



## Ed Atkin

**Nationality:** British

**Profession:** Oceanographer

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### **PRESENT POSITIONS:**

- Director/Oceanographer, eCoast Marine Consulting and Research
- PhD Candidate, University of Waikato

### **SPECIALISATION:**

Physical oceanography, coastal sediment dynamics and processes, numerical modelling of waves and hydrodynamics, coastal monitoring and hydrographic data collection, multipurpose artificial reefs, surfing wave quality analysis, GIS and marine environmental instrumentation.

### **YEARS OF EXPERIENCE:**

- 10 years (consulting since 2008)

### **KEY QUALIFICATIONS:**

- MSc in Oceanography (1st Class Honours), University of Southampton, UK
- Higher National Diploma in Marine Science, University of Plymouth, UK
- BTEC National Diploma in Marine Engineering, Falmouth Marine School, UK

### **PERSONAL STATEMENT:**

Ed's core background is in coastal processes and oceanography, specialising in coastal sediment dynamics, hydrodynamics, wave climate, surf science, multipurpose reefs, and numerical modelling. Ed completed his Master's degree at The University of Southampton's National Oceanography Centre. His first-class master's thesis studied wave breaking characteristics at Boscombe, UK.

Ed's current role is director and senior consultant at eCoast Marine Consulting and Research. As a consultant Ed has completed technical reports and research projects across a wide range of disciplines; including contributing to expert witness evidence for environmental and other court proceedings. More recently Ed has applied his knowledge of coastal processes to climate change adaptation projects in Mauritius, Tonga and the Marshall Islands. Ed has worked extensively across New Zealand and the Pacific Islands, and is affiliated to the New Zealand Coastal Society (Technical Group of Engineering New Zealand) and New Zealand Fiji Business Council (NZFBC).

Ed has been a part of biological, physical and chemical research teams, worldwide. His experience as a field technician and capability as a consultant means he understands the feasibility, practicality and budgetary requirements of commercial project. He regularly attends and presents at national and international conferences, being actively involved in an organisational capacity.

Ed combines and relates his interests with his exposure to nearshore processes, his high-quality data collection capabilities and an innate knowledge of the surf zone. Ed's currently undertaking a PhD (part-time) at the University of Waikato concerning coastal resource (surf break) management, environmental monitoring and numerical modelling. During this research Ed has received the Trust Waikato Community scholarship in 2013, 2014, 2015

Ed has been a surfer for over 20 years and involved with surf science since 2005 and uses his understanding of nearshore and wave breaking processes in investigations that address wave breaking quality changes. Ed works closely with the Surfbreak Protection Society in New Zealand, by providing technical advice regarding preservation of marine resources and is an active campaigner for the preservation of surf breaks worldwide.

## **WORK HISTORY:**

### **April 2012 – Present**

Director/Oceanographer, eCoast Marine Consulting and Research, Raglan, New Zealand.

### **May 2011 – April 2012**

Environmental Scientist, Oceanographer, ASR Ltd. Raglan, New Zealand. Integral staff member of a marine and freshwater consultancy team. Job roles range from field work to report writing and numerical modelling for a diverse client base. Involved in the planning stages and execution of projects. Primarily responsible for high quality data collection, accurate results and data analysis with reference to published scientific literature.

### **August 2010 – October 2010**

Scientific Specialist and Field Technician, Gulf of Mexico, Louisiana, USA. Oil Spill Response, Southampton, UK. Conducted a multifaceted monitoring program to determine the distribution of Deepwater Horizon oil and dispersant concentrations in nearshore waters and sediments. Involved in the program's development and logistics onboard the MV International Peace. Responsible for the acquisition of high quality data from a range of oceanographic instruments, water samples and sediment samples.

### **July 2010**

Scientific Specialist, Gulf of Mexico, Louisiana, USA. Oil Spill Response, Southampton, UK. Member of a research team deployed in the Gulf of Mexico to monitor the effects of dispersants on open water surface spill associated with the Deepwater Horizon incident. Responsible for the sampling strategy and operation of a Laser In-situ Scattering and Transmissometer. Data processing and analysis.

### **October 2008 – 2010**

Hydrographic Surveyor, Boscombe, Dorset, UK. Planning, execution and processing of high resolution bathymetric data. Data collected sub monthly to monthly detailing morphology of the sandy shoreline in the vicinity of an artificial surfing reef. Required the education, leading and supervision of others during data collection.

### **June 2008 – October 2008**

Intern, ASR Ltd. Raglan, New Zealand. Member of the research and development team. The role contributed to a number of global projects with engineering, monitoring and physical/numerical modelling aspects.

## **SPECIALISED SKILLS/TRAINING AND OTHER BACKGROUND**

- Numerical modelling: Delft3D, Swan, Dual-sphysics, Coullwave
- Processing: Matlab, Python, QGIS, ARCGIS, Surfer, SigmaStat/Plot, Cloud Compare
- Experienced with the calibration, deployment and data analysis of a large range of off-the-shelf oceanographic instrumentation and software including: ADCP, CTD, LISST, FLNTU
- Comfortable with shipboard operations on research vessels including the operation of hydraulic machinery and winches used in the collection of bio-chem water and sediment sampling, and the deployment, casting and retrieval of oceanographic equipment.
- Operation of hydrographic/GNSS hardware and associated software: SBES, MBES, SSS, SBP, RTK, DGPS, CARIS HIPS/SIPS
- RYA National Powerboat Certificate Level 2 (2008)

- Shore based Royal Yachting Association/Maritime Coastal Agency Coastal Skipper & Yacht Master Offshore (2005)
- Volunteer Coastguard
- RYA Certified GPS and RADAR Operator
- Maritime Restricted Operators Certificate (MROC) VHF Radio Operators Licence
- Search and Rescue Medic
- Skipper of eCoast Research Vessels
- PADI Open Water, Advanced and Rescue Diver

## THESIS

**Atkin, E.**, 2010. The Impact of an Artificial Surfing Reef on Breaking Wave Conditions at Boscombe, UK. Master of Oceanography Dissertation. University of Southampton. Pp 94 + appendices.

## PUBLICATIONS SUMMARY

### Peer-reviewed Publications

Mead, S. T., T. M. Hume, E. **Atkin**, K. Bryan and J. Waiti, 2018. Management Issues Concerning New Zealand's Nationally and Regionally Significant Surf Breaks. Submitted to the *Journal of Coastal Research* (Special Issue 87: *Surf Break Management in Aotearoa/New Zealand*)

**Atkin**, E., T. Hume, S. Mead, K. Bryan, and J. Waiti, 2017. Remote Sensing, Classification and Management Guidelines for Surf Breaks of National and Regional Significance. *Proceedings of the 23<sup>th</sup>*

Mead, S. T., D. J. Phillips, and E. **Atkin**, 2017. The Rise and Fall (and Rise) of Winston Island.

*Proceedings of the 23<sup>th</sup> Australasian Coasts and Ports Conference*, Cairns, Australia, 21-23 June 2017.

Mead, S. T., J. C. Borrero, E. **Atkin** and D. J. Phillips, 2015. Application of Climate Change Adaptation, Resilience, and Beach Management Strategies on Coral Islands. *Proceedings of the 22<sup>th</sup> Australasian Coasts and Ports Conference*, Auckland, New Zealand, 15-18 September 2015.

**Atkin**, E. A., J. C. Borrero and S. T. Mead, 2013. Morphological Response to a Multi-Purpose Reef. *Journal of Coastal Engineering*, (Submitted).

Mead, S. T., and E. **Atkin**, 2017. *Review of MetOcean Surfing Impact Report for Lyttleton Port Dredge Disposal: Existing and post sediment disposal nearshore wave dynamics and potential effects on inshore surfing conditions*. Prepared for the Surfbreak Protection Society, Environment Court Hearing, April 2017.

### Research (Incomplete) – Note, many consulting projects incorporate components of research.

Mead, S. T., E. **Atkin**, R. Macintosh, S. O'Neill and N. Ducharmeux. 2016-2018. *Development of an Inland Surfing Facility – Numerical and Physical Modelling*. Funded by Surf Generation and Callaghan Innovation.

**Atkin**, E., S. T. Mead, K. Bryan, T. Hume, and J. Waiti, 2015-2018. *Remote Sensing, Classification and Management Guidelines for Surf Breaks of National and Regional Significance*. Funded by the Ministry Business, Innovation and Employment.

Mead, S. T., E. **Atkin** and D. J. Phillips, 2011 – on-going. *Sediment Transport Investigations of a West Coast Beach - Repeated Bathymetry and Beach Surveys of Maori Bay for Morphological Modelling and Calibration*. Funded by UNITEC.

Mead, S. T., E. **Atkin** and D. J. Phillips, 2011. *Development of Numerical Models to Assess Beach Protection Options for Whitianga Beach*. Funded by UNITEC, December 2011.

Mead, S. T., E. **Atkin** and D. J. Phillips, 2011. *Preliminary Investigation of Offshore Focussing Reefs*. Funded by UNITEC, August 2011.

## Conference Papers and Abstracts

### 2018

**Atkin, E.**, Mead, S. T., Bryan, K., Hume, T. and Waiti, J., 2018. Remote Sensing, Classification and Management Guidelines for Surf Breaks of National and Regional Significance. Global Wave Conference V, Santa Cruz, USA, 4<sup>th</sup>-8<sup>th</sup> March 2018.

### 2017

Davies-Campbell, J. A. T., Bryan, K.R., **Atkin, E.**, Hume, T., Mead, S. and Waiti, J., 2017. Protecting Surf Breaks of Regional and National Significance. New Zealand Coastal Society (IPENZ) Conference. Tauranga, New Zealand, November 2017.

S. T. Mead, D. Phillips and **E Atkin**, 2017. Surfer's Corner (Lyllall Bay) Coastal Remediation Implementation and Amenity Rehabilitation. New Zealand Coastal Society (IPENZ) Conference, Tauranga, New Zealand, 15-17 November 2017.

**Atkin, E.**, Mead, S. T., Bryan, K., Hume, T. and Waiti, J., 2017. Remote Sensing, Classification and Management Guidelines for Surf Breaks of National and Regional Significance. Proceedings of the 23th Australasian Coasts and Ports Conference, Cairns, Australia, 21-23 June 2017.

Mead, S. T., D. J. Phillips, and **E. Atkin**, 2017. The Rise and Fall (and Rise) of Winston Island. Proceedings of the 23th Australasian Coasts and Ports Conference, Cairns, Australia, 21-23 June 2017.

**Atkin, E.**, Mead, S. T., Bryan, K., Hume, T. and Waiti, J., 2017. Remote Sensing, Classification and Management Guidelines for Surf Breaks of National and Regional Significance. the International Surfing Symposium 2017, Currumbin, Australia, 13<sup>th</sup>/14<sup>th</sup> March 2017.

### 2016

**Atkin, E.**, and Mead, S. T., 2016. Identification, Characterisation and Swell Corridors of Regionally Significant Surf Breaks. New Zealand Coastal Society (IPENZ) Conference. Dunedin, New Zealand, November 2016.

### 2015

**Atkin, E.**, and Mead, S. T., 2015. Protecting Surf Breaks in New Zealand Through Surf Science Techniques. 2015 Global Wave Conference, Cornwall/London UK.

Mead, S., Borrero, J., Phillips, D. & **Atkin, E.** (2015). Application of climate change adaptation, resilience, and beach management strategies on coral Islands. In Australasian Coasts & Ports Conference 2015: 22nd Australasian Coastal and Ocean Engineering Conference and the 15th Australasian Port and Harbour Conference. Auckland, New Zealand: Engineers Australia and IPENZ, 2015: 566-571

### 2013

**Atkin, E.**, Greer, D. and Pickett, V., 2013. Whangamata Ebb Tidal Delta Morphology and Wave Breaking Patterns. Coasts and Ports 2013. Manly, Australia.

Mead, S. and **Atkin, E.**, 2013. Development of a Coastal Adaptation Strategy in North-eastern New South Wales, Australia. New Zealand Climate Change Conference 2013.

**Atkin, E.** and Borrero, J., 2013. Morphological Response to a Multipurpose Submerged Breakwater. 8th IMPR Symposium, Puerto Rico, 2013.

### 2012

Phillips, D., Mead, S. T. and **Atkin, E.**, 2012. Morphological Variations and Sediment Transport at a West Coast Auckland Beach, New Zealand Coastal Society (IPENZ) Conference. Auckland, New Zealand, November 2012.

Mead, S. T., **E. Atkin** and D. Phillips, 2012. Design Optimization of Offshore Focusing MPR's, ASBPA 2012 National Coastal Conference. San Diego, October 2012.

## Technical Reports

## 2018

**Atkin, E.A.**, 2018. Mowhanau Site Visit Report and Recommendations. Letter report prepared for Whanganui District Council

**Atkin, E.A.** and Mead, S.T., 2018. Bathymetry Survey of the Waikato River – Hamilton Gardens. Prepared for BBO, May 2018.

Mead S. T., **E. Atkin**, D. Greer and S. O'Neill, 2018. *Coastal Processes Assessment for Malolo Island Resort*. Prepared for Freesoul Real Estate, April 2018.

**Atkin, E.**, Jenks, G. and Mead, S., 2018. Castlecliff Management Options. Technical Report Prepared for Whanganui District Council

Mead S. T., **E. Atkin**, and S. O'Neill, 2017. Preliminary Coastal Processes Assessment for Malolo Island Resort. Prepared for Freesoul Real Estate, February 2018.

## 2017

Mead, S. T., and **E. Atkin**, 2017. Temauku Marine and Freshwater Environmental Surveys. Prepared for Jacobs, December 2017.

**Atkin, E.**, S. T. Mead and S. O'Neill, 2017. RTK Bathymetry Survey of the Lower Wairoa River. Prepared for BBO, September 2017.

**Atkin, E.**, S. T. Mead, D. Greer and S. O'Neill, 2017. *Denis Island (Seychelles) Coastal Management Options*. Prepared for Denis Private Island Ltd, August 2017

**Atkin, E. A.**, S. T. Mead, A. Moores and N. Ducharneau, 2017. Surf Gen Physical Modelling Data Overview – 7 July 2017. Prepared for SURF GENERation Ltd, July 2017.

Mead, S. T., **E. Atkin**, R. Macintosh, S. O'Neill and N. Ducharneau, 2017. Surf Gen Modelling Progress Summary: 8 April 2017. Prepared for SURF GENERation Ltd, April 2017.

**Atkin, E.**, S. T. Mead, D. Greer and S. O'Neill, 2017. Denis Island (Seychelles) Coastal Management Options. Prepared for Denis Private Island Ltd, August 2017

**Atkin, E. A.**, 2017. Review of Response material for MetOcean Surfing Impact Report for Lyttleton Port Dredge Disposal: Existing and post sediment disposal nearshore wave dynamics and potential effects on inshore surfing conditions. Prepared for the Surfbreak Protection Society, April 2017.

Mead, S. T., and **E. Atkin**, 2017. Review of MetOcean Surfing Impact Report for Lyttleton Port Dredge Disposal: Existing and post sediment disposal nearshore wave dynamics and potential effects on inshore surfing conditions. Prepared for the Surfbreak Protection Society, April 2017.

**Atkin, E. A.**, S. T. Mead, and R. Pollock, 2017. Nearshore Survey of Takapuna Beach for Optic Fibre Cable Crossing. Surveys undertaken for EGS, April 2017.

## 2016

**Atkin, E. A.**, S. T. Mead, T. Haggitt and R. Pollock, 2016. Nearshore Survey of Mangawhai Beach for Optic Fibre Cable Crossing. Surveys undertaken for EGS, December 2016.

**Atkin, E.**, 2016. Cosseys Reservoir Trial Data Collection and Analysis: Introduction and Second Quarterly Report. Technical Report produced for Watercare Services Limited.

Mead, S. T., and E. Atkin, 2016. Proposed Nawi Island Temporary Access Road: Environmental Impact Assessment. Prepared for Nawi Island Ltd Fiji, November 2016.

**Atkin, E.**, K. R., Bryan, T. Hume, S. T. Mead and J. Waiti. Remote Sensing, Classification and Management Guidelines for Surf Breaks of National and Regional Significance: Initial Characterisation of Study Sites. Prepared as part of the Ministry of Business, Innovation and Employment Research project, November 2016.

- Borrero, J. C., **Atkin, E.**, D. Greer, S. O'Neill and S. T., Mead. Coastal Processes Study: North East Point, Mahé Island, Seychelles Mahé Island, Seychelles. Prepared for the United Nations Development Program, November 2016.
- Mead, S. T., S. O'Neill and **Atkin, E.**, 2016. Seabed Stability, Bedforms and Seabed Penetration off the New Zealand Coastline. Prepared for Vodafone NZ, September 2016
- Atkin, E.**, and S. T. Mead, 2016. Cosseys Reservoir Trial Data Collection and Analysis: Introduction and First Quarterly Report. Technical Report produced for Watercare Services Limited.
- Mead, S. T., **Atkin, E.** and S. O'Neill, 2016. Coastal Processes and Design Studies for the First Landing Marina Development. Prepared for Barstock Developments, September 2016.
- Atkin, E.**, S. T. Mead, J. C. Borrero, D. J. Phillips and S. O'Neill, 2016. Development of the Castlecliff Coastal Management Strategy. Prepared for Whanganui District Council, July 2016.
- Atkin, E.**, Mead, S. T., and S. O'Neill, 2016. Denis Island Coastal Processes Assessment. Report for Denis Private Island Ltd, June 2016.
- Mead, S. T., and **Atkin, E.**, 2016. Coastal Processes Studies for Plantation Island Resort. Report for Raffe Hotels and Resort, June 2016.
- Mead, S. T., and **Atkin, E.**, 2016. Coastal Processes and Design Studies for the Nawi Island Drydock. Report for Nawi Island Ltd, May 2016.
- Atkin, E.**, and S. T. Mead, 2016. Regionally Significant Surf Breaks in the Waikato Region. Technical Report produced for Waikato Regional Council.
- Atkin, E.**, 2015. Ngaranui Beach Drop Camera Survey. Technical Report prepared for EGS Survey.
- Atkin, E.**, and S. T. Mead, 2016. Diver Survey of the 3.5 km Nearshore Stretch of the TGA Fibre Optic Cable. Undertaken for MCC, February 2016.
- Greer, D., **Atkin, E.**, S. T. Mead, T. Haggitt and S. O'Neill, 2016. Hydrodynamic Modelling and Residence Times of the Waikato West Coast: Fieldwork and Data Collection. Report prepared for Waikato Regional Council, January 2016.
- Greer, S D., **Atkin, E.**, T. Mead, T. Haggitt and S. O'Neill, 2016. Hydrodynamic Modelling and Residence Times of the Waikato West Coast. Report prepared for Waikato Regional Council, April 2016.
- Mead, S. T., and **E. Atkin**, 2016. Coastal Processes and Design Studies for Tropica Island Resort. Prepared for Tropcia Island Resort, Fiji, January 2016.
- Atkin, E.**, K. Bryan, T. Hume, S. Mead and J. Waiti, 2016. Remote Sensing, Classification and Management Guidelines for Surf Breaks of National and Regional Significance: Initial Characterisation Studies. Prepared for the Ministry of Business, Innovation and Employment, December 2016.
- Atkin, E.**, and S. T. Mead, 2016. Diver Survey of the 3.5 km Nearshore Stretch of the TGA Fibre Optic Cable. Undertaken for MCC, February 2016.
- Mead, S. T., and **Atkin, E.**, 2016. Coastal Processes and Design Studies for Tropica Island Resort. Prepared for Tropcia Island Resort, Fiji, January 2016.

## 2015

- Atkin, E.**, 2015. Cosseys Reservoir Fieldwork Manual. Technical Guide produced for Watercare Services Limited.
- Mead, S. T., D. Greer and **Atkin, E.**, 2015. Coastal Processes and Design Studies for the Nawi Island Development. Report prepared for Nawi Island Ltd, Fiji, October 2015.
- Mead, S. T., S. O'Neill, **Atkin, E.** and H. Dennis, 2015. Physical and Biological Processes and Impacts: The Tasman Global Access (TGA) Fibre-Optic Cable. Prepared for Vodafone New Zealand, June 2015.

## 2014

- Atkin, E.** and Mead, S. T. 2014. Surf break management tool: swell corridors and threats to Wellingtons regionally significant surf breaks.

Mead, S. T., and **Atkin, E.**, 2014. Field Data Collection for the Nawi Island Development. Report prepared for Nawi Island Ltd, Fiji, December 2014.

Mead, S. T., and **Atkin, E.**, 2014. Baseline Coastal and Oceanographic Study for the Upgrade of the Existing Savusavu Jetty. Report prepared for Fiji Roads Authority, December 2014

Mead, S. T. and **Atkin, E.**, 2014. Coastal management plan for Denerau Island, Fiji. Large scale wave and hydrodynamic numerical modelling, including calibration. Recommendations for beach stability and erosion prevention. Denerau Corporation Limited.

Mead, S. T. and **Atkin, E.**, 2014. Detailed design of a marina on Pilotin Island, Vanuatu. Large scale wave and hydrodynamic numerical modelling, including calibration and extreme wave statistics. Private Sector

Mead, S. T. and **Atkin, E.**, 2014. Wooli Coast-Cams Image Analysis. Prepared for Coastal Communities Protection Alliance – Wooli Inc.

Mead, S. T., and **Atkin, E.**, 2014. Wairoa Dam Sediment Investigation. Prepared for Watercare Services Ltd, February 2014.

**Atkin, E.**, 2014. Whangamata Field Work Report. Prepared for Waikato Regional Council.

**Atkin, E.**, M. Gunson and S. T. Mead, 2014. Regionally Significant Surf Breaks in the Greater Wellington Region. Report prepared for the Greater Wellington Regional Council, December 2014.

Mead, S. T., and **Atkin, E.**, 2014. Denarau Island Beach Management Assessment. Report prepared for Denarau Corporation Limited, August 2014.

Mead, S. T., and **Atkin, E.**, 2014. Pilotin Island (Vanuatu) Marina Design. Report prepared for Vincent Robert Markus, August 2014.

Mead, S. T., and **Atkin, E.**, 2014. Final Design for Coastal Protection at Hihifo, Northwest Tongatapu, Tonga. Report prepared for MLECCNR, May 2014. Report prepared for MLECCNR, June 2014.

Mead, S. T., and **Atkin, E.**, 2014. Draft Project Design for Coastal Protection at Hihifo, Northwest Tongatapu, Tonga. Report prepared for MLECCNR, May 2014.

Mead, S. T., and **Atkin, E.**, 2014. Review of Historical and Recent Studies Pertaining to Coastal Erosion and Inundation of Hihifo, northwest Tongatapu, Tonga. Report prepared for MLECCNR, May 2014.

## 2013

**Atkin, E.**, 2013. Mowhanau Coastal Landslip Hazard Zone Assessment. Prepared for Wanganui District Council.

Mead, S. T., **Atkin, E.** and Greer. D., 2013. Shangri La – Coastal Engineering Assessment. Prepared for Shangri La Hotels and Resorts.

Mead, S. T. and **Atkin, E.**, 2013. Port Motueka Hydrodynamic Modelling, Expert witness, including multiple scenario modelling of dredged channel options.

**Atkin, E.** and Mead, S. T., 2013. Mauritius Road Decongestion Programme EIA specialist Study: Coastal Vulnerability Assessment. Prepared for cca Environmental.

Mead, S. T., **Atkin, E.**, Greer. D. and Haggitt, T., 2013. Puhoi – Warkworth Coastal Modelling and Field Data Collection. Prepared for Further North Consortium.

Mead, S. T. and **Atkin, E.**, 2013. Wooli Coast-Cams Image Analysis. Prepared for Coastal Communities Protection Alliance – Wooli Inc.

Mead, S. T., **Atkin, E.**, Greer. D. and Phillips, D., 2013. Naisoso Island – Beach Management and Coastal Engineering. Prepared for RELCORP Property Development.

Mead, S. T., **Atkin, E.** and Greer. D., 2013. Vunabaka Detailed Design – Coastal. Prepared for Vunabaka Bay Fiji Ltd:

Mead, S. T., **Atkin, E.** and T. Haggitt, 2013. Fieldwork Report for the Mahurangi and Puhoi Estuaries for the Development of a Sediment Accumulation Model for the Highway of National Significance. Prepared for the Far North Consortium, March 2013.

Mead, S. T., and **Atkin, E.**, 2013. Woolli Beach Photogrammetry Analysis. Prepared for CCPA Woolli Inc., February 2013.

**Atkin, E.**, D. Greer and S. T. Mead, 2013. Analysis of Bathymetric Surveys, Wave Climate, Breaking Patterns and Wave Driven Circulation at Whangamata Ebb Tidal Delta. Report prepared for Waikato Regional Council, January 2013

## 2012

**Atkin, E.**, 2012. Mowhanau Cliff Line Retreat Review. Prepared for Wanganui District Council.

Greer, D. and **Atkin, E.**, 2012. Estimation of Intertidal Flat Surface Area, Western Treatment Plant, Port Phillip Bay, Australia. Integration and analysis of multiple bathymetric and topographic data sets for Melbourne Water

Mead, S. T. and **Atkin, E.**, 2012. A Review and Recommendations of Thermistor String Requirement in Lakes Managed by WSL. Prepared for Watercare Services Ltd.

Mead, S. T. and **Atkin, E.**, 2012. Bathymetry Monitoring of Maori Bay - Phase II. Prepared for Unitec Institute of Technology, September 2012.

Mead, S. T., **Atkin, E.** and D. Greer, 2012. Vunabaka Detailed Design – Coastal. Prepared for Vunabaka Bay Fiji Ltd, December 2012.

Mead, S. T., D. Greer and **Atkin, E.**, 2012. Dam Water Aeration/Circulation Optimization – Cossey's Dam. Prepared for Watercare Services Ltd, December 2012.

**Atkin E.** and **Mead, S. T.**, (2012). The impact of Otago Harbour spoil de position on NZCSP 2010 protected surf breaks: Aramoana (Spit Beach), Whareakeake Bay (Murderers) and Karitane Point. Prepared for the Surfbreak Protection Society, April 2012.

## 2011

Mead, S. T., and **Atkin, E.**, 2011. Preliminary Investigation of Options for Erosion Management at Whitianga Beach. Prepared for Unitec Institute of Technology, November 2011.

**Atkin, E.**, D. Greer and S. T. Mead, 2011. An Appraisal of Waitakere River Erosional Issues at the Te Henga Surf Lifesaving Club and Preliminary Solutions. Prepared for Auckland Council, October, 2011.

Mead, S. T., and **Atkin, E.**, 2011. Bathymetry Monitoring of Maori Bay, Auckland. Prepared for Unitec Institute of Technology, November 2011.

**Atkin, E.**, and S. T. Mead, 2011. Literature Review and a Preliminary Investigation of Offshore Focussing Reefs. Prepared for Unitec Institute of Technology, August 2011.

Mead, S. T., and **Atkin, E.**, 2011. Aramoana Surfing Wave Quality. An investigation on behalf of Surf Break Protection Society to determine the possible effects of dredge spoil deposition on surfing wave quality at 3 surfing breaks protected by NZCPS 2010.

**Atkin, E.** and Greer, D., 2011. Bathymetry Survey of Waihou River Delta, Firth of Thames. Waikato Regional Council, June 2011.

**Atkin, E.**, Greer, D. and Moores, A., 2011. Bathymetry Survey of Te Kouma, Coromandel Peninsular. Thames-Coromandel District Council, May 2011.

Mead, S. T., A. Moores and **Atkin, E.**, 2011. *Pine Harbour Heavy Metal Investigation*. Prepared for Auckland Council, June 2011.

## Expert Evidence

Mead, S. T., and E. Atkin, 2017. Review of MetOcean Surfing Impact Report for Lyttleton Port Dredge Disposal: Existing and post sediment disposal nearshore wave dynamics and potential effects on inshore surfing conditions. Prepared for the Surfbreak Protection Society, Environment Court Hearing, April 2017.



