



Producing safe water that meets regulatory standards is paramount. Consistent water quality requires careful optimisation and operation of treatment plants. Treatment processes are sensitive to many factors relating to source water and environmental conditions, including temperature, turbidity and organic content. Far from being a static environment, water treatment requires continual monitoring, optimisation and corrective action to produce water that meets water quality standards and manages public health and environmental risks.

Optimisation of processes such as coagulation, flocculation, filtration and disinfection can be complicated. Control of these processes is critical to achieving critical control limits, improving compliance with Water Quality Management Plans and assist in achieving Health Based Treatment Targets. Detailed understanding of plant performance, considering how changes to operation of the plant affect treatment outcomes is key for achieving the required targets. Optimisation of processes needs to consider not just current performance, but also a robust performance envelope allowing operators to handle changing conditions with confidence.

Viridis Consultants has been consulting to the water industry for 10 years. We work with water utilities, local councils, regulators and private water utilities. Our team of water quality experts comprising of chemists, scientists and engineers can provide a program that will give all stakeholders confidence in your results.

Plant Assessment

- Data Analysis and Process Review
- Operational Process Assessment
- Health Based Treatment Targets Assessment
- Plant Condition Assessment
- Plant Risk Assessment

Process Optimisation

- Design of Experiments
- Performance Envelope Testing
- Coagulation and Flocculation Optimisation
- Filtration Optimisation
- Disinfection Optimisation

Implementation Programs

- Capital Upgrade/Renewal Planning
- Operational Guidance and Procedures
- Detailed Design and Specification
- Commissioning Support
- Plant Validation and Verification

Supporting Programs

- Plant Performance Monitoring
- Staff Training
- Data Management
- Review of risk management strategies

Our Experience:

- Process and Plant Condition Assessment for four water treatment facilities in regional Queensland – Building and Asset Services, Department of Housing and Public Works
- Alternate specification for potable and raw water networks at Kinchant Outdoor Education Centre – Department of Housing and Public Works
- Development of a Recycled Water Management Plan and Validation Program for at Luggage Point WWTP – Queensland Urban Utilities
- Independent Audit of the Validation Program for the Western Corridor Recycled Water Scheme – SEQWater
- Independent Audit of Chlorination, RO/NF and Membrane Bioreactor Process Validation for three Water and Waste Water Treatment Plants– Watersecure
- Technical Assessment of Chlorination and RO Process Validation for Luggage Point AWTP - SEQWater
- Technical Assessment of the Non-Potable Water Scheme for Barangaroo South – Lend Lease
- Our staff have experience in design, commissioning and asset lifecycle management of water treatment systems, including filtration, chemical treatment and hydraulics system design.

Services

- Process Assessment
- Health Based Treatment Targets Assessment
- Condition Assessment
- Risk Assessment
- Coagulation Optimisation
- Flocculation Optimisation
- Filtration Optimisation
- Disinfection Optimisation
- Capital Upgrade Planning
- Detailed Design and Specification
- Plant Validation and Verification
- Performance Monitoring

Process Engineer

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With seven years' experience in the design, construction and commissioning of process plant, Glen is an experienced project manager specialising in the specification, implementation and assessment of filtration and chemical treatment plant.

As an experienced engineer across diverse environments including water treatment, commercial construction and manufacturing, Glen has extensive involvement in risk-sensitive design, design reliability, total cost of ownership, design for construction, commissioning and validation.

Glen also has experience in asset management, including condition assessment, risk assessment and compliance assessment in a range of filtration and chemical treatment environments including water treatment plants, wastewater treatment plants and recreational aquatic environments.



If you would like further information or think that Viridis can help you, please contact us. We are always happy to assist.

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