



Matt Blacka

Principal Coastal Engineer

MIEAust CPEng NER APEC Engineer IntPE(Aus)

Matt is Chartered Professional Engineer (Civil, Environmental) and for the past 17 years he has led projects in the fields of coastal processes and hazards, estuary processes, coastal structures and coastal climate change adaptation. His projects in these areas include engineering design, vulnerability assessment, management planning, physical modelling, field data collection and monitoring. Matt's work extends throughout the east coast of Australia, New Zealand and the Pacific Islands. He holds a Master of Engineering Science with specialisation in Coastal Engineering and Management, and a Bachelor of Engineering (Civil) with first class honours in Coastal Engineering.

Matt's qualifications in Civil Engineering combined with his passion for the natural coastal environment allow him to bring a balanced approach to his work in the areas of coastal management and coastal protection. His experience provides a wealth of knowledge on the use and mis-use of coastal protection systems, and the impacts of coastal management works on the environment. Matt's expertise in coastal and maritime structures extends to include physical modelling, wave loading assessments, design, condition assessments and analysis of environmental impacts from coastal protection works. Matt regularly leads desktop and field investigations in these areas, and he has many years of practical experience undertaking environmental data collection in the coastal zone.

In the past decade Matt's work has focussed on coastal processes and hazards for reef-fringed Pacific Islands. His work in the Pacific region includes analysis of waves, storm surge and hydrodynamic processes, assessment of coastal hazard risks for island communities, as well as planning and adaptation of infrastructure in the coastal zone. Matt spends large amounts of time deployed within the region, with a focus on field investigations and close engagement with regional organisations, government agencies and communities of Pacific Island Countries.

Matt is an active member of the Australia/Pacific Islands coastal engineering profession, regularly publishing work in technical conferences and presenting in industry forums. He is a corresponding committee member and former secretary of the Engineers Australia NSW Coastal, Ocean and Port Engineering Panel and a member of the IUCN Commission on Ecosystem Management (Oceania).

Qualifications and affiliations

- BE Hons 1 (Civil Engineering), UNSW, 2003
- MEngSc (Coastal Eng. & Management), UNSW, 2008
- MIEAust (Member of the Institution of Engineers Australia)
- CPEng (Chartered Professional Engineer – Civil Engineering, Environmental Engineering)
- APEC Engineer (Member: APEC Engineers Register)
- IntPE (Member: International Professional Engineers Register)
- Member: NSW Coastal, Ocean & Port Engineering Panel of Engineers Australia (Corresponding committee member)
- Member: IUCN Commission on Ecosystem Management (Oceania division)
- Member: Te Ipukarea Society, Cook Islands (Environmental NGO)

Expertise

- Analysis of coastal processes, including Australian and Pacific Island coastlines
- Assessment of coastal hazard risks and impacts
- Coastal zone and estuarine management
- Design and evaluation of coastal protection works
- Climate change impacts and planning of coastal adaptation
- Coastal monitoring and environmental data collection
- Physical model design, construction and testing (coastal and hydraulic models)

Awards

- 2003: **DN Foster Award** (undergraduate studies in coastal engineering), Presented by Engineers Australia.
- 2015: **Kevin Stark Memorial Award** (excellence in coastal engineering practice), Presented by Engineers Australia.
- 2019: **Endeavour Leadership Program – Executive Leadership Award**, Presented by the Australian Government Department of Education and Training. International fellowship to investigate capacity building opportunities for coastal science and engineering in the Pacific Islands region, with workplace postings to the Pacific Community (SPC) in Suva and the Cook Islands Government (Climate Change Division, Office of Prime Minister).
- 2020: **Asia-Pacific Spatial Excellence Award – Technical Excellence (NSW)**, Presented by Surveying and Spatial Sciences Institute.

Consulting and research interests

- Impacts of wave and storm surge hazards on Pacific Island communities including wave and hydrodynamic processes of fringing reef systems and coastal processes of reef mediated beaches.
- Adaptation and sustainable development of coastal zone infrastructure in Pacific Islands.
- Advanced coastal data collection and monitoring systems including UAV and camera-based systems.
- Environmental management of coastal zone and estuary systems.

Professional history

- 2014-Present: Principal Coastal Engineer, UNSW Water Research Laboratory
- 2011-2014: Senior Coastal Engineer, UNSW Water Research Laboratory
- 2004-2011: Project Engineer, UNSW Water Research Laboratory

Reports and publications

Industry guidance publications:

PRIF (2017) “*Guidance for Coastal Protection Works in Pacific Islands Countries*”, published by the Pacific Region Infrastructure Facility, (authors T Shand (Tonkin +Taylor) and M Blacka (UNSW))

Blacka M, Shand T, Carley J and Mariani A (2013) “*A Review of Artificial Reefs for Coastal Protection in NSW*”, UNSW WRL Technical Report 2012/08, Prepared for the NSW Office of Environment and Heritage

SCCG (2013) “*Assessment and Decision Frameworks for Seawall Structures*”, Appendix A - Literature Review, Appendix D - Field Assessment, Appendix E & F - Case Studies, published by the Sydney Coastal Councils Group, (authors I Coghlan, A Mariani, F Flocard and M Blacka)

EA (2010) “*Appropriate Safety Criteria for Vehicles in Floods*”, published by Engineers Australia, (authors T Shand, R Cox, M Blacka M and G Smith)

Book chapters:

UNSW and UNESCO (2021; in draft) “*Securing Water, Energy and Food in the Pacific*”, Chapter 9 “*Infrastructure Vulnerability to Disruption: A Particularly Pacific Problem*”, Chapter authors M Blacka, F Johnson and R Cox, Springer Series - Water Security in a New World

Journal papers:

Splinter, K., Li, L. and Blacka, M. (2018) “*Laboratory Experiments of Wave Overtopping of Revetment Structures in Reef Environments*”, Coastal Engineering Proceedings, 1(36), waves.80. <https://doi.org/10.9753/icce.v36.waves.80>

Mariani, A., Blacka, M.J., Cox, R.J., Coghlan, I.R. and Carley, J.T. (2009) “*Wave Overtopping of Coastal Structures. Physical Model Versus Desktop Predictions*”, Journal of Coastal Research

Conference papers/presentations:

Blacka M and Drummond C (2019) “*Measurements and Hydrodynamic Analysis of a Complex Fringing Reef and Lagoon System*”, Proceedings of the Australasian Coasts and Ports Conference

Bouvier C, Castelle B, Balouin Y, Splinter K, Blacka M and Dubarbier B (2019), “*Cross-Shore Sandbars Response to an Artificial Reef: an Intersite Comparison*”, International Conference on Coastal Sediments 2019

Splinter K, Li L and Blacka M (2018), “*Laboratory Experiments of Wave Overtopping of Revetment Structures in Reef Environments*”, Coastal Engineering Proceedings 1(36):80

Coghlan I, Blacka M, Shand T, Foster M, Carley J, Howe D and Modra B (2018), “*Wharves At The Edge Of The World: Physical Modelling Of Zero Maintenance Breakwaters In Remote Locations*”, Proceedings of the 7th International Conference on the Application of Physical Modelling in Coastal and Port Engineering and Science (Coastlab18), Santander, Spain

Shand T and Blacka M (2018) “*Development of Guidance for Coastal Protection Works in Pacific Islands Countries*”, Proceedings of the Pacific Climate Change Conference

Blacka M, Drummond C, Rahman P and Miller B (2018) “*Geospatial Mapping and Hydrodynamic Investigations of Muri Lagoon and Avana Harbour, Rarotonga, Cook Islands*”, Pacific Science Technology and Resources Conference

Blacka M, Crane K, van Bracht D and Weicek D (2018), “*Sustainable Entrance Management for ICOLLs of the NSW Sapphire Coast*”, NSW Coastal Conference, Merimbula

Coghlan I and Blacka M (2017), “*Wave Penetration into Waterways with Intermittently Closed Entrances*”, NSW Coastal Conference, Port Stephens

Blacka M, Splinter K and Killalea R (2017) “*Considerations for the Design of Rock Armoured Coastal Protection on Fringing Reef Coastlines*”, Pacific Islands Science, Technology and Resources Conference

Killalea R, Splinter K, Blacka M and Berthelemy X (2017) “*Considerations for the Design of Rock Armoured Structures on Fringing Reef Coastlines*”, Proceedings of the Australasian Coasts and Ports Conference

Splinter K, Huo M, Berthelemy X and Blacka M (2017) “*Laboratory Experiments into the Effect of Reef Width on Extreme Water Levels During Cyclone Events*”, Proceedings of the Australasian Coasts and Ports Conference

Shand T, Blacka M, Carley J, Whalley O and Estigarribia L (2017), “*Affordable Coastal Protection in the Pacific Islands: Impacts of Local Resource Availability and Transport Costs*”, Proceedings of the Australasian Coasts and Ports Conference

Blacka M, Shand T, Howe D, Coghlan I, Carley J, Whalley O and Estigarribia L (2017), “*Affordable Coastal Protection in the Pacific Islands: Testing and Design of Alternative Protection Options for Low-Energy Coastlines*”, Proceedings of the Australasian Coasts and Ports Conference

Foster M, Shand T, Blacka M and Bakker P (2017) “*Waitangi Wharf and Port Upgrade - Providing a critical lifeline at the edge of New Zealand*”, Proceedings of the Australasian Coasts and Ports Conference

Main R, Hartley A, Dengate C, Rowe E and Blacka M (2016) “*Coffs Harbour Northern Breakwater - Not Your Average Upgrade*”, NSW Coastal Conference, Coffs Harbour

Blacka M, Flocard F, Splinter K and Cox R (2015) “*Estimating Wave Heights and Water Levels inside Fringing Reefs during Extreme Conditions*”, Proceedings of Australasian Coasts and Ports Conference, Auckland

- Stewart J, McDonnell B, Saunders B, Tan K, Lee S, de Geeter J, Blacka M (2015) "*Alternative Revetment Design for the Roy Hill Infrastructure Rail Loop*", Proceedings of the Australasian Coasts and Ports Conference, Auckland
- Blacka M, Guerry N, Davey E and Symmons, J (2014), "*Coastal Imaging in Australia, the Next Generation*", Australian Coast to Coast Conference, Western Australia
- Carley J, Flocard F, Coghlan I, Blacka M, Splinter K, Cox R (2014), "*Advances in the Assessment of the Inundation Hazard*", presented at NSW Coastal Conference, Ulladulla, NSW, 11 - 14 November 2014
- Coghlan I, Carley J, Cox R, Davey E, Blacka M and Lofthouse J (2014), "*Concept Designs for a Groyne Field on the Far North NSW Coast*", NSW Coastal Conference
- Blacka M, Flocard F, Rayner D, Rahman P and Parakoti B (2013), "*Modelling and Mapping the Impacts of Storm Surge and Waves on the Avarua Coastline*", SOPAC Science Technology and Resources Conference, Avarua, Rarotonga
- Blacka M, Flocard F, Rayner D, Rahman P and Parakoti B (2013), "*A Case Study of Vulnerability to Cyclones and Climate Change: Avarua, Rarotonga*", in Coasts and Ports 2013, National Committee on Coastal and Ocean Engineering, pp. 91 – 96
- Coghlan I, Carley J, Blacka M, Rayner D and Cox R (2012) "*Coastal Engineering Options for Adaptation to Climate Change*", Proceedings of the 2nd Practical Responses to Climate Change Conference
- Coghlan I, Carley J, Blacka M, Rayner D and Cox R (2012), "*Coastal Engineering Options for Adaptation to Climate Change*", in Proceedings of National Conference on Practical Responses to Climate Change, Engineers Australia, Canberra, Australia, pp. 307 - 314, presented at Practical Responses to Climate Change National Conference 2012, National Convention Centre, Canberra, 1 - 3 May 2012
- Shand T, Cox R, Smith G and Blacka M (2011), "*Development of Appropriate Criteria for the Safety and Stability of Persons and Vehicles in Floods*", Hydrology and Water Resources Conference, 34th IAHR World Congress, Brisbane, QLD
- Blacka M, Nilsen A and Colleter G (2011), "*An Overview of the use of Physical Models to Assess Wave Loading on Marine Structures*", Coasts and Ports Conference, Perth, WA
- Colleter G, Van Staden A, Blacka M and Louys J (2011), "*Mackay Breakwater Adaptability*", Proceedings of the Australasian Coasts and Ports Conference, Perth, WA
- Carley J, Coghlan I, Blacka M, Cox R and Hornsey W (2011), "*Performance of Sand Filled Geotextile Container (Geocontainer) Structures in North Queensland during Tropical Cyclone Yas*", Proceedings of the Australasian Coasts and Ports Conference, Perth, WA
- Shand T, Cox R, Smith G and Blacka M (2010), "*Appropriate Criteria for the Safety and Stability of People in Stormwater Design*", National Conference of the Stormwater Industry Association, Sydney, NSW
- Carley J, Shand T, Coghlan I, Blacka M, Cox R, Littman A, Fitzgibbon B, McLean G and Watson P (2010), "*Beach Scraping as a Coastal Management Option*". NSW Coastal Conference, Batemans Bay, NSW
- Cox R, Shand T and Blacka M (2010), "*People Safety in Stormwater Design*", Queensland Stormwater Industry Association Annual Conference, Caloundra, QLD
- Coghlan I, Carley J, Cox R, Blacka M, Mariani A, Hornsey W and Sheldrick S (2009), "*Two-Dimensional Physical Modelling of Sand Filled Geocontainers for Coastal Protection*", Proceedings of the Australasian Coasts and Ports Conference, Wellington, NZ
- Blacka M, Carley J, Corbett B and Jackson A (2009), "*Wave Transmission over Low Crested Geotextile Breakwater Structures*", Proceedings of the Australasian Coasts and Ports Conference, Wellington, NZ
- Carley J, Blacka M, Mariani A, Cox R, Attwater C and Watson P (2009), "*Integrated Assessment of Coastal Hazards and Climate Change for Clarence City, Tasmania*", Proceedings of the Australasian Coasts and Ports Conference, Wellington, NZ
- Mariani, A., Blacka, M.J. and Carley, J.T. (2009), Extreme Wave Overtopping of a Vertical Breakwater. A Physical Model and Desktop Investigation. Coasts and Ports Conference, Wellington, NZ
- Carley J, Blacka M, Cox R and Timms W (2008), "*A Template for Modelling and Managing Sea Level Rise and Climate Change*", IPWEA National Conference Climate Change Response, Coffs Harbour, NSW

- Carley J, Blacka M, Cox R, Attwater C and Watson P (2008), “*Modelling Coastal Processes and Hazards to Assess Sea Level Rise Impacts for Integration into a Planning Scheme*”, IPWEA National Conference Climate Change Response, Coffs Harbour, NSW
- Blacka M, Carley J, Cox R, Lester D and Williams B (2008), “*Sea Level Rise Implications and Adaptation for South Arm Secondary Road, Hobart*”, IPWEA National Conference Climate Change Response, Coffs Harbour, NSW
- Carley J, Blacka M, Cox R, McIntosh J and Macarthur J (2008), “*Sea Level Rise and Climate Change Impacts for Planning a New Hospital*”, IPWEA National Conference Climate Change Response, Coffs Harbour, NSW
- Carley J, Blacka M, Mariani A, Bettington S and Prior G. (2007), “*Physical Modelling of Coastal Structures for Gorgon Project, Barrow Island Western Australia*”, Proceedings of the Australasian Coasts and Ports Conference, Melbourne
- Blacka M, Carley J, Cox R, Hornsey W and Restall S (2007), “*Field Measurements of Full Sized Geocontainers*”, Proceedings of the Australasian Coasts and Ports Conference, Melbourne, VIC
- Blacka M, Carley J and Cox R (2007), “*Stability and Design of Rubble Toe Protection for Vertical Seawalls*”, Proceedings of the Australasian Coasts and Ports Conference, Melbourne, VIC
- Phillips B and Blacka M (2007), “*Hydraulic Assessments of the William Slim Drive PMF Retarding Basin*”. 47th Floodplain Management Authorities Conference, Gunnedah, NSW
- Blacka M, Carley J, Miller B and Cox R (2006), “*The Current use of Physical and Numerical Models for Coastal Applications*”, NSW Coastal Conference, Coffs Harbour, NSW
- Blacka M, Carley J, Cox R and Jayewardene I (2005), “*Assessment of the use of Concrete Hanbar Armour Units on NSW Breakwaters*”, Proceedings of the Australasian Coasts and Ports Conference, Adelaide, SA
- Carley J, Blacka M, Cox R and Pulini I (2005), “*Physical Modelling of Breakwater Damage and Redesign, Nafanua Harbour*”, Eua Island, Tonga. Coasts and Ports Conference, Adelaide, SA
- Carley J, Blacka M, Cox R and Phillips B (2005), “*Toe Protection and Remedial Options for Historical Seawalls*”, Proceedings of the Australasian Coasts and Ports Conference, Adelaide, SA
- Blacka M, Carley J and Cox R (2004), “*Management and Remedial Options for Historical Seawalls*”, NSW Coastal Conference, Lake Macquarie, NSW

Technical reports:

- Blacka M (2020) “*Climate Risk Assessment of the Avatiu Port Eastern Breakwater, Rarotonga Cook Islands*”, UNSW WRL Technical Report 2020/41
- Blacka M and Flocard F (2020) “*Coastal Hazard Risk Assessment, Turangi Coastline, Rarotonga, Cook Islands*”, UNSW WRL Technical Report 2019/31
- Drummond C and Blacka M (2019) “*Quasi 3D Physical Modelling of the Port of Apia Breakwater Upgrade, Samoa*”, UNSW WRL Technical Report 2019/27
- Blacka M, Miller B, Lumiatti G and Howe D (2019) “*Oceanographic and Outfall Near Field Modelling Investigations for Muri, Rarotonga, Cook Islands*”, UNSW WRL Technical Report 2019/29
- Blacka M, Drummond C, Rahman P and Miller B (2019) “*Hydrodynamic Investigation of Muri Lagoon and Avana Harbour, Rarotonga, Cook Islands*”, UNSW WRL Technical Report 2018/21
- Blacka M, Drummond C and Harrison A (2019) “*Oceanographic Data Collection – Stage 2 Investigations, Rarotonga, Cook Islands*”, UNSW WRL Technical Report 2018/17
- Drummond C and Blacka M (2019) “*Coastal Imaging and Shoreline Analysis Report 10: Palm Beach, Burleigh, Broadbeach and Surfers Paradise, September 2018 - February 2019*”, UNSW WRL Technical Report 2019/15
- Blacka M (2018) “*Muri Oceanographic Assessment - Stage 1a Oceanographic Processes Summary*”, UNSW WRL Letter Report LR20180508a
- Blacka M, Rahman P and Miller B (2018) “*Muri Oceanographic Assessment – Stage 1b Receiving Water Quality Guidelines*”, UNSW WRL Letter Report LR20180508b
- Modra B, Blacka M and Young S (2018) “*Pitt Island Wharf 3D Physical Model Testing*”, UNSW WRL Technical Report 2017/11

- Blacka M, Howe D and Coghlan I (2017) “*Affordable Coastal Protection in the Pacific, Physical Modelling of Concrete Masonry Blocks and Geotextile Sand Containers*”, UNSW WRL Technical Report 2016/24
- Howe D, Coghlan I, Carley J, Blacka M (2016) “*Chatham Islands Port Waitangi Physical Modelling*”, UNSW WRL Technical Report 2015/17
- Bega Valley Shire Council (2016) “*Review of Environmental Factors for Entrance Management of Wallaga Lake, Cuttagee Lake, Bega River, Wallagoot Lake, Back Lake, Curalo Lagoon and Wonboyn Lake*”, Prepared by UNSW Water Research Laboratory, Author: Blacka M
- Blacka M, Mariani A and Carley T (2015) “*North Wonboyn NSW Foreshore Protection Study*”, UNSW WRL Technical Report 2013/29
- Blacka M, Guerry N, Davey E (2015) “*Coastal Imaging and Shoreline Analysis Report Palm Beach and Northern Gold Coast Beaches: March to August 2014*”, UNSW WRL Technical Report 2014/19
- Drummond C, Modra B and Blacka M (2015) “*Coastal Imaging and Shoreline Analysis Report: Palm Beach and Northern Gold Coast Beaches, March – August 2015*”, UNSW WRL Technical Report 2015/21
- Blacka M, Flocard F, Rahman P, Rayner D and Parakoti B (2014) “*Coastal Adaptation Needs for Extreme Events and Climate Change, Avarua, Rarotonga Cook Islands – Project Stage 3: Coastal Engineering Vulnerability Assessment*”, UNSW WRL Technical Report 2013/13
- Blacka M and Davey E (2014) “*Argus Coastal Imaging System Commissioning Report*”, UNSW WRL Technical Report 2013/07
- Drummond C and Blacka M (2014) “*Physical Modelling of Flexmat Mattresses for the Roy Hill Iron Ore Project, Port Landside Revetments*”, UNSW WRL Technical Report, 2014/16
- Coghlan I, Davey E, Carley J, Blacka M and Cox R (2014) “*Kingscliff Beach Foreshore Protection Works Part C - Groyne Field Assessment*”, UNSW WRL Technical Report 2012/18
- Blacka M, Rayner D and Parakoti B (2013) “*Coastal Adaptation Needs for Extreme Events and Climate Change, Avarua, Rarotonga Cook Islands – Project Stage 2: Topographic and Bathymetric Data Collection*”, UNSW WRL Technical Report 2013/12
- Blacka M, Flocard F and Parakoti B (2013) “*Coastal Adaptation Needs for Extreme Events and Climate Change, Avarua, Rarotonga Cook Islands – Project Stage 1: Scoping and Collation of Existing Data*”, UNSW WRL Technical Report 2013/11
- Cox R, Panayotou K and Cornwall R (2013) “*Climate Risk Assessment for Avatiu Port and Connected Infrastructure*”, UNSW WRL Technical Report 2013/15, Reviewer: Blacka M
- Blacka M, Rayner D and Parakoti B (2013) “*Coastal Adaptation Needs for Extreme Events and Climate Change, Avarua, Rarotonga, Cook Islands Project Stage 2: Topographic and Bathymetric Survey Data Collection*”, UNSW WRL Technical Report 2013/12
- Blacka M, Flocard F and Parakoti B (2013) “*Coastal Adaptation Needs for Extreme Events and Climate Change, Avarua, Rarotonga, Cook Islands Project Stage 1: Scoping and Collation of Existing Data*”, UNSW WRL Technical Report 2013/11
- Mariani A, Drummond C and Blacka M (2013) “*Wyndham Harbour Physical Modelling*”, UNSW WRL Technical Report 2013/01
- Blacka M and Flocard F (2012) “*Coastal Adaptation and Protection Options for Port Sorrell and Shearwater, Tasmania*”, UNSW WRL Technical Report 2012/20
- Blacka M, Ruprecht J, Coghlan I and Farrelly, B (2012) “*Coffs Harbour Eastern Breakwater Physical Modelling*”, UNSW WRL Technical Report 2012/19
- Blacka M and Farrelly B (2012) “*ICHTHYS LNG Plant Revetment Physical Modelling, Darwin Harbour*”, UNSW WRL Technical Report 2012/15
- Blacka M, Davey E and Carley J (2012) “*Investigation of Roches Beach Protection Works*”, UNSW WRL Technical Report 12/09
- Ruprecht J and Blacka M (2012) “*Gladstone Tug Berth Marina Physical Modelling*”, UNSW WRL Technical Report 2012/07
- Flocard F and Blacka M (2012) “*Seawall Assessment Literature Review*”, UNSW WRL Technical Report 2012/04

Blacka M and Rayner D (2012) "*Hay Point Berth 2 3D Modelling*", UNSW WRL Technical Report 2011/28

Coghlan I, Ruprecht J and Blacka M (2012) "*Abbot Point Multi Cargo Facility 2D and Q3D Baseline Modelling Study*", UNSW WRL Technical Report 2011/16

Blacka M, Coghlan I and Ruprecht J (2011) "*Abbot Point Multi Cargo Facility 2D Physical Modelling ECI MDIJV*", UNSW WRL Technical Report 2011/18

Mariani A, Blacka M and Coghlan I (2011) "*2D Physical Modelling of Hay Point Coal Terminal Expansion 3, Queensland*", UNSW WRL Technical Report 2010/13

Blacka M, Coghlan I and Rayner D (2011) "*3D Physical Modelling of Hay Point Coal Terminal, Expansions 3 and 4, Queensland*", UNSW WRL Technical Report 2010/01

Shand T, Cox R, Blacka M and Smith G (2010) "*Appropriate Safety Criteria for Vehicles in Floods*", UNSW WRL Research Report RR241

Blacka M, Carley J and Cox R (2010) "*Coastal Risk Management Report for the North Palm Beach Surf Live Saving Clubhouse, Palm Beach*", UNSW WRL Technical Report 2010/22

Shand T and Blacka M (2009) "*Foreshore Protection Review - Penrith Lakes Main Lake*", UNSW WRL Technical Report 2009/27

Pells S and Blacka M (2009) "*Proof of Concept - Testing of Elemental Energy Technologies Limited SeaUrchin Turbine in Low Velocity Water Flows*", UNSW WRL Technical Report 2009/16

Blacka M and Badenhop A (2009) "*Foreshore Protection Review - Penrith Lakes Wildlife Lake*", UNSW WRL Technical Report 2009/09

Blacka M, Mallen Lopez L., Mariani A and Carley J (2009) "*3D Wave Penetration Modelling - Full Material Offload Facility, Gorgon Project, Barrow Island LNG Plant, Western Australia*", UNSW WRL Technical Report 2009/03

Coghlan I.R, Mariani A, Blacka M and Carley J (2009) "*Two-Dimensional and Quasi Three-Dimensional Modelling of Armour Stability and Overtopping - Full Material Offload Facility, Gorgon Project, Barrow Island LNG Plant, Western Australia*", UNSW WRL Technical Report 2008/36

Blacka M, Mallen Lopez L and Carley J (2009) "*Three-Dimensional Physical Modelling of Geocontainer Breakwaters, Sir Bani Yas Island, Abu Dhabi*", UNSW WRL Technical Report 2008/34

Blacka M, Mallen Lopez L and Carley J (2009) "*Two-Dimensional Physical Modelling of Geocontainer Breakwaters, Sir Bani Yas Island, Abu Dhabi*", UNSW WRL Technical Report 2008/33

Carley J, Coghlan I, Blacka M and Cox R (2009) "*Development of a Proposal and Environmental Assessment of Beach Scraping - New Brighton and South Golden Beach*", UNSW WRL Technical Report 2008/19

Carley J, Blacka M, Timms W, Andersen M, Mariani A, Rayner D, McArthur J and Cox R (2009) "*Coastal Processes, Coastal Hazards, Climate Change and Adaptive Responses for Preparation of a Coastal Management Strategy for Clarence City, Tasmania*", UNSW WRL Technical Report 2008/04

Blacka M, Anderson D and Mallen Lopez L (2008) "*Palm Beach Coastal Imaging Report No. 9*", UNSW WRL Technical Report 2008/32

Mariani A, Coghlan I, Blacka M and Carley J (2008) "*Two-Dimensional and Quasi Three-Dimensional Physical Modelling for Gorgon Project, Barrow Island LNG Plant, Pioneer Material Offload Facility, Western Australia*", UNSW WRL Technical Report 2008/31

Blacka M, Anderson D and Mallen Lopez L (2008) "*Gold Coast Imaging Report No. 18*", UNSW WRL Technical Report 2008/27

Blacka M, Anderson D and Mallen Lopez L (2008) "*Palm Beach Coastal Imaging Report No. 8*", UNSW WRL Technical Report 2008/18

Blacka M, Mariani A and Carley J (2008) "*Review of Design Changes and Previous Physical Modelling for Gorgon Project, Barrow Island LNG Plant Material Offload Facility, Western Australia*", UNSW WRL Technical Report 2008/17

Blacka M, Carley J and Mallen Lopez L (2008) "*Physical Modelling of Bounty Bay Breakwater, Pitcairn Island*", UNSW WRL Technical Report 2008/14

- Blacka M, Carley J and Coghlan I (2008) "*Inundation and Sea Level Rise Impacts and Adaption for South Arm Secondary Road, Hobart, Tasmania*", UNSW WRL Technical Report 2008/08:
- Blacka M, Anderson D and Mallen Lopez L (2008) "*Analysis of Shoreline Variability, Seasonality and Erosion/Accretion Trends, August 2007-January 2008, Northern Gold Coast Coastal Imaging Report 17*", UNSW WRL Technical Report 2008/06
- Blacka M, Anderson D and Cunningham I (2008) "*Palm Beach Coastal Imaging System Report 7*", UNSW WRL Technical Report 2007/40
- Blacka M, Carley J, Mariani A and Cox R (2008) "*Three-Dimensional Physical Modelling of Greater Gorgon, Barrow Island LNG Plant Material Offload Facility, WA*", UNSW WRL Technical Report 2006/24
- Blacka M, Carley J and Cox R (2008) "*Two-Dimensional Physical Modelling of Gorgon Project, Barrow Island LNG Plant Material Offload Facility, WA*", UNSW WRL Technical Report 2006/18
- Blacka M, Carley J and Cox R (2008) "*Field Measurement of ELCOMAX ELCOROCK Geocontainers at Clifton Springs Boat Harbour, Victoria*", UNSW WRL Technical Report 2006/06
- Blacka M, Carley J and Cox R (2007) "*Three-Dimensional Physical Modelling of Shell Cove Boat Harbour Entrance*", UNSW WRL Technical Report 2005/23
- Blacka M, Anderson D and Cunningham I (2007) "*Analysis of Shoreline Variability, Seasonality and Erosion/Accretion Trends: February-July 2007, Report 16: Northern Gold Coast Coastal Imaging System*", UNSW WRL Technical Report 2007/34
- Blacka M (2007) "*Collaroy-Narrabeen Coastal Imaging Report 3*", UNSW WRL Technical Report 2007/30
- Blacka M, Anderson D and Turner I (2007) "*Analysis of Shoreline Variability and Erosion/Accretion Trends: December 2006 - May 2007. Report 6: Palm Beach Coastal Imaging System*", UNSW WRL Technical Report 2007/21
- Blacka M, Wyllie S and Carley J (2007) "*Springfield Lakes Queensland, Low Level Lake Spillway and Cascade Physical Model*", UNSW WRL Technical Report 2007/09
- Turner I and Blacka M (2007) "*Analysis of Shoreline Variability, Seasonality and Erosion/Accretion Trends: August 2006 - January 2007. Report 15: Northern Gold Coast Coastal Imaging System*", UNSW WRL Technical Report 2007/08
- Blacka M, Carley J and Wyllie S (2006) "*Physical Modelling of William Slim Drive Retarding Basin Outlet, Canberra, ACT*", UNSW WRL Technical Report 2006/17
- Blacka M, Carley J and Cox R (2006) "*Physical Modelling of Toe Apron Option for the Parallel Runway Seawall*", UNSW WRL Technical Report 2005/29
- Anderson D, Cox R, Glamore W, Pells S and Blacka M (2006) "*Penrith Lakes - Foreshore Protection Review*", UNSW WRL Technical Report 2005/12
- Blacka M, Carley J and Cox R (2006) "*Two-Dimensional Physical Modelling of Shellcove Breakwater*", UNSW WRL Technical Report 2004/21
- Carley J, Blacka M and Cox R (2005) "*Preliminary Assessment of Toe Apron Option for Parallel Runway Seawall*", UNSW WRL Technical Report 2005/07
- Carley J, Blacka M and Ball J (2004) "*Physical Modelling of Eidsvold Weir Spillway - Detailed Design*", UNSW WRL Technical Report 2004/15
- Carley J, Blacka M and Stone P (2004) "*Tonga Wharf Model Study*", UNSW WRL Technical Report 2004/10