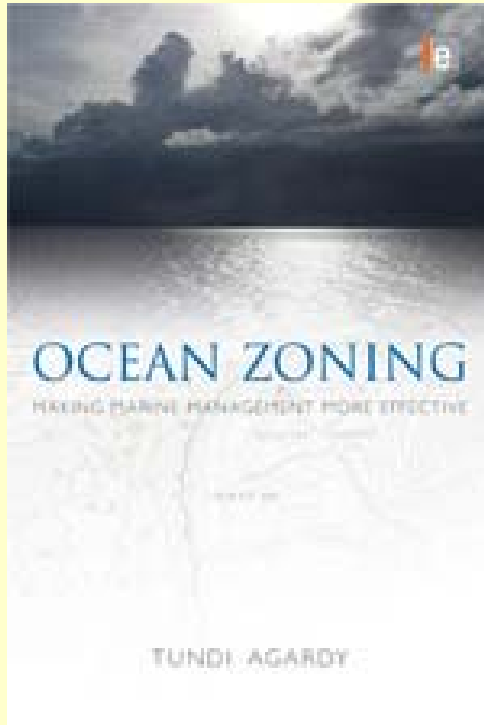


Marine Zoning - benefits and challenges



Agardy (2010) - Chapter 1:

Introduction

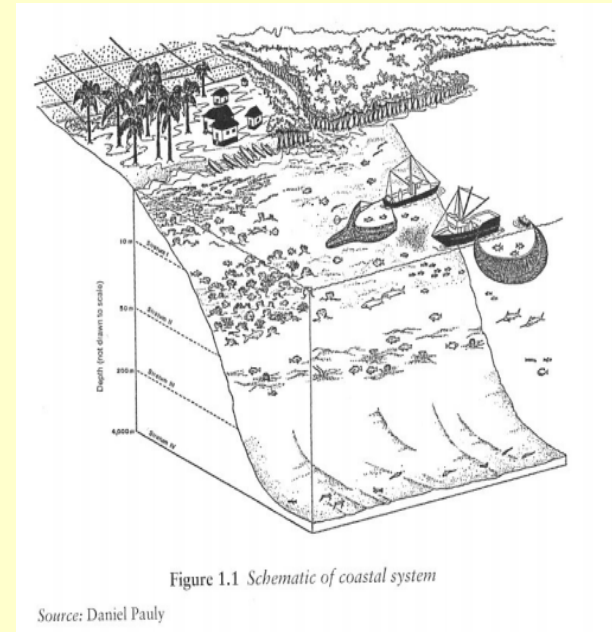
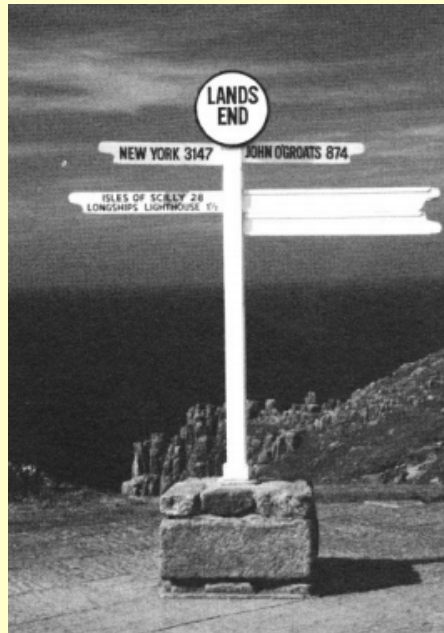
Agardy (2010) - Chapter 2:

Challenges

Ocean Zoning - Introduction

Two opposing management paradigms:

Compartmentalization VS Integration



Ocean Zoning - What is it ?

Attributes of Marine Zoning:

- Regulations (what / where / how much)
- Spatially-explicit (mapable)

Ocean zoning to meet ocean management challenges

Zoning is a set of regulatory measures used to implement marine spatial plans – akin to land-use plans – that specify allowable uses in all areas of the target ecosystem(s). Different zones accommodate different uses, or different levels of use. As in municipal zoning, regulations address prohibitions or permitted uses, or both. All zoning plans are portrayed on maps, since the regulations are always area-based.

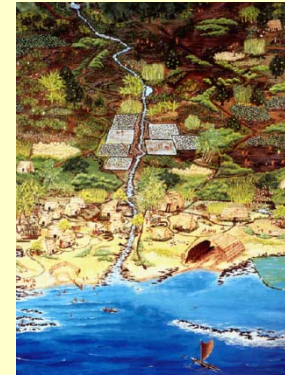
Ocean Zoning - Evolution

1) Customary Marine Tenure

2) Marine Protected Areas

3) MPA Networks

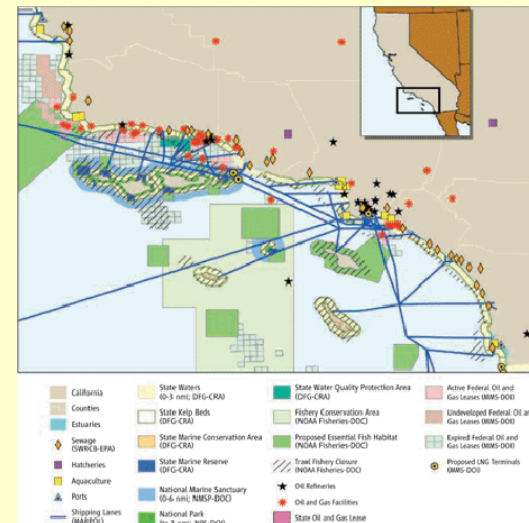
4) Comprehensive Marine Zoning



Ahupua`a



Tenure System



(Crowder et al. 2006)

Marine Spatial Planning (MSP)

How are MSP and COZ different ?

Differences between marine spatial planning and ocean zoning

Marine spatial planning (MSP) is a generic term describing the process leading to place-based marine management. UNESCO defines MSP as 'the public process of analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process' (UNESCO, 2009). The European Union states that MSP is a process that consists of data collection, stakeholder consultation and the participatory development of a plan, the subsequent stages of implementation, enforcement, evaluation and revision (EC, 2008). MSP is thus increasingly seen as a central component to effective marine management, or perhaps a new name for what agencies have been struggling to do all along. For example, marine spatial planning has been defined by the UK's Department of Environment, Food and Rural Affairs as 'a strategic plan for regulating, managing, and protecting the marine environment that addresses the multiple, cumulative, and potentially conflicting uses of the sea'.

Ocean Zoning - Foundations

What would be needed for effective Ocean Zoning ?

Requirements for Effectiveness:

- Comprehensive Approach (all stakeholders: uses / impacts)
- Inter-disciplinary Perspectives (uses / ecology / management)
- Requires Planning (targets / time horizons)
- Requires Adaptability (monitoring / evaluation)

Summary - COZ Steps

(Socio-political)

(Ecological)

(Management)

- Establish authority / process for participatory planning
- Develop planning and analysis process (MSP)
- Obtain information to support decisions
- Develop incentives and institutions
- Establish implementation / management process
- Establish evaluation and monitoring metrics / process
- Devise methods for adaptation - revision of plans

Adapting Zoning to the Ocean

What Roadblocks Limit Zoning of the Sea ?

Ownership simplified - "commons" (states / nations) - or more difficult?

Enforcement (signage / policing)

Large scale (linked with the land: watersheds, ports)

Oceanographic Implications:

Dynamic Ocean

Jurisdictions often arbitrary

Ocean Zoning - Challenges

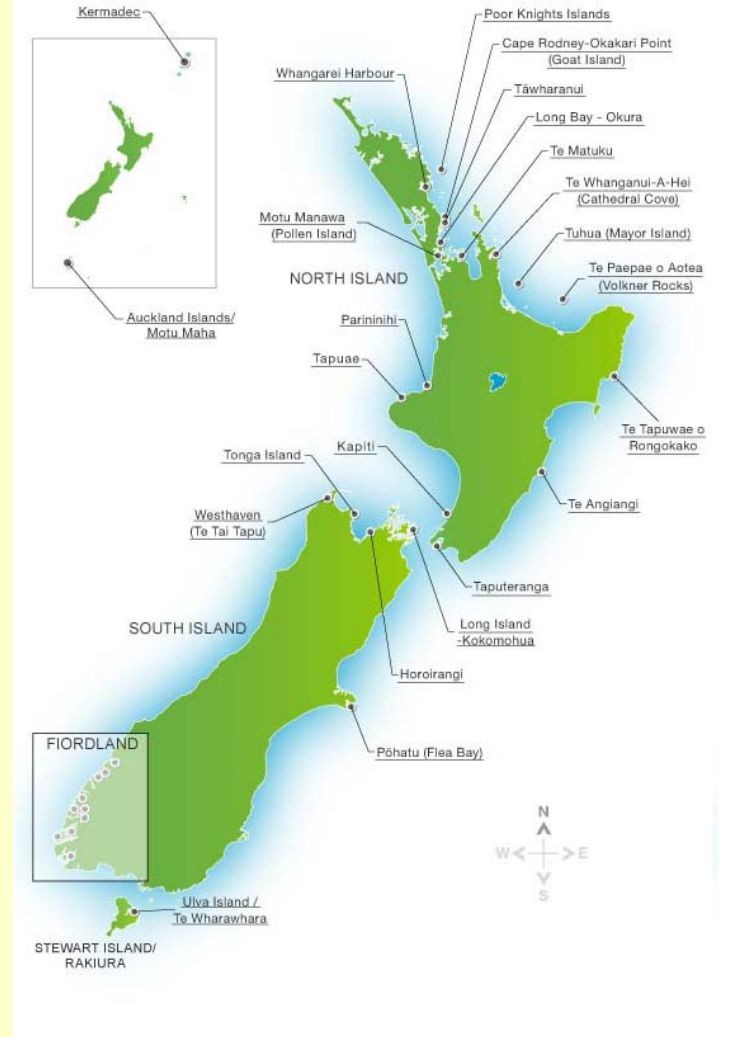
- Socio-political:

- Management:

- Ecological:

- Other ?

Does COZ offer a new management approach?



Where / when has it worked ?

- Starting points
- Ecosystem(s)

What steps are required for effective COZ ?

What are the challenges ahead ?