

- Heritage, Ramsar, JAMBA - Japan/Aus migratory bird agreement and CAMBA - China/Aus migratory bird agreement)
  - State Government Acts - Management Plans
- Zone Planning: enables different management measures to be assigned to areas through designated zones
  - zones regulate the extent and intensity of activities through restriction of access and level of use
  - **use legislative framework to inform policy guidelines**
- Zone types: sanctuary, recreational, general use excluding extracting industries, general use including extractive industries (aka including salt mining)
  - 1. Determine zone types and policies: comes from legislative framework
  - 2. Policy weighting (what is the importance of each layer)
  - 3. Quantify level to which policy requirements are met
  - 4. Assign zone status
- How do we balance 'top down', or legislation controlled management framework with a 'bottom up', or community and user driven structure?
  - **policies** reflect the **top down approach**: derived from the legislative framework
  - **policy weightings** themselves allow for a **bottom up approach**: becomes biased based on interests of certain stakeholders
    - > can prepare alternative maps that incorporate user preferences to varying degrees
    - > **spatial modelling is a practical solution to implementation of conversational and resource use goals in a dynamic environment**
- Raster based mapping units: incorporate features in the landscape at a finer resolution
  - the resolution you set should reflect the reliability/scale at which the data was captured in the first place e.g. if seagrass data was captured at scale of 1:50 000 then resolution shouldn't be less than 50m
- **Multiple use management requires that management strategies:**
  - are accountable to the community
  - meet legislative requirements
  - address current and potential human use demands
  - ensure protection of ecological integrity

## Week 3 - Coastal planning and management in NSW

### Lecture 5: Marine Protected Area (Eleanor Bruce)

#### Jervis Bay Marine Park

- Declared by NSW in 1998 based on the natural and cultural values of the area
  - generally unmodified landscape with significant cultural heritage

- Zone Plan established in 2002
  - under the Marine Parks Act 1997 zoning plans are reviewed after 5 years of operation, and subsequently every 10 years
  - reflects changing scientific knowledge and socioeconomic values (in a political context but also by resident stakeholders)
  - reflects environmental safeguards principle, precautionary principle and transparency principle
- 2002 plan was reviewed in 2008 and 2009 based on 14 criteria
  - changes were based on new information, community consultation, issues raised in the zoning plan review and community consultation on the draft zoning plan conducted in 2010
  - revised zoning plan was implemented early 2011 but rescinded less than 3 months later

### Marine Protected Areas

- ‘an area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment’
- Function of MPAs:
  - protect
  - escape: ‘spatial escape’ for intensely exploited species, population structure based on ‘natural process of mortality’ and not from fishing
  - buffer: there is allowance for uncertain/ highly variable scientific predictions
- Approx 4500 in the world
  - 850 have a coastal component (associated terrestrial areas)
- *Historical background*
- **Yellow Stone model (1872):** emphasis on an area having significant natural value, ‘beautiful to look at’ etc, areas set aside for visitors/ scientific pursuits
  - privileges tangible aesthetic values (to an extent for recreation purposes) over potential intangible values
  - may disregard areas of high biodiversity etc because they aren’t aesthetically ‘valuable’
  - adopts an anthropomorphic perspective
- First in the world: Green Island 1906 declared by the local council who were concerned about commercial fishing
- Law of the Sea (1982) and advent of Exclusive Economic Zones highlighted potential for economic growth and food source of marine areas
  - declare areas beyond 3nm limit (state/territory jurisdiction) — > now need to consider ocean system
- **1962 First World Conference on National Parks** - recommendation inviting all countries with a marine frontier - create new marine parks and also extend existing national parks that have equivalent reserves with shorelines in the water

- Prompted the **declaration of 1600 MPAs in 120 countries by 1983**
- very few were translated into management plans