

PROFESSOR MICHAEL ELLIOTT BSc (Hons, Lond.), PhD (Stirling), FRSB, CBiol., FRGS, FMBA

Position: Emeritus Professor of Estuarine & Coastal Sciences, School of Environmental Sciences, University of Hull; Email Mike.Elliott@hull.ac.uk; tel. +44 (0)1482 466773/mobile +44 (0)7946 533938. Director, International Estuarine & Coastal Specialists (IECS) Ltd. Email: Mike.Elliott@iecs.ltd see <https://www.iecs.ltd>

Personal Details:

Date of Birth – 3rd November 1952.

Marital Status – Married with 3 sons and 3 grandsons.

Nationality: British

Addresses: School of Environmental and Life Sciences, University of Hull, Hu6 7RX, UK; IECS Ltd, c/o 31 Westlands Way, Leven, Beverley, HU17 5LQ, UK (also home address)

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Personal website: <https://www.iecs.ltd/about-us/mike-elliott/> ; <https://www.hull.ac.uk/work-with-us/research/our-people/professor-mike-elliott/>;

Specialisations with emphasis on estuarine, coastal and marine knowledge and on environment-society relationships:

Anthropogenic impacts on marine and estuarine communities and policy, sustainable marine governance and management; links between natural and social sciences, social-ecological systems. There are many personal notable research and advisory areas where the approaches have been developed, refined and adopted by regulatory and advisory bodies in the UK, elsewhere in Europe and other countries worldwide (e.g. the OSPAR Regional Seas Convention, the UK and Canadian Governments, the European Union). These include:

- the structure and functioning of marine ecological systems, their communities, species and habitats and the responses of these to human pressures;
- cause-consequence-response frameworks (such as the widely adopted DAPSI(W)R(M) system for drivers, activities, pressures, state changes (on the natural system), impacts (on human welfare), and responses (using management measures);
- the activity-, pressures- and natural and societal effects-footprints and the management response-footprints;
- ecosystem-based approaches and management (EBA/EBM);
- social-ecological systems and systems analysis including the determination of ecosystem services and societal goods and benefits;
- environmental impact assessments of most activities in the seas and marine and maritime spatial planning, including conservation designations;
- the determination of solutions to anthropogenic challenges, including the derivation and use of the 10-tenets – that actions for successful and sustainable environmental management have to be: 1) ecologically sustainable, 2) technologically feasible, 3) economically viable, 4) legally permissible, 5) administratively achievable, 6) socially desirable/tolerable, 7) politically expedient, 8) ethically defensible/morally correct, 9) culturally inclusive, and 10) effectively communicable);

- the estuarine quality paradox (where the anthropogenic changes in estuaries may be masked by the natural characteristics;
- the stakeholder typology, for the societal groups: inputters, extractors, regulators, affectees, beneficiaries and influencers;
- the risk and hazard typology, and its use in the ISO-techniques Bow-tie Analysis;
- the valuation of marine systems in ecological, socio-economic and socio-cultural terms, both monetary and non-monetary and tangible and non-tangible;
- the determination and creation of horrendograms of marine legislation and the organograms of the administrative bodies implementing that legislation, in many countries.

Employment Record:

Present employment – Director of the Research Consultancy - International Estuarine & Coastal Specialists Ltd. (since 2019); Emeritus Professor at the University of Hull, UK (since 2022).

Previously - Research Professor in School of Environmental Sciences, University of Hull, on a part-time research contract (50% FTE 2018-2021; 20% from 2021) responsible for undertaking and managing research projects, for training, mentoring and supervising staff and postgraduates both at Hull and elsewhere; for publishing and ensuring an input to the 2020 REF, for Impact Case Study and wider publications.

Director Institute of Estuarine & Coastal Studies 1996-2017; Lecturer (appointed 1991), Senior Lecturer (1995), Professor (2003), University of Hull (REF/RAE submission in UoA17 Geography, Environmental Science & Archaeology); Course Co-ordinator of the MSc in Estuarine and Coastal Science & Management (1991-2010). To 2017, lecturer at BSc and MSc level in marine biology, physical, chemical and biological oceanography, threats in aquatic systems, and in the governance of estuaries and coasts.

Currently - guest lecturer at many universities; Visiting Professor at the University of Palermo, Italy, CORPI – Klaipeda University, Lithuania, Aveiro University, Portugal, and Xiamen University, China; Honorary Research Associate of the South African Institute for Aquatic Biodiversity; Sir Walter Murdoch Distinguished Adjunct Professor, Murdoch University, Australia (2013-2018); member of the Advisory Board of Xiamen University Marine Sciences, China.

Previous employment - (1979-1991) as Senior Marine Biologist, Forth River Purification Board, Tidal Waters Section, Edinburgh (now Scottish Environmental Protection Agency), and (pre-1979) contract postdoctoral scientist in estuarine ecology at the University of Stirling, Scotland.

Experience/Pure and Applied Research/Consultancy:

Extensive experience in the science and management of estuaries and coastal areas, marine and estuarine pollution and the effects of human activities on biological systems; policy and legislative aspects of estuaries and coasts. Lecturer at undergraduate and postgraduate level, and researcher in many aspects of these systems. Presented invited plenary keynote papers at many international symposia and led many workshops worldwide. Marine and estuarine consultancy and advice for many government and statutory bodies, companies, industries and organisations. Responsible for attracting a large number and financial value of grants and commissions from industry, governments, NGOs, the European Union, and others. Involved in many EU Projects as coordinator, WP leader, Module co-leader or partner: ESTFISH, XENOFISH, ELME, EUROTROPH, HARBASINS, VECTORS, TIDE, WISER, VECTORS, DEVOTES, CERES, MARBEFES, MarineSABRES, MarinePlan, GES4SEAS, GuardIAS.

Advisory Positions and Membership of National and International Bodies

- UK Marine Science Coordinating Committee – appointed Non-Executive Member (MSCC to 2022) and from 2016-2022 UK Marine Assessment Reporting Group (MARG); and Member of the UK Marine Facilities Advisory Board
- MSCC International Working Group (from 2019 to 2022)
- UK Marine Facilities Advisory Board (2019-2023)
- SUT International Salvage and Decommissioning Working Group (from 2014)
- 2015-2017 Science Advisory Group of SeaFish;
- Marine Scotland Science Advisory Board (up to 2018)
- UN World Oceans Assessment II Chapter (27) UK nominated author
- UN World Oceans Assessment III Panel of Experts UN nominated member and chapter author/lead for the Drivers Chapter (2023 onwards)
- ICES-UNECE Risk Assessment Working group for SDG14
- North Eastern Inshore and Nature Conservation Authority (NEIFCA) Member (from 2017) and Chairman (from 2024), NEIFCA Science Advisory Committee – member, and NEIFCA Executive Committee Member
- Humber Nature Partnership – Non-Executive Director and Board Member
- International Academic Advisory Committee, Coastal and Ocean Management Institute (COMI), Xiamen University (Member 2018-2021)
- BANOS-CSA – Baltic and North Sea Support & Coordinated Action, Advisory Group Member
- French Scientific Council for Estuaries, Member (from 2019)
- GESAMP (Group of Experts of the Scientific Aspects of Marine Environmental Protection) Working Group 41 on Marine Geoengineering, member (from 2019)
- Theme Advisory Panel (TAP) Member of the NERC-funded Scottish Universities Partnership for Environmental Research (SUPER) Doctoral Training Partnership (DTP)
- Member Advisory Board of the German Science Foundation (DFG) Research Training Group ‘Biota mediated effects on Carbon cycling in Estuaries’ (BiCEst)
- Vice-Chair Future Earth Coasts (part of the Global Future Earth Partnership)
- Chair of the Oceans Commission, International Geographical Union
- NOC Association (Hull Uni. Rep.)
- Advisory Committee member CIMA - Centro de Investigação Marinha e Ambiental, Universidade do Algarve, Portugal
- External Advisory Committee, CIIMAR, Porto, Portugal (from 2025)
- Member of EMECS (Environmental Management of Enclosed Coastal Seas) Science and Policy Committee, Kobe, Japan (from 2018)
- Member of the SUT Underwater Explosives Sub-committee (XCOM)
- Member, Steering Advisory Group, Welsh Government – Deep Dive for Achieving 30x30 Biodiversity Target
- International Advisory Board – HOPOP - The future of Humans and fish pOPulations: fOstering interdisciPlinarity and transdisciPlinarity for sustainable marine social-ecological systems
- Member of Science Advisory Groups for EU Projects: MSP4BIO, NETTAG+, MAELSTROM

Research Metrics:

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=56433780300> H index: 76, Citations >19,950;

Google Scholar: http://scholar.google.co.uk/citations?user=lkQOy_UAAAAJ&hl=en H index 92, i10 index 278; citations >38,000.

Web of Science H index 63; ORCID ID 0000-0002-2519-4871; ResearcherID: B-4312-2013/M-9819-2019.

In Web of Science Highly Cited Researcher in the field of Cross-Field – 2025

<https://www.webofscience.com/wos/author/record/747578>

Calculated as the top-ranking author in Environmental Policy for 2011-2020: see

<https://expertscape.com/ex/environmental+policy>

Calculated as being the highest or among the highest cited author in various journals and years – see <https://exaly.com/author/3602052/michael-elliott/rankings>

In the Research.com 2025 Edition of Ranking of Best Scientists in the field of Ecology and Evolution ranked #525 in the world ranking and #76 in United Kingdom with a D-Index of 84; also recognized with Ecology and Evolution Leader Award. See

<https://research.com/u/michael-elliott> World ranking: <https://research.com/scientists-rankings/ecology-and-evolution>; UK ranking: <https://research.com/scientists-rankings/ecology-and-evolution/gb>

Advisory Bodies and Awards:

Committee Member and Chair (2000-2003, 2004-2006), Vice-chair to 2007, of the Yorkshire Branch of the Royal Society of Biology; Member of the UK National Marine Biological AQC Committee (set up under MPMMG/DoE) (to 2002); Member of the following: Marine Organic Enrichment Task-team of GCSDM/MEMG/Defra; WWF Marine Programme and Living Seas Advisory Committee; the Flamborough Head SAC Advisory Group; the Humber Advisory Group; the Environment Agency Steering Committees for Benthic Indicators and for Fishes in Transitional Waters for the Implementation of the EU Water Framework Directive; of the International Advisory Board, Kristineberg Marine Station, Sweden (2005); Defra, Aggregate extraction research advisor, 2004-6; Panel Chairman, Review BIREME Research programme (Baltic) Academy of Finland, 2006-2007.

Member, Scientific Advisory Panel Wadden Sea research programme (NL) (from 2007); External International Expert, SUMANOS - Belgian North Sea research programme, Belgian Science Policy, 2006; Member, Scientific Advisory Council, Plymouth Marine Laboratory (from 2006); Chair, Expert Panel, BEEMS (British EDF Estuarine & Marine Studies, for New Build Nuclear power plants) (from 2007-2018); Chair BONUS ERA-NET research application evaluation and selection, Helsinki, 2008 and member of evaluation panel 2012; Panel Estonia Higher Education Teaching and Research evaluation exercise, May 2007; Wadden Sea Research programme, research evaluation exercise, October 2007 – February 2008; Research recruitment panel, University of Lisbon, Faculty of Sciences, November 2008 and Oceanographic Institute Evaluation Panel 2011-12; other advisory committees and working groups at local, regional, national and international level; Department, Faculty and University Committees.

International panels for research reviews in Belgium, the Netherlands, Finland, Sweden, South Africa, Australia, US, Poland, Cyprus, Germany and Estonia; from 2005-2009 President of the international Estuarine & Coastal Sciences Association (ECSA); from 2009 to 2012 Ministerial Appointee of the Scientific Advisory Panel for Defra MCZ project; Independent Expert Review Group, for MCZ, Defra, 2011-12; 2010-11 Ministerial appointee MMO independent review for Rame Head inquiry; Baltic STERN Science Advisory Committee, Stockholm (2010-13). Presented evidence to House of Lords EU Committee on marine management 2014.

Fellow of Learned societies

Royal Society of Biology, Royal Geographical Society and Marine Biological Association. Awarded Laureate of the Honorary Winberg Medal 2014 of the Russian Hydrobiological Academic Society. Awarded Lifetime Achievement Award of the international ECSA, September 2022. Director of the Humber Nature Partnership from 2018 and in 2017 presented with the annual award from the Humber Nature Partnership for the contribution to the science and management of the Humber Estuary. At various times since 1980 the Workshop and Meetings Coordinator, Bulletin Editor, Honorary Secretary and President of the international Estuarine & Coastal Sciences Association (ECSA).

Supervisory, advisory and teaching and research review activities:

Successful supervision of 44 PhD students and many (>100) MSc by Research and Taught Students. External examiner for MSc and BSc courses at many universities in the UK and Ireland and for research degrees at many universities in the UK and worldwide (>85 at PhD, plus several MSc and MPhil). Quality Assurance Agency Subject Specialist Reviewer for teaching in Biological Sciences (2000-2002). Research and teaching reviewer for the Estonian Department of Education and elsewhere. Research reviewer for Defra (e.g. aggregates extraction research programme; seabed disturbance research), Scottish Aquaculture industry, the Port of Rotterdam, the Swedish Environmental Protection Agency, the Royal Swedish Academy and the Finnish national research programme, the Polish National Research Council, Shetland Oil Terminal Environmental Advisory Group, and others. Represented IECS and the University at meetings with outside bodies, in workshops and discussion task-teams; also provided information for public inquiries.

Oceanographic Campaigns:

While Senior Marine Biologists for the then Forth River Purification Board (now the Scottish Environmental Protection Agency), I organised and participated in many field sampling campaigns covering all areas of marine biology, physical oceanography and marine chemistry. As the Director of the Institute of Estuarine & Coastal Studies at the University of Hull for 21 years, I was responsible for developing a laboratory and field programme and managing 25 staff covering many field and laboratory practical areas; these often included postgraduate research programmes.

Publications and Presentations:

Delivered oral presentations in person in 42 countries worldwide and several other countries on-line covering all continents except Antarctica. Produced more than 400 scientific publications and very many reports as single or co-author. Delivered oral presentations in person in 42 countries worldwide and several other countries on line covering all continents except Antarctica. More than 400 scientific publications and very many reports as single or co-author; from 2010, Co-Editor-in-Chief of *Estuarine & Coastal Shelf Science*; Editor of the Bulletin of the Estuarine and Coastal Sciences Association (to 1998); Senior Advisor of *Marine Ecology Progress Series*; Editorial Board member of *Marine Pollution Bulletin*, *Marine Environmental Research* (to 2007), *Mediterranean Marine Science* and *Dana* (*Danish Journal of Marine Science and Fisheries*, to 2004).

I have given many interviews on national and local radio and television and to newspapers in the UK, elsewhere in Europe and further afield. I have also given podcasts and had seminars recorded for wider dissemination, e.g. ECSA Webinar October 8th 2021, Estuarine & Marine Management <https://youtu.be/4ROOHBpaQD8>.

Co-Author/co-editor of 23 books/volumes on estuarine and marine science and management:

- McManus, J & M Elliott, (Eds.) (1989). *Developments in Estuarine and Coastal Study Techniques*. Olsen & Olsen, Fredensborg, Denmark, pp 158.
- Elliott, M & J-P Ducrotoy (Eds.), (1991). *Estuaries and Coasts: spatial and temporal intercomparisons*. Olsen & Olsen, Fredensborg, Denmark, pp390.
- Elliott, M, & J-P Ducrotoy (Eds.) (1994) *Environmental Perspectives for the Northern Seas*. Marine Pollution Bulletin **29** (6-12) p253-660
- Jones, NV & M Elliott (Eds.) (2000) *The Humber Estuary and adjoining Yorkshire & Lincolnshire Coasts*. Coastal Zone Topics: Process, Ecology & Management, 4. Publ. Estuarine & Coastal Sciences Association, ISSN 1353-6168, pp180
- Elliott, M & KL Hemingway (Eds) (2002) *Fishes in Estuaries*. Blackwell Science, Oxford, pp636.
- Orive, E, M. Elliott & VN de Jonge (Eds.) (2002) *Nutrients and Eutrophication in Coastal and Estuarine Areas*. Developments in Hydrobiology.
- McLusky, DS & Elliott, M (2004). *The Estuarine Ecosystem: ecology, threats and management*. OUP, Oxford, pp 214.
- Ducrotoy, J-P & M Elliott (Eds.) (2006). *Recent Developments in Estuarine Ecology & Management*. Marine Pollution Bulletin 53 (1-4), 1-204.
- Franco, A, Elliott, M & P Torricelli (Eds.) (2007) *Biodiversity and ecosystem functioning in coastal and transitional waters*. Estuarine Coastal & Shelf Sciences, 75.
- Gray, JS & M Elliott (2009) *Ecology of Marine Sediments: science to management*. OUP, Oxford.
- Telesh, IV, M Elliott & VN de Jonge (Eds) (2010). Estuarine Ecosystems: structure, function and management (ECSA-42 Symposium in Russia). *Marine Pollution Bulletin*, 61(4-6): 147-266.
- Ducrotoy JP, Mazik K and Elliott M. (2011) *Bio-sedimentary indicators for estuaries: a critical review*. Union des océanographes de France, Paris, 2011, ISBN 978-2-9510625-2-8, pp.1-77.
- Kennish, MJ & Elliott, M (Eds) (2011) Volume 8. Human-induced problems (uses and abuses) in Estuaries and Coasts. In: E Wolanski & McLusky, DS (Eds) *Treatise on Estuarine & Coastal Science*, Elsevier, Amsterdam, pp315.
- Marques, J.C., M.J. Costa and M. Elliott (Eds.) (2012). Assessing Ecological Quality in Estuarine and Coastal Systems – Functional Perspective. *Estuarine Coastal and Shelf Science*, 112:1-286.
- Cormier, R, A Kannen, M Elliott, P Hall & IM Davies (Eds) (2013). *Marine and Coastal Ecosystem-based Risk Management Handbook*. ICES Cooperative Research Report, No. 317, March 2013, International Council for the Exploration of the Sea, Copenhagen, 60pp, ISBN 978-87-7472-115-1.
- Wolanski, E, Elliott M (2015). *Estuarine Ecohydrology: an introduction*. Elsevier, Amsterdam. Pp322.
- Borja, A., Elliott, M., Uyarra, M. C., Carstensen, J., Mea, M., eds. (2017). Bridging the Gap Between Policy and Science in Assessing the Health Status of Marine Ecosystems, 2nd Edition. Lausanne: Frontiers Media. doi: 10.3389/978-2-88945-126-5; downloaded from http://www.frontiersin.org/books/Bridging_the_Gap_Between_Policy_and_Science_in_Assessing_the_Health_Status_of_Marine_Ecosystems_2nd/1151
- Austen, M.C., Crowe, T.P., Elliott, M., Paterson, D.M., Peck, M.A., Piraino, S., (Eds) (2018) Vectors of change in the marine environment. *Estuarine, Coastal and Shelf Science* 201: 1-256.
- Wolanski, E., Day, J.W., Elliott, M., Ramachandran, R. (Eds.) (2019). *Coasts and Estuaries: The Future*. Elsevier, Amsterdam, ISBN 978-0-12-814003-1, pp701.

- Whitfield, A.K., Able, K.W., Blaber, S.J.M. & Elliott, M. (2022). Fish and Fisheries in Estuaries – A Global Perspective (ed.), Vols. 1 and 2, pp. 1056. John Wiley & Sons, Oxford, UK; ISBN 9781444336672.
- Elliott, M., Wither, A., (Eds.) (2024). Environmental Consequences and Management of Coastal Industries: Terms and Concepts. Elsevier, Amsterdam, Paperback ISBN: 9780443137525, eBook ISBN: 9780443137532, pp 371 (see <https://www.sciencedirect.com/book/9780443137525/environmental-consequences-and-management-of-coastal-industries>)
- Baird, D., Elliott, M. (Editors-in-Chief), 2024. Treatise on Estuarine and Coastal Sciences, 2nd Edition, 7 Volumes, Elsevier, Academic Press, Hardback ISBN: 9780323907989, eBook ISBN: 9780323910422; <https://shop.elsevier.com/books/treatise-on-estuarine-and-coastal-science/baird/978-0-323-90798-9>
- Kennish, M.J., Elliott, M. (Eds.), 2024. Volume 6 – Problems, Solutions, Restoration. In: Treatise on Estuarine and Coastal Sciences, 2nd Edition, Elsevier, Academic Press, Hardback ISBN: 9780323907989, eBook ISBN: 9780323910422; pp799; <https://www.sciencedirect.com/referencework/9780323910422/treatise-on-estuarine-and-coastal-science-second-edition>