

Published on *Marine Ecosystems and Management (MEAM)* (<https://meam.openchannels.org>)

Notes & News: New Zealand - Cultural ecosystem services - Ocean acidification management options - Impact of rising ocean temperatures - Ocean planning handbook - Ocean zoning

MSP process launched for NZ's Hauraki Gulf

In September 2013, New Zealand launched a project (Sea Change) to develop a marine spatial plan for the Hauraki Gulf, a 12,000-km² body of water adjacent to the city of Auckland. To be delivered in 2015, the plan will address problems such as increasing user conflicts, declining fish stocks, sedimentation, and water contamination in the gulf. Although the plan will not be legally binding, it is expected to be used to modify a wide range of marine and coastal policies, rules, and regulations, including for land use. The Sea Change website is www.seachange.org.nz

Analyzing the cultural ecosystem services that oceans provide

In marine spatial planning processes, it is common to focus on the economic values provided by the sea: fishing, offshore wind farming, shipping, etc. But what is the value of aesthetic, spiritual, or recreational services the sea provides? A new report analyzes ways of increasing the visibility of such cultural values in the MSP process, with the goal of improving the identification and mapping of culturally significant ocean areas. The report represents outcomes from a June 2013 workshop that was convened by the International Council for the Exploration of the Sea (ICES), an intergovernmental organization that provides scientific advice for the management of Northeast Atlantic marine resources. The report is at <http://bit.ly/CulturalEcosystemServices>

Review of management and policy options for ocean acidification

A recent study in the journal *Environmental Management* reviews management and policy options for ocean acidification. It investigates the assumption that managing for acidification is mainly about reducing CO₂ emissions, and explores how ocean acidification may interact with other environmental issues. The study reviews four categories of management responses (preventing ocean acidification; strengthening ecosystem resilience; adapting human activities; and repairing damages) and classifies them according to their potential and feasibility. The abstract of the article "Taking action against ocean acidification: a review of management and policy options" is at <http://link.springer.com/article/10.1007%2Fs00267-013-0132-7>

An associated policy brief on this topic is available at www.iddri.org/Publications/Collections/Syntheses/PB1712_RB%20et%20al._ocean%20acidification.pdf

Two studies on how changing ocean temperatures are affecting marine life

Two recent studies by US government fisheries scientists show that rising ocean temperatures are impacting ocean ecosystems, causing marine species to shift in distribution. The first study is a meta-analysis of all previous studies on how marine life is responding to climate change. The second study focuses on a specific case - the Gulf of Maine on the North Atlantic coast of North America - and shows that the food web there is shifting in ways that could make recovery of Atlantic cod stocks more difficult. For more information, go to www.nmfs.noaa.gov/stories/2013/09/9_30_13two_takes_on_climate_change_in_ocean.html

US Ocean Council releases planning handbook

The US National Ocean Council has released a handbook on establishing regional planning bodies and developing marine plans. It serves as a more detailed supplement to the discussion of marine planning in the National Ocean Policy Implementation Plan, which was released in April 2013 ([MEAM 6:5](#)). The handbook walks readers through common planning elements such as providing opportunities for public input. The *Marine Planning Handbook* is at www.whitehouse.gov/sites/default/files/final_marine_planning_handbook.pdf

New book on ocean zoning in the United States

A new book, *Zoning the Oceans: The Next Big Step in Coastal Zone Management* provides a legal overview of marine spatial planning approaches at the state and federal levels in the US. In particular, it details the development, design, and implementation of the state of Rhode Island's Ocean Special Area Management Plan - the first state-level marine spatial plan to receive federal approval. Published by the American Bar Association, the book also addresses recent federal initiatives in the implementation of a National Ocean Policy. It is available for purchase for US \$109.95 at <http://apps.americanbar.org/abastore/index.cfm?section=main&fm=Product.AddToCart&pid=5330226>
