

CAPABILITY STATEMENT



Vision Environment QLD (VEQ) is an environmental consulting company with a wide range of capabilities associated with marine, coastal, estuarine and freshwater ecosystems.

Established in 2008, VEQ conducts rigorous scientific investigations to make sound recommendations to clients, working closely with industry, university, government and NRM groups.

VEQ consists of a highly qualified multi-disciplinary team of full time research staff, with dedicated laboratory facilities, specialised field equipment and a fleet of commercial vessels, providing one of the largest readily mobilised field technical teams for projects in Australia and overseas.

SERVICES

VEQ has the technical expertise to offer a fully integrated service for projects in a range of areas.

Expert services:

- Design and implementation of monitoring programs including REMP and WQMP
- Interpretation of licence conditions, due diligence and compliance monitoring for dredge events, effluents and receiving waters
- · Rigorous statistical approaches
- Environmental Management Systems
- Environmental Auditing and Legislative Compliance

Technical services:

- Telemetry station design, development, implementation and maintenance for both water physicochemistry and PAR (benthic light) monitoring
- Cloud based real time data delivery services 24/7
- Water quality profiling and sampling to Australian Standards
- Sediment quality assessment and sedimentation rates (automated continuous measures of net flux)
- · ADCP, Ponar grab and van Dorn profile sampling.
- Camera sled tows, video transects and drop down camera techniques
- · Stereo BRUVS and associated software analyses
- ADAS certified (commercial/scientific) supervised dive team

Biological services:

- Marine ecological assessments and biological monitoring programs
- Habitat mapping and assessment including production of high resolution maps (GIS and satellite imagery)
- Benthic sediment investigations including epifaunal communities such as seagrass, algae and soft corals
- Reef ecology and hard coral substrate surveys

- Mangrove habitat surveys including species identification, density and biomass estimates
- Fish and nekton surveys including netting and identification
- Introduced marine pest assessments
- Macroinvertebrate sampling, sorting and identification
- · Diver surveys including transects and coring
- Algal identification
- Fish tissue contaminant body burden
- Bio-indicator species
- · Whole of effluent toxicity testing

Research

VEQ is a very research focused consultancy. One of our self-funded research projects involves our coral experts developing a light 'trigger value' for locally relevant coral communities, similar to the seagrass light trigger that VEQ assisted in developing for the WBDDP.

This involves shading studies to determine coral resilience to light reduction. Potentially this could be applied as a compliance monitoring tool for selected dredge projects across Australia. The "Light Based Management Approach for Dredging – Q&A" flyer can be found on the website.











"At the centre of our Vision is Innovation, Quality and Commitment"



HSEQ

VEQ have an established Health, Safety, Environment and Quality (HSEQ) System which is certified under the following Australian and International standards ISO9001:2008, ISO18001:2007, AS/NZS4801:2001 and ISO14001:2004. VEQ's goal is to be at the forefront of technical service providers in Australia in terms of quality and expertise, in order to satisfy the requirements and expectations of its clients.

VESSELS

VEQ operates and maintains a fleet of five commercially surveyed research vessels (three less than two years old). The vessels have been surveyed for inshore and offshore work and range from 6-9m with crane capacity, which enable operations in shallow or deep, closed and open waters. Vessels are also equipped for comfortable (wet weather) personnel transportation and accommodation. All vessels are available 24/7 wet hire with Coxswain and crew, or dry hire if appropriate hire agreement conditions are met. All vessels are road transportable via a four tonne Hino dual cab flat tray, also with one tonne crane capacity.

FEATURED PROJECTS

Western Basin Dredge & Disposal Project 2009-2013

VEQ has undertaken dredge assessment and compliance monitoring in Gladstone for most major capital works dredge events since 2000, including providing compliance monitoring for both the QCLNG Narrows Crossing project and the Western Basin Dredge and Disposal Project (WBDDP), over a three-year period.

These projects have included the use of continuous telemetered data loggers, in conjunction with physical measurements of a range of parameters. VEQ developed its own in-house technology for telemetered PAR (photosynthetically active radiation) for the continuous measurement of benthic light, which to our knowledge was a commercial first in Australia. Monitoring methodology designed by VEQ researchers has been incorporated into a number of Environmental Management Plans including the use of telemetered PAR in a best-practice light based approach for the management of seagrass habitats, for Gladstone Ports Corporation and Queensland Gas Company.

As the primary environmental contractor for what was the second largest dredging project in Australia to date, VEQ has experienced first-hand the unforeseen issues which can develop during development and construction projects. As a result of those issues there has been a greater amount of scrutiny from both regulators and stakeholders, including SEWPAC (Commonwealth Department of Environment), GBRMPA (Great Barrier Reef Marine Park Authority) and UNESCO, of future developments adjacent to or within the Great Barrier Reef Marine Park. This has resulted in a heightened level of the due diligence process, potentially raising the benchmark for future projects in Queensland. VEQ has demonstrated the ability to rise to that challenge, surpassing our client's needs and expectations.

"GPC required a consultant that could undertake the monitoring to Australian Standards and deliver results that were beyond reproach."

"VEQ were able to rise to that challenge and provide a very high standard of service, particularly where contentious issues arose in a politically pressurized climate."

Peter O'Sullivan
Project Leader
LNG Dredging Project (WBDDP
Gladstone) - GPC

"It was a pleasure to work alongside the VEQ team, who provided seamless data processing and delivery to an extremely high standard and with consistent attention to detail."

Hedwig VanlishoutProject Director
Dredging International N.V.

FEATURED PROJECTS

Gladstone Harbour Channel Duplication EIS 2013-current

VEQ is responsible for the program design and implementation of baseline water quality monitoring for the EIS. Generally water quality monitoring for an EIS could include the use of telemetered physicochemical loggers, telemetered PAR loggers, sedimentation rates (automated continuous data) and discrete water sampling. VEQ has developed new technology and instrumentation to permit the simultaneous measurement of benthic and surface physicochemical parameters in conjunction with benthic PAR and sedimentation rates for projects of this type.

VEQ is also undertaking the marine ecology component of the EIS, which generally includes assessment of coral habitats, fish, macrobenthic and mangrove communities.

Desalination Plant Monitoring 2012-current

VEQ was responsible for the development and implementation of a desalination plant Water Quality Management Plan, to be undertaken as per Department of Environment and Heritage permit conditions. The plan comprised a Receiving Environment Monitoring Program, including assessment of water quality, algal assemblages and macroinvertebrate communities, and an Entrained Organism Monitoring Program, which focused on zooplankton communities. VEQ undertook both the baseline and operational monitoring phases.

In a concurrent study, VEQ also conducted diver assessments of the benthic habitat surrounding the offshore plant infrastructure to assess substrate characteristics via coring, analysis and contaminant assessment, as well as assessment of benthic communities. Information was collated and used to construct a risk assessment for potential future contamination scenarios for provision to Regulators. Diving assessments have also been undertaken regularly to inspect and report on plant infrastructure.



"We were impressed by the VEQ team's high standard of marine field skills in designing the program and collecting data for the project, as well as the level of scientific knowledge, which was reflected in their reports."

VEQ has a proven track record and is committed to delivering high quality and timely services to our regional, national and international clients.

The involvement of our experts in the fields of water quality management and ecology allows for seamless design, implementation & execution to address complex environmental problems.

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