Dr Adam Smith

COMPANY
Reef Ecologic

POSITION IN FIRM
Director

ROLE ON PROJECT
Marine research

QUALIFICATIONS
Bachelor of Science, University of New South Wales; Doctor of Philosophy, University of New South Wales; Master of Business, University of Queensland

Certified Environmental Practitioner, Environment Institute of Australia and New Zealand.

Fellow, Environment Institute of Australia and New Zealand.

Fellow, Australian Rural Leadership Foundation.

Fellow, Centre for Sustainability Leadership.

Commercial Diver, Australian Diver Accreditation Scheme.

Coxswain, Queensland Transport.

Expertise areas

- Environmental Impact Assessment
- Strategic Planning
- Marine Park Management
- Coral reef research and monitoring
- Reef restoration

Project Roles and Responsibilities

Lead- Marine research

Career Overview

Adam has 30 years experience as a marine scientist, marine park manager, environmental consultant and Director. He has extensive experience in all forms of environmental planning and management in the project cycle from inception and options analysis, baseline research, community consultation, to approvals and licensing, operation and decommissioning.

He is a Director of Reef Ecologic Pty Ltd and provides strategic advice, international capacity building on leadership and management of coral reefs and biological and social surveys. Heworks in multiple roles in research, consulting, management, facilitation, not-for-profit and Boards. Adam was a Director with the Great Barrier Reef Marine Park Authority for over 15 years. His work as Director (Environmental Impact Management) has been recognised with multiple national and international awards for excellence. He has extensive regulatory, EIA, policy, partnership, incident and communication experience in coral reef research and management. He has been involved in diverse projects associated with planning, management and auditing of Tourism infrastructure, Defence activities and incidents, Shipping incidents, Fisheries research, Port planning, management and best practice guidelines and Reef Restoration.

Adam has written, managed, directed, collaborated and peer-reviewed many strategic plans, policy and guidelines for government and international organisations including the 2017 *Great Barrier Reef Blueprint for Resilience*.

He has written, assessed, Directed and reviewed thousands of research and environmental proposals in the Great Barrier Reef Marine Park between 1999 and 2018. These studies have involved both government and private enterprise projects, some being highly sensitive from a political, environmental or community perspective, with some requiring multi-jurisdictional approvals and legal challenges.

He currently holds several research and education permits. He is a co-investigator at James Cook University of the National Environment Science Program (NESP) Tropical Water Quality Hub project *Best practice coral restoration for the Great Barrier Reef.* He is a co-founder of the *International Coral Reef Management and Leadership program.*

Adam has written over 50 scientific papers and reports including the very relevant. *Environmental management of a shipping accident in the world's largest marine park*.

Throughout his career Adam has developed innovative, value adding strategies that have become industry standards and best practice benchmarks in policy, environmental impact assessment, marine park management and training. This has included Environmental Impact Assessment Policy, environmental and social risk assessment, Dredging and spoil disposal policy, Dredging and port construction around coral reefs and Standard Operational Procedures for macroalgal removal.

Relevant projects

Project Name	***Best practice coral restoration for the Great Barrier Reef***
Date	2017-2020
Role and responsibility	Co-investigator, designing and undertaking research, report writing, resources, collaboration, communication
Project overview	A NESP and JCU project involving review, workshops, research and training. Working in partnership with GBRMPA to select sites and techniques for assisted recovery and coral restoration in the GBR (building on goals from the 2017 Reef Summit). In the first year we are undertaking a global literature review to assesses the effectiveness of coral restoration, rehabilitation and assisted recovery techniques and outline the options that may work in the GBR region. We will share knowledge by organising a workshop/symposium (in 2018) that builds on the 2017 Reef Summit and 2017 Coastal Restoration Symposium, and that includes broad participation from business, tourism and engineering disciplines to develop new direct intervention options, and refinements of existing techniques to help improve GBR health. Evaluating the approaches, methods and success of existing coral restoration efforts in the GBR through meetings and discussions with restoration practitioners and in-water assessments where appropriate. Designing an experimental protocol to test different broken coral reattachment and re-orientation techniques, ready for implementation after ship strike or cyclone damage.. Assessing the effectiveness of coral reattachment and re-orientation techniques and coming up with best practice guidelines by conducting surveys of scientifically validated trial sites (2018-2019). Conducting field experiments to scientifically test promising methods relevant to the GBR identified through the scoping study

Project Name	***Douglas Shoal Trophic Contamination Survey***
Date	2016
Role and responsibility	Planning, risk assessment, field work, commercial diving, specimen collection, report writing, presentation to GBRMPA
Project overview	The Great Barrier Reef Marine Park Authority (GBRMPA) commissioned a survey to rigorously ascertain levels of contamination in biota to inform long term management of the contamination sites at Douglas Shoal. The study involved survey design, expedition plan, specimen collection, tissue sampling, laboratory analysis and data analysis and interpretation. The scientific assessment collected specimens of mobile fauna common to Douglas Shoal and adjacent reference sites from a range of trophic guilds (different levels in the food web) from a total of 16 species. The targeted taxa included species that are commonly targeted by recreational and commercial fishers. In total, 157 specimens were collected for chemical analysis of organotins, copper and zinc. Only 2% (3 out of 157 specimens) of mobile fauna sampled in the survey had detectable concentrations of organotins (TBT and its breakdown products) in their tissues. Overall, therefore, this survey provides evidence that there is negligible risk to the health of humans consuming seafood caught at Douglas Shoal in relation to TBT contamination.

Project Name	***RHIS surveys in support of GBR Coral Bleaching Incident Response***
Date	2016
Role and responsibility	Expedition planning, Field work, commercial diving, report writing
Project overview	At each of nine reefs we followed the GBR Coral Bleaching Incident Response protocol and completed three quadrants (SW, NW, NE). At the SW and NW quadrants, three RHIS surveys were completed at 1-3 m depth. At each survey location, the centre of the RHIS survey plot was marked with cattle tags tied to the reef with cable ties, as per GBRMPA instructions. At the NE quadrant three RHIS surveys were completed at each of three depths (1-3 m, 3-6 m, 6-9 m). For each reef we completed 15 RHIS surveys and associated photographs and video images. A total of 174 RHIS forms and over 1900 images were completed. The research was completed on time and below budget.