

The School of Life Sciences

invites you to a seminar entitled:

An integrated approach to estuarine and marine restoration and management: lessons from successes and failures

presented by **Prof. Mike Elliott**

Institute of Estuarine and Coastal Studies (IECS), The University of Hull, UK



When

Where

- Monday, 18 June 2018
- 16:30

Seminar Rooms

- Life Sciences Building, South Ring Rd, Westville Campus
- Coordinates: -29.817482,30.940305

Enquiries

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Prof. Mike Elliott (18 June 2018)

An integrated approach to estuarine and marine restoration and management: lessons from successes and failures

The one big idea in estuarine and marine management is how to protect and maintain ecological structure and functioning while at the same time deliver ecosystem services and societal benefits. The latter emanate from the natural processes and cover the regulating, provisioning, supporting and cultural aspects. Societal benefits then can be gathered from the ecosystem services but only after inputting time, energy, finance and skills. Hence, achieving a sustainable and successful estuarine and marine management requires all environmental and socio-economic aspects to be considered. Estuaries have long been affected by hazards and risks causing degradation which then needs to be restored or compensated. A hazard and risk typology is used to show pressures which emanate from inside the managed system (termed endogenic managed pressures) and outside the managed system (termed unmanaged exogenic pressures). This involves fulfilling the so-called 10-tenets which inter alia includes a plethora of environmental legislation and many statutory organisations as well as economic imperatives. The presentation uses global examples of successes and failures including ecoengineering and ecohydrology principles to achieve sustainable outcomes; for example, the latter includes creating habitats to give wins for human safety, the economy and ecology. It will discuss two types of ecoengineering – Type A in which the environment is modified thus allowing the biota to recover, and Type B in which the biota is supplemented through replanting or restocking.

Mike is the Professor of Estuarine and Coastal Sciences at the University of Hull, UK and was Director of IECS from 1996-2017(http://www.hull.ac.uk/iecs). He is a marine biologist with a wide experience and interests and his teaching, research, advisory and consultancy includes estuarine and marine ecology, policy, governance and management. Mike has published widely, co-authoring/co-editing 18 books/proceedings and >270 scientific publications. This includes co-authoring 'The Estuarine Ecosystem: ecology, threats and management' (with DS McLusky, OUP, 2004), 'Ecology of Marine Sediments: science to management' (with JS Gray, OUP, 2009), and 'Estuarine Ecohydrology: an introduction' (with E Wolanski, Elsevier, 2015) and as a volume editor and contributor to the *Treatise on Estuarine & Coastal Science* (Eds.-In-Chief - E Wolanski & DS McLusky, Elsevier). He has advised on many environmental matters for academia, industry, government and statutory bodies worldwide. Mike is a past-President of the international Estuarine & Coastal Sciences Association (ECSA) and is an Editor-in-Chief of the international journal Estuarine, Coastal & Shelf Science; he has Adjunct Professor and Research positions at Murdoch University (Perth), Klaipeda University (Lithuania), the University of Palermo (Italy), Xiamen University (China) and the South African Institute for Aquatic Biodiversity. He was awarded Laureate of the Honorary Winberg Medal 2014 of the Russian Hydrobiological Academic Society.

