Water quality monitoring

Trinity Consultants AUSTRALIA

VISION ENVIRONMENT

Trinity Consultants Australia offers a comprehensive range of environmental services, including water quality monitoring.

Our team of full-time research staff, certified coxswains and environmental professionals undertake monitoring in a range of environments and for diverse clients including ports, local councils, developers and resource companies.

We have dedicated laboratory facilities, specialised field equipment and a fleet of commercial vessels to provide readily mobilised field technical services. Our extensive in-house expertise and equipment mean we are able to offer comprehensive support and prompt response times.

Our capabilities

Monitoring plans and scheduled monitoring

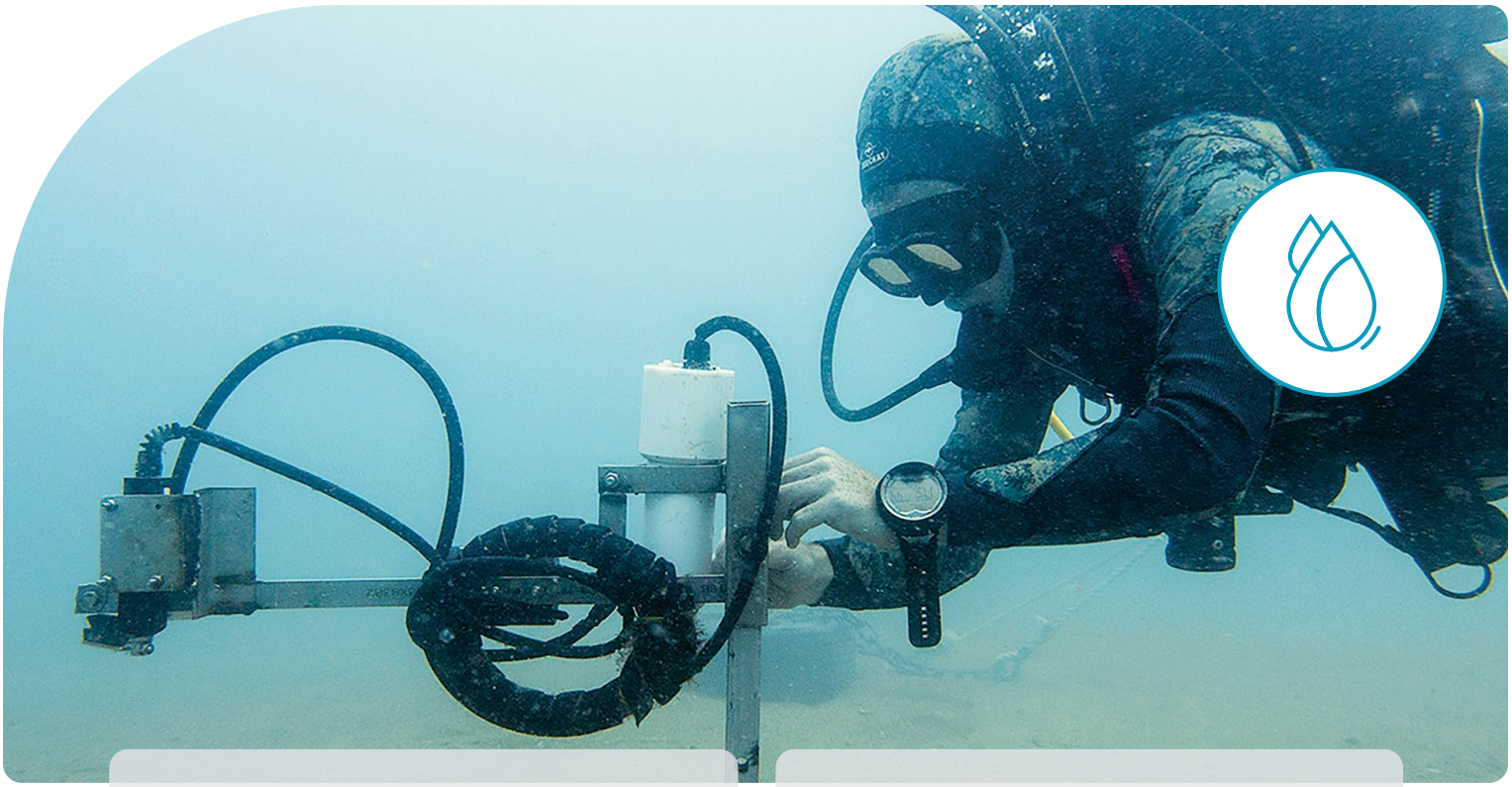
- Monitoring the short- and long-term impacts of acute environmental events
- Continuous and discrete water quality monitoring options
- Design, implementation and reporting of ambient and compliance water quality monitoring plans (WQMP) and receiving environment monitoring plans (REMP)

Project- and purpose-specific monitoring and compliance reporting

- Construction (including capital and maintenance dredge) monitoring and compliance reporting
- Real-time data and online dashboards
- Telemetered data automatically deconfounded via a real-time SMART algorithm in our cloud databases
- Ability to view updated data after every field reading via a customised secure project dashboard
- Data automatically compared to trigger values and alerts sent to custom lists

Real-time meteorological data and vessel movements linked to dashboard

- Customised daily email report, which is suitable for viewing by regulators, if desired
- Greater than 98% validated data recovery rate for telemetered physicochemical data from more than 70 individual sites over periods up to four years



Equipment and technology

We build customised water quality monitoring stations for each client and project.

Our monitoring stations can be telemetered (real-time data provision) or autonomously logging. Stations can be located anywhere, including between the water column surface to the seabed. Using our modular buoys, a variety of different loggers and parameters can be measured including:

- Physicochemical parameters, such as temperature, pH, salinity/conductivity, dissolved oxygen and turbidity
- Photosynthetic active radiation (PAR)
- Waves and ADCP features, such as currents, turbulence and acoustic scattering
- Depth and atmospheric pressure
- Sedimentation (benthic stations).

Data management and dashboards

- Data is continuously sent to our cloud databases, where it is automatically deconfounded via a real-time SMART algorithm.
- Clients can view updated data after every field reading via our secure dashboard website.
- Real-time meteorological data and vessel movements can also be linked to the dashboard.
- Clients receive a customised daily email report, which is also suitable for viewing by regulators.
- > 98% validated data recovery rate for telemetered physicochemical data from 70+ individual sites over periods up to four years.

Accreditations, standards and permits

- All dive operations conducted to AS/NZS 2299.2 and the VE90 Diving Operations Manual.
- Australian Diver Accreditation Scheme-certified dive supervisor, and all divers with minimum qualification of Rescue Diver, holding current occupational dive medicals and advanced first aid certifications.
- Appropriate Great Barrier Reef Marine Park Authority and Fisheries permits, as well as Animal Ethics Scientific Use Registration.

Our clients

- Gladstone Ports Corporation (maintenance dredging, project compliance, ambient monitoring)
- North Queensland Bulk Ports (Abbot Point ambient, Hay Point and Weipa maintenance dredging)
- Queensland Alumina (environmental monitoring)
- QGC (project compliance)
- TasPorts (construction monitoring and project compliance)
- Lyttelton Port Company (construction monitoring and project compliance)
- Christchurch City Council (wastewater project)
- Auckland City Council (monitoring)

Connect with us

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