



CURRICULUM VITAE - Edward Atkin

PERSONAL DETAILS:

Name: Edward Anthony Atkin

Nationality: United Kingdom

Date of Birth: 1983

Profession: Oceanographer

Contact Details: Ph: +64 210 820 0821 E: e.atkin@ecoast.co.nz

SPECIALISATION:

Large-scale physical oceanography, coastal sediment dynamics and processes, numerical modelling, coastal monitoring and hydrographic data collection, multipurpose artificial reefs, surfing wave quality analysis, GIS and marine environmental instrumentation.

YEARS OF EXPERIENCE: 4

PRESENT POSITIONS:

- Director/Oceanographer, eCoast Ltd

KEY QUALIFICATIONS:

- MSc in Oceanography (1st Class Hons), 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 Atkin's diverse academic background provides a multidisciplinary understanding of marine science. Consequently, Ed has been an integral member 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 academic and commercial projects.

Ed completed his Master's degree at The University of Southampton's National Oceanography Center. His first class master's thesis studied wave breaking characteristics at Boscombe, UK. Combined with a self-funded, long term bathymetric monitoring campaign, Ed has gained a thorough understanding of multipurpose artificial reef design, development and installation.

Coastal sediment dynamics, multi-purpose artificial reefs and numerical modelling are Ed's primary interests and he combines and relates these interests with his exposure to nearshore processes, his high quality data collection capabilities and an innate knowledge of the surf zone.

SPECIALISED SKILLS/TRAINING AND OTHER BACKGROUND:

- Numerical modelling: Delft3D, 3DD Suite, Swan, Dual-sphysics, FUNWAVE, COULWAVE.
- Processing, GIS and Datasets: Matlab, Python, ARCGIS, Surfer, SigmaStat/Plot, GEBCO, WW3
- 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 etc.

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- 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 and bespoke modules.
- RYA National Powerboat Certificate Level 2
- Shore based Royal Yachting Association/Maritime Coastal Agency Coastal Skipper & Yacht Master Offshore
- Volunteer Coastguard
- RYA Certified GPS and RADAR Operator
- VHF Radio Operators Licence
- Search and Rescue Medic
- OSHA 24Hr HAZWOPER (Hazardous Waste and Emergency Response Standard) Certificate
- PADI Open Water, Advanced & Rescue Diver

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| Conference Papers: | 2 |
| Technical Reports: | >15 |
| Popular Articles: | 2 |

NATIONAL AND INTERNATIONAL CONFERENCES ATTENDED:

New Zealand Coastal Society (IPENZ) Conference. Auckland, New Zealand, November 2012

WORK HISTORY:

April 2012 – Present

Environmental Scientist, Oceanographer, eCoast Ltd. Raglan, New Zealand. Marine and freshwater consultant.

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 affects 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 – Ongoing

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.

PUBLICATION SUMMARY

Abstracts

Phillips, D., Mead, S. T. and Atkin, E. A., 2012. Morphological Variations and Sediment Transport at a West Coast Auckland Beach, 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

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

Mead, S. T., and E. Atkin, 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 the Auckland Council, October, 2011.

Mead, S. T., and E. Atkin, 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.

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.

Thesis

Atkin, E. A., 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.

RECENT PROJECT RECORD:

Estimation of Intertidal Flat Surface Area, Western Treatment Plant, Port Phillip Bay, Australia (2012). intergaration and Analysis of multiple bathymetric data sets.

Field Investigation to Determine the Location of Debris Associated with the MV Rena Incident, Bay of Plenty, NZ (2012). Technician.

New Kuta Beach Coastal Management, Pecatu, Indonesia (2011-12). Fieldwork programme and numerical modelling to determine nearshore coastal processes.

Hydrodynamic Modelling of Tanjung Priok (Jakarta Harbour) (2011). Preliminary modelling for port expansion.

Ground Validation of Rena Oil Spill (2011). Planned and executed a validation scheme for ASR's in-house dispersion model that tracked oil across the Bay of Plenty during the Rena spill.

Te Henga Erosion Response Options (2011). A report detailing the riverine-basinal erosion issues at Te Hanga and suitable mitigation options.

Aramoana Surfing Wave Quality (2011). 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.

Studying the Effects of Offshore Features (2011). A literature review and numerical modelling report to establish a baseline for further research on behalf of Unitec Institute of Technology.

Firth of Thames Bathymetric Survey (2011). Large-scale, high resolution bathymetric data collected for Environment Waikato for the development of aquaculture based modelling.

Waihou River Bathymetric Survey (2011). Detailed bathymetric data was collected on the Waihou River at the southern end of the Firth of Thames. Conducted for Thames-Coromandel District Council.

Te Kouma Bathymetric Survey (2011). Detailed bathymetric data collection was conducted at Te Kouma on the Coromandel Peninsular for Thames-Coromandel District Council for a coastal development project.

Pine Harbour Sediments (2011). Sediment samples collected and analysed for evidence in an environmental court case.

Boscombe Multipurpose Artificial Reef (2008-2010). Bathymetric Monitoring; Detailed bathymetric monitoring campaign to determine shoreline response to an offshore structure.