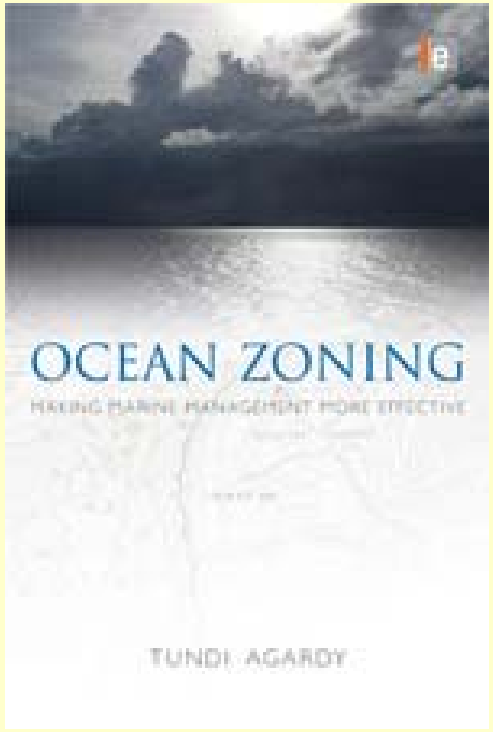
Marine Zoning - Conclusions



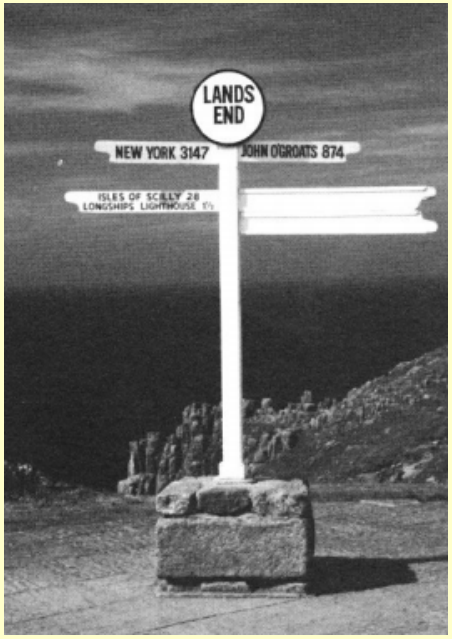
Agardy (2010) – Chapter 13:

Principles Underscoring
Ocean Zoning Success

Does COZ offer a new management approach?

Two opposing management paradigms:

Compartmentalization VS Integration



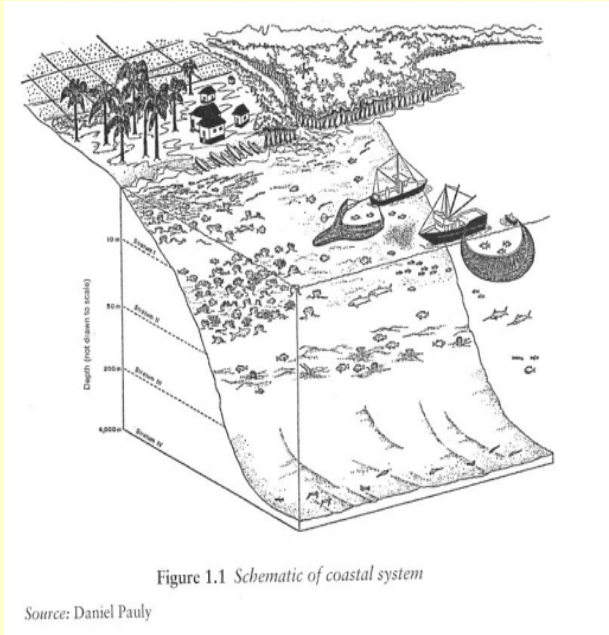
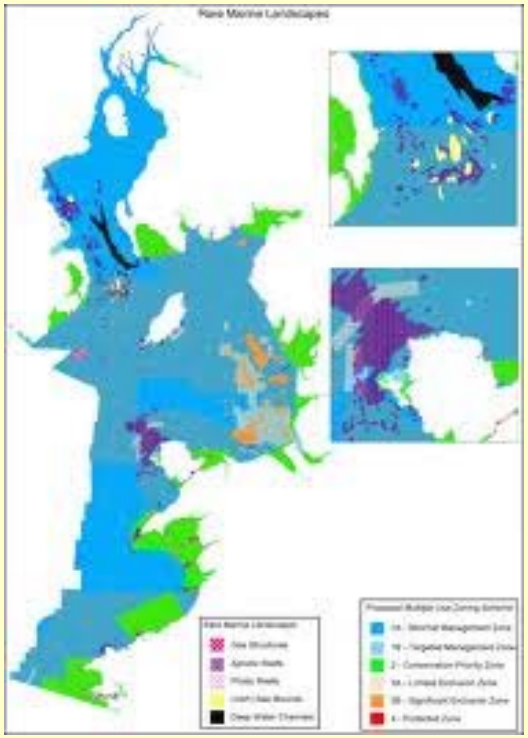
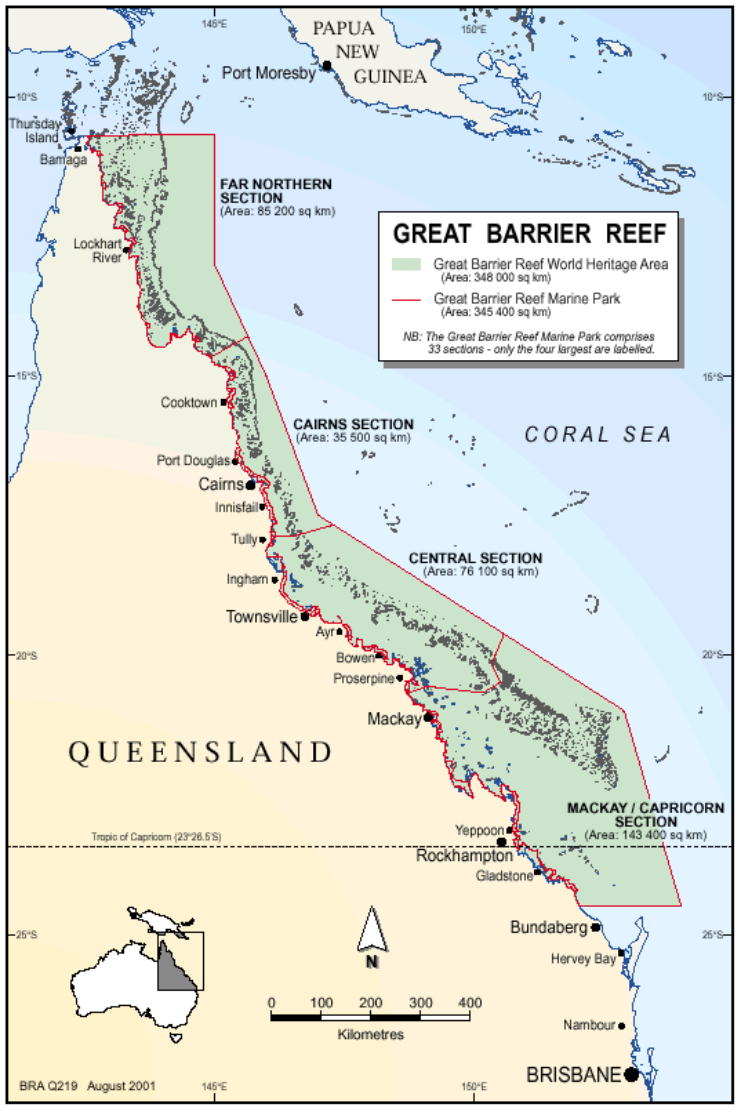


Figure 1.1 *Schematic of coastal system*

Source: Daniel Pauly

When / Where does COZ work ?





Where / when has it worked ?

- Starting points
- Ecosystem(s)

What steps are required for effective COZ ?

What are the challenges ahead ?

When / Where does COZ work ?

Successful outcomes rely heavily on:

Using best available science knowledge

Using transparent criteria / methods

High level of public participation

Consequent socio-political support

Top-down / Bottom-up integration

Devising adaptive designs; Allow rezoning

Planning Principles – Biophysical

KEY Biophysical Operating Principles

- minimum size of management areas
- replication of management areas
- minimum of at least 20% no-take per bioregion
- consider connectivity cross-shelf & latitudinal diversity
- incorporate all community types & physical environments
- consider special & unique sites/ locations

Planning Principles – Social-Economic

KEY Social-Economic & Management Principles

- maximise complementarity with adjacent land/sea areas
- recognise social benefits /costs
- complement existing management
- maximise public understanding & enforceability

When / Where does COZ work ?

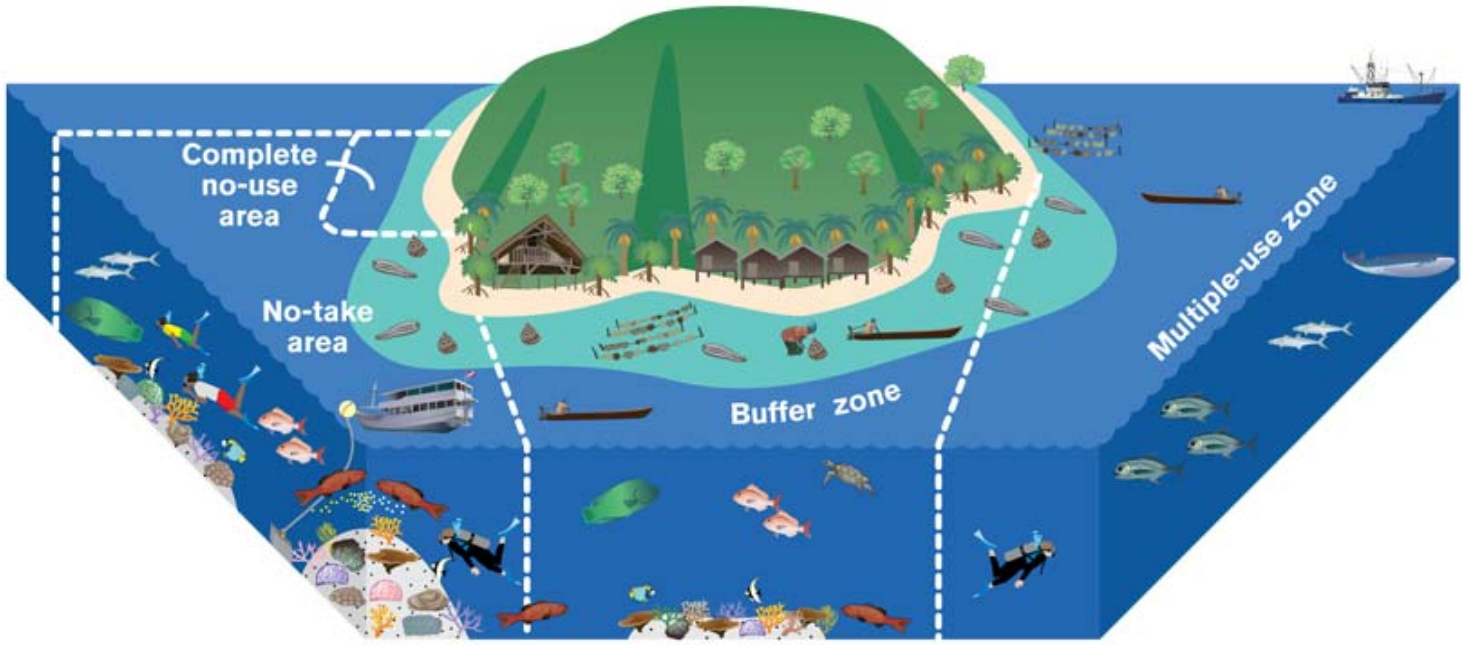
Some aspects are addressed well by zoning

- Very effective for separating all extractive/collecting activities, and defining representative 'no-take' areas
- Value of complementary zoning across Federal / State jurisdictions
- Good public input / understanding

Some aspects are not addressed well by zoning

- Some activities better addressed by other management approaches *(e.g., shipping, tourism, climate change)*
- Need for ongoing public education, compliance, enforcement

Marine Managed Areas



In no-take zones, fish are protected to support populations in the other zones. Spawning aggregations and nursery grounds often are established as no-take areas. Only specified nonextractive activities, such as diving and mooring, are allowed. Fishing and aquaculture are not permitted. Complete no-use areas, which ban all activities, are mechanisms for restoring highly degraded ecosystems.

Buffer zones, which are intended to be transition zones from more restricted use areas (i.e., no-take areas) to multiple-use zones, typically allow moderate activities, such as hook-and-line fishing, limited aquaculture, and limited tourism activities.

In multiple-use zones, all tourism activities, including diving and snorkeling; all fishing activities, ranging from small-scale subsistence fishing to large-scale commercial fishing; and aquaculture are permitted.