



legal industry profile

frc environmental has the expertise and experience to deliver insight across the full range of aquatic environments, from freshwater and estuarine to marine ecosystems. Our wide-ranging capabilities in survey, assessment, management, monitoring and reporting enable us to give you absolute clarity and the confidence for action.

If it involves water, it involves frc environmental.

Legal

frc environmental's Principal and Senior Scientists are truly experts able to offer substantial experience across a range of disciplines relating to the aquatic and riparian environment, and are consequently regarded as highly effective expert witnesses.

As a practice we embrace challenge; and as individuals we bring our shared commitment to expertise, professionalism, integrity and innovation to every appointment. Whether it is under a planning land or mining jurisdiction, or in relation to an environmental prosecution or tribunal, we understand the timely application of focused expertise can significantly contribute to both an efficient legal process and a just outcome.

Experts from **frc environmental** are noted for their objectivity, attention to detail and ability to communicate effectively, and of course, mastery of their particular discipline. We recognise the synergy to be gained from teamwork.

Dr John Thorogood, FEIANZ, FAIBiol

John has over three decades of applied experience across the disciplines of coastal and riverine management, aquatic ecosystems assessment, monitoring and management, and fisheries management. From a research career with the CSIRO, John has led **frc environmental** since the late 1980s and continues to enjoy a hands-on-role in many key projects. John has acted as an expert witness in both Queensland and New South Wales, and has expertise that enables him to effectively contribute to the resolution of issues relating to:



frc environmental's capacity to instigate focused field (and laboratory) studies at short notice provides the edge to develop rigorous and compelling evidence



Principal Ecologist, Carol Conacher assessing impacts to estuarine vegetation

Judge Robertson, Planning & Environment Court of Queensland
(from *Histpark Pty Ltd & Anor v. Maroochy Shire Council*)

"frc environmental's Dr John Thorogood was an impressive and persuasive witness and indeed his evidence in this regard was largely unchallenged."



freshwater

estuarine

marine

- Effective buffering of wetlands and waterways
- Aquatic ecosystem health
- Marine and freshwater
- The impacts of coastal development
- Management of mosquitos and biting midge
- Introduced marine pests
- The impact and management of sewage, oil, metals and other contaminants, and groundings
- Catch limits and closures
- The impact of sea level rise on coastal ecosystems
- Environmental flows

John's 'hallmark' is in the identification of key issues and the delivery of practical advice based on a sound appreciation of the project's overall objectives and constraints.

Carol Conacher, B.Sc

Carol is one of the industry's most respected aquatic botanists and wetland ecologists. Carol began her career with the 'Estuarine Inventory' group at NSW Fisheries, before joining the CSIRO's Division of Fisheries where she lead research on tropical marine botany. With government, Carol pioneered many of the wetland survey and rehabilitation methodologies in use today. Carol has been a Principal Ecologist with **frc environmental** since 1996 and has commonly acted as an expert witness in the Planning and Environment Court. Carol's core expertise relates to:

- Wetland ecosystem health
- Environmental offsets and compensatory habitat (eg. to offset mangrove loss)
- Blue-green algae – assessment and management
- Management of aquatic weeds
- The impact and management of sewage, oil, metals and other contaminants
- Sediment - water – biota interactions
- Survey and monitoring program design – statistical rigour and interpretation

Carol's background in both research and resource management provides her with a perspective that is both rigorous, yet decidedly practical.

Industry experience

- Ports & Maritime Operations
- Mining, Oil & Gas
- Linear Infrastructure
- Power Generation & Distribution
- Waste Management Water
- Infrastructure Effluent
- Infrastructure
- Urban, Industrial & Agricultural Development
- Government
- International Development & Aid
- Fisheries & Aquaculture
- Wetland Construction & Rehabilitation
- Tourism
- Defence
- Forensic & Legal



frc environmental's Dr John Thorogood, 30+ years experience and still very much the 'hands-on' ecologist

EPA v Karreman Quarries

The EPA had charged Karreman Quarries with a number of offences relating to environmental harm. Dr John Thorogood was commissioned as an expert witness to consider the alleged impacts on Tingalpa Creek. Through rigorous investigation of the health of the creek and tracing the source of damaging sediments, John's evidence was critical in the EPA's decision to downgrade the charges laid and was accepted without challenge.

Cape York Aboriginal Land Council's Challenge of the Wild Rivers Declaration

Dr John Thorogood was retained by the Council to assess the validity of assumptions underpinning the Wild Rivers declarations. Through focused field survey and a deep understanding of the science behind the assessment of ecosystem health. Dr Thorogood provided robust evidence that challenged these assumptions, the geographic basis for a number of declarations (including the extent of the riparian zone), and the assumption that development would detrimentally impact the Wild Rivers.

RF Thompson v Noosa Council

Dr John Thorogood was retained by Council to consider the likely constraints imposed by the proximity of freshwater and estuarine habitat. Dr Thorogood gained a first-hand understanding of the site's aquatic habit, flora and fauna through focused site survey and review. Aerial photographs dating back to 1940s were used to develop an understanding of the effects of clearing and grazing. Dr Thorogood's demonstration of both the site's conservation significance and the rapid development of explicitly relevant conservation regulation immediately prior to (and in effect driving) the change in the planning scheme were critical to Judge Robin QC's decision to refuse the Appeal.

Judge Robin QC, Planning and Environment Court of Queensland
(*R F Thompson v Noosa Council*)

"At the end of the day, I am satisfied that a competent consultant in the field would have advised a hypothetical prudent purchaser along the lines of Dr Thorogood's evidence in chief"