-functional teams to implement and validate these models in real-world scenarios.

Continuously refine and optimise digital models based on operational data and feedback.

Generate actionable insights from data analysis and modelling efforts.

Communicate findings to both technical and non-technical stakeholders through data visualisations, reports, and presentations.

Coordinating and overseeing the execution of data-driven projects, including defining objectives, allocating resources, tracking progress, and ensuring the timely delivery of results.

Identify data and information requirements that align with asset and operational performance objectives.

Observe and comply with all Seqwater work health and safety, quality and environmental management systems and procedures.

Carry out other duties as requested by the Senior Data Process Improvement Analyst and the Manager.

In all duties, comply with the behavioural expectations set out in “The way we work” (Seqwater’s Code of Conduct), and our policies and procedures.

## Qualifications and experience

### Essentials

Bachelor's degree in a relevant field (e.g., Data Science, Computer Science, Engineering, Statistics).

Strong demonstrated experience in data science and analytics roles, with a track record of successfully applying data-driven solutions.

Strong knowledge of data modelling techniques, statistical analysis, and machine learning algorithms.

### Desirables

Experience with PI Historian, Labware, WISKI or Power BI is a significant advantage.

Experience in water utility or water quality sector is an advantage.

## Job capability requirements

Excellent problem-solving skills and the ability to work independently on complex data projects.

Proficiency in programming languages such as Python or R for data analysis and modelling.

Effective communication skills to convey technical findings to non-technical stakeholders.

Strong project management and teamwork abilities.