

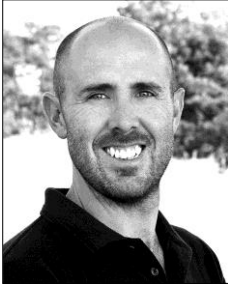


Australia's
Global
University

Water Research Laboratory

Matt Blacka

Principal Coastal Engineer



Matt has completed a Master of Engineering Science degree with specialisation in Coastal Engineering and Management, and a Bachelor of Engineering (Civil) degree, with first class honours in Coastal Engineering. He has over 15 years of applied experience working at WRL, and manages projects in the fields of coastal processes and hazards, estuary processes, coastal structures, coastal engineering vulnerability assessment, physical modelling, field data collection and coastal monitoring.

Matt is one of Australia's foremost experts in the application of physical models for analysis of coastal and marine structures, having modelled over 35 coastal structure projects in the past 15 years, and published many papers on coastal structure physical modelling methods and case studies. Matt's expertise is in the application of both 2D and 3D physical models for assessing rock and precast concrete armoured structures as well as the measurement of wave loading on rigid marine structures such as caissons, platforms, jetties and wharves.

Matt's background qualifications in Civil Engineering combined with his passion for the natural coastal environment allow him to bring a considered but technical approach to his expertise of coastal protection. His experience working on a broad range of coastal protection applications provides extensive knowledge on the use and misuse of coastal protection systems. This experience spans desktop concept design, physical modelling, condition appraisal and monitoring of coastal structures, as well as assessment of their impacts on the surrounding environment.

Matt is an active member of the Australian/Pacific coastal engineering community, regularly publishing work in technical conferences and journals. He is also a committee member of the Engineers Australia NSW Coastal, Ocean and Port Engineering Panel (COPEP) and was secretary of the committee in 2013 and 2014.

Qualifications and affiliations

BE Hons 1 (Civil Engineering), UNSW, 2003
MEngSc (Coastal Eng. & Management), UNSW, 2008
Member: Engineers Australia
Member: NSW Coastal, Ocean & Port Engineering Panel
Member: Te Ipukarea Society, Cook Islands
Member: IUCN Commission on Ecosystem Management

Awards

2003: DN Foster Award, Engineers Australia
2015: Kevin Stark Memorial Award, Engineers Australia
2019: Endeavour Executive Leadership Award, Australian Government

Professional history

2014-: Principal Coastal Engineer, UNSW WRL
2011-2014: Senior Coastal Engineer, UNSW WRL
2004-2011: Coastal Engineer, UNSW WRL

Expertise

- Coastal processes and hazards
- Coastal and estuarine management
- Geomorphology
- Climate change adaptation
- Coastal monitoring
- Physical model design, construction and testing
- Rubble mound coastal structures
- Rigid marine and coastal structures