

# Sustainable Marine Ecosystems: Fisheries and Ecosystems Management

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# Talk structure

- Node 4 & EBFM overview
- Progress/lessons/challenges

# PURPOSE OF NODE 4

- Develop the methods and approaches to implement Ecosystem-Based Fisheries Management (EBFM) in Western Australia
- Assist managers of the fisheries resources of Western Australia to meet the principles of ESD

**RESPONSIBILITY**

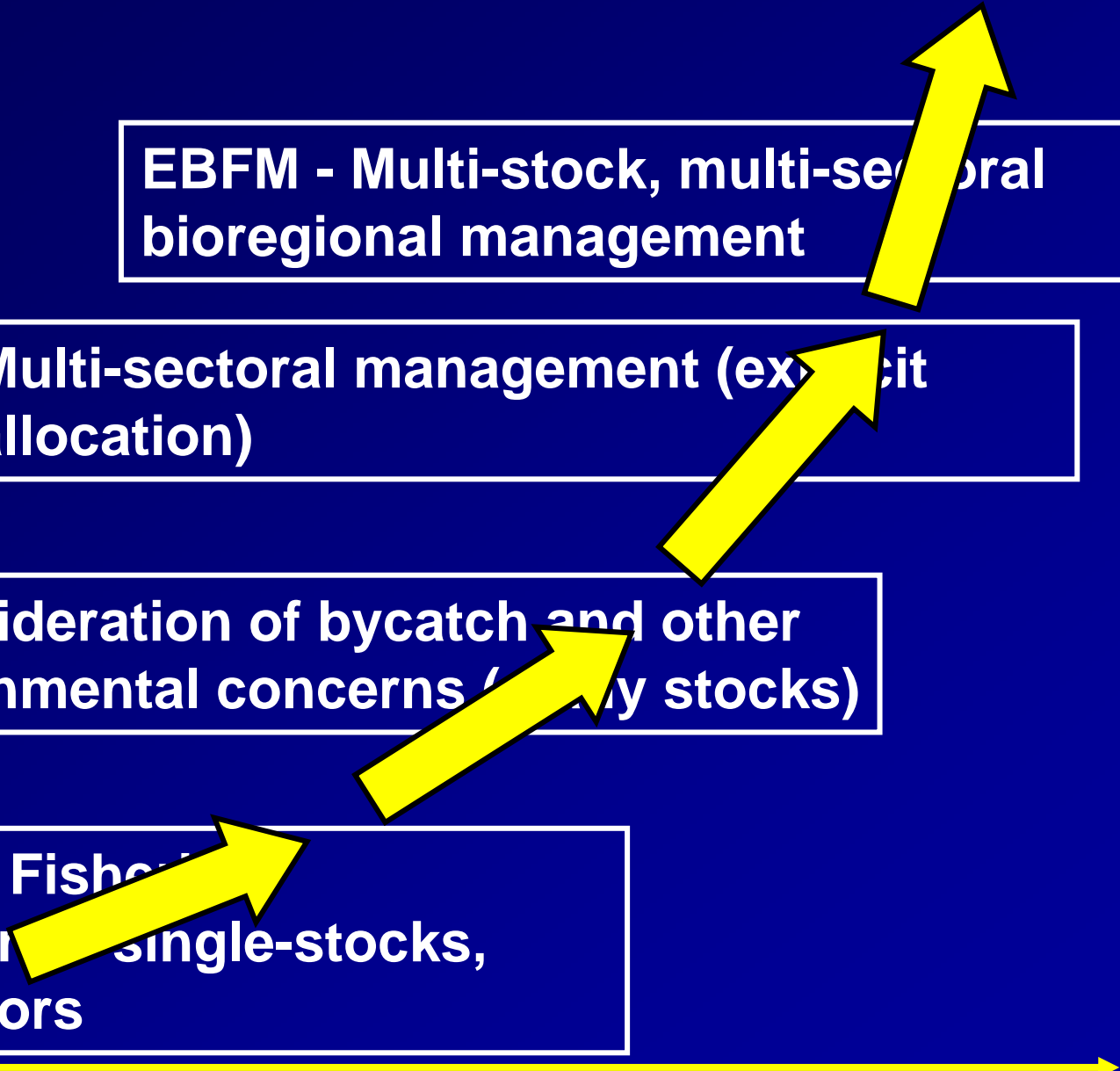
**Traditional Fisheries Management**  
single-stocks,  
single sectors

**+ consideration of bycatch and other  
environmental concerns (by stocks)**

**Multi-sectoral management (explicit  
allocation)**

**EBFM - Multi-stock, multi-sectoral  
bioregional management**

**TIME**



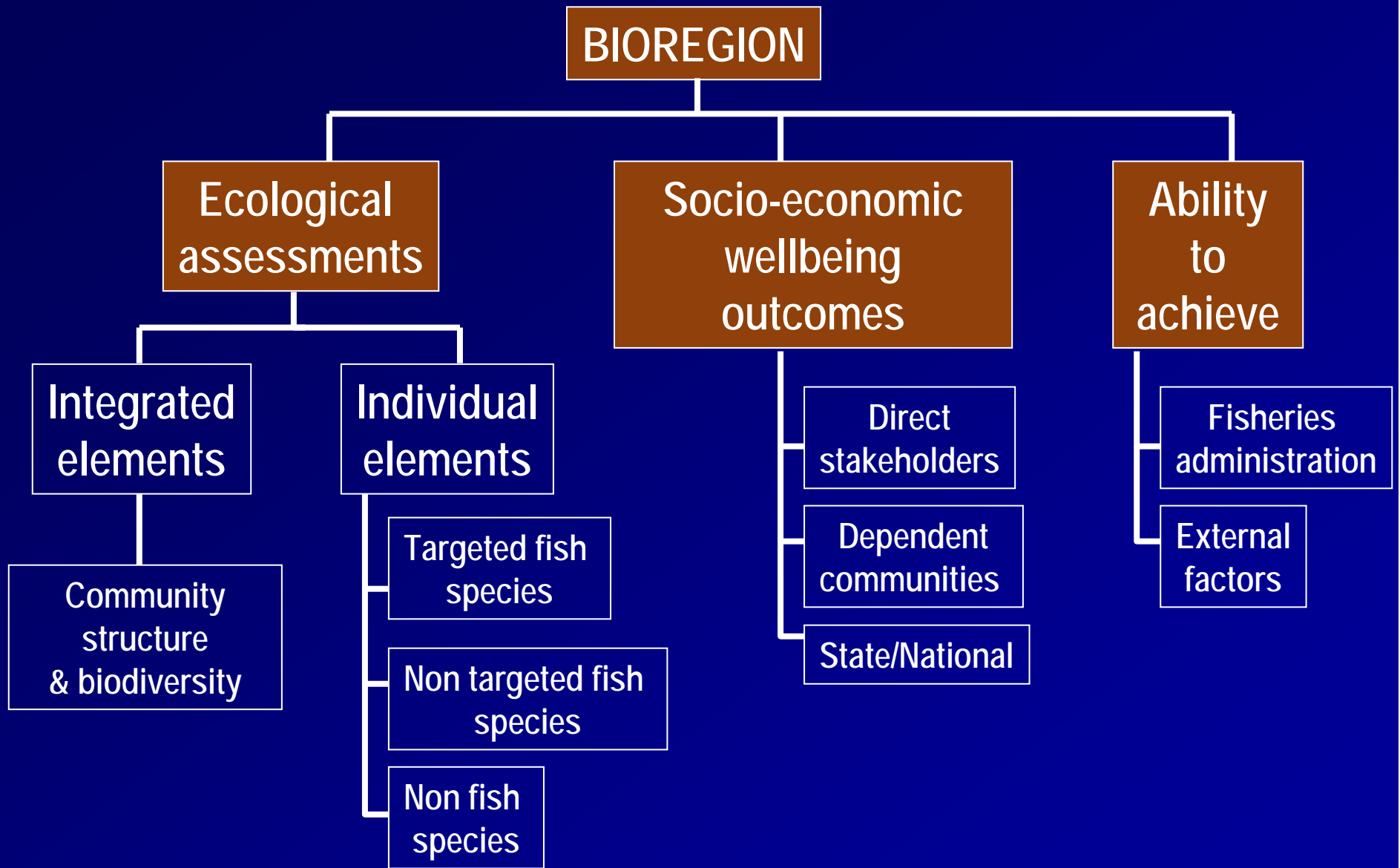
# EBFM . . . . .

**Risk based process systematically:**

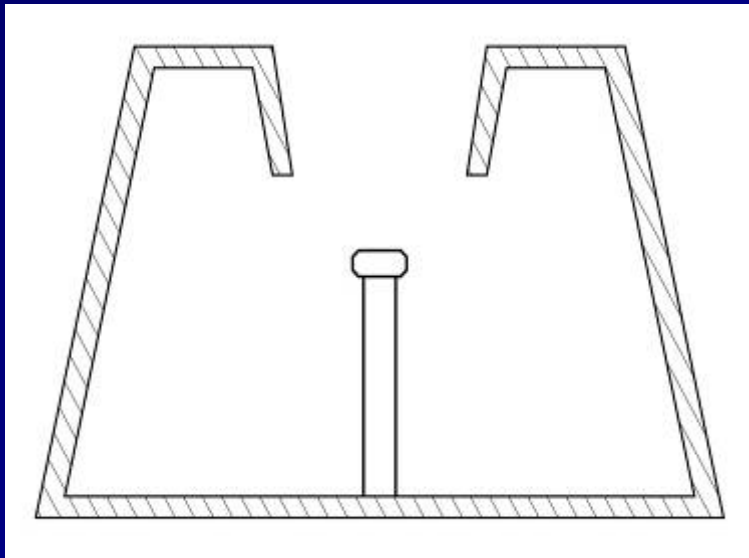
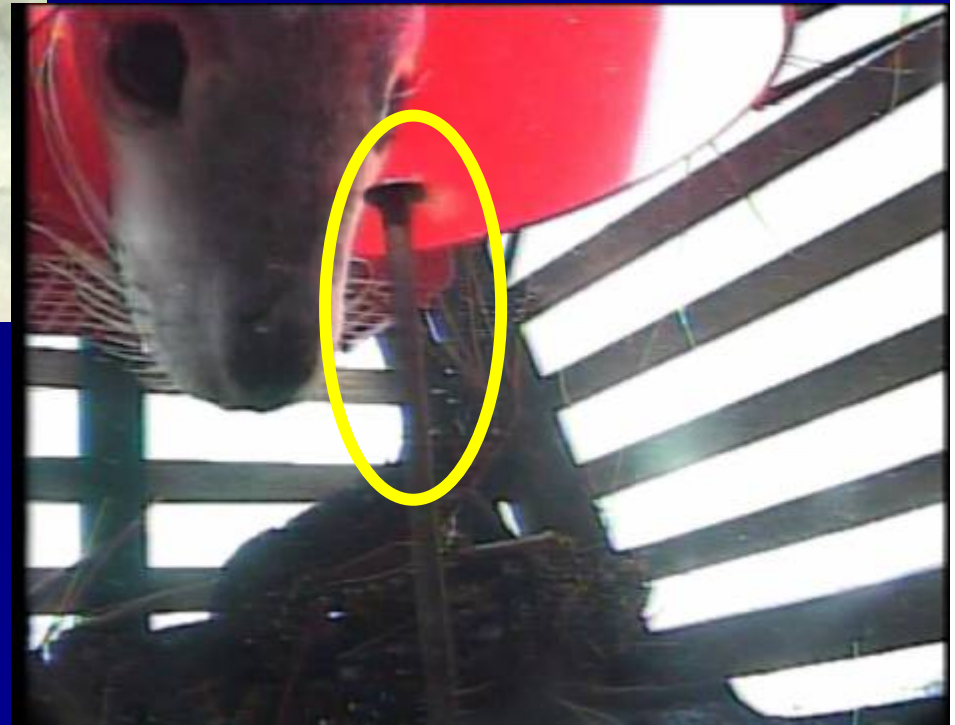
- **identifies and prioritises issues**
- **develops operational objectives**
- **determines what indicators need to be measured and**
- **the level of management needed to achieve acceptable performance**

## ..... EBFM

- **Builds on success and assessments at individual fishery level**
- **Practical way of linking actions; finding gaps, overlaps, lack of clarity etc..**
- **Provides a basis for negotiations with other sectors as part of a regional planning process**

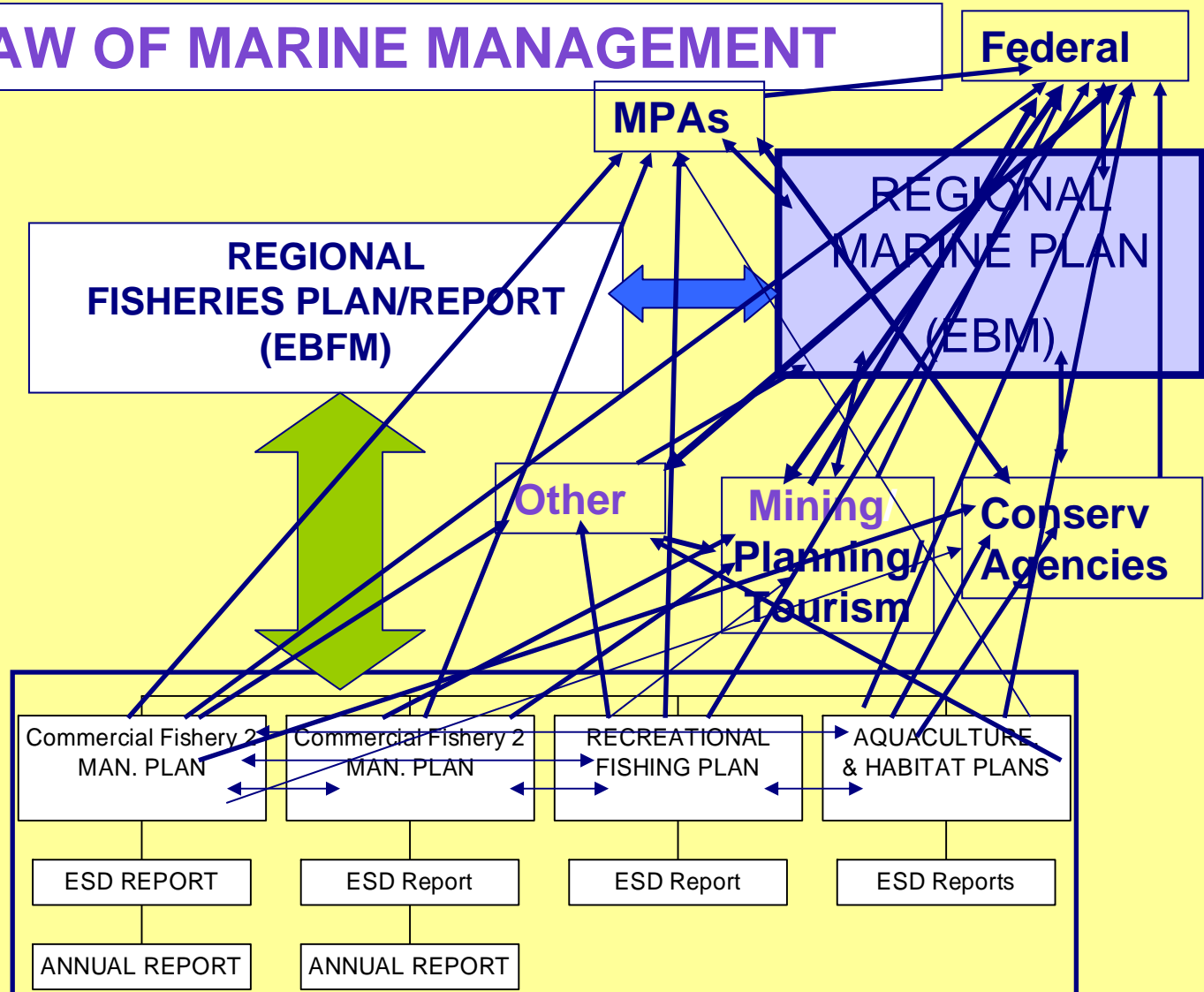


(Fletcher et al., ESD Subprogram)



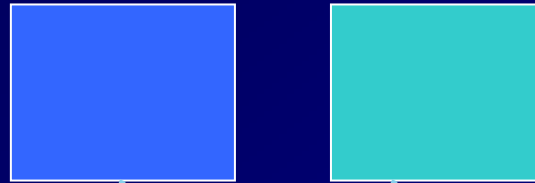
# THE JIGSAW OF MARINE MANAGEMENT

**Multi-sector analysis**

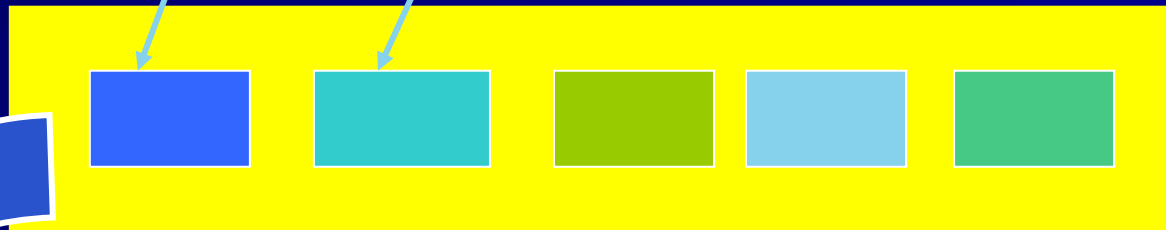


# Linking fisheries to ecosystem management

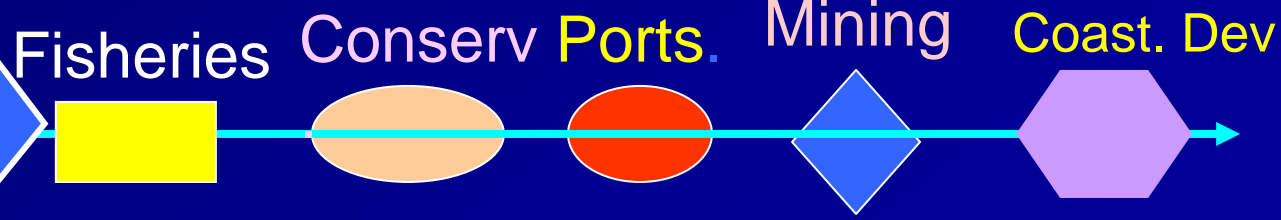
## 1. Single fishery assessments



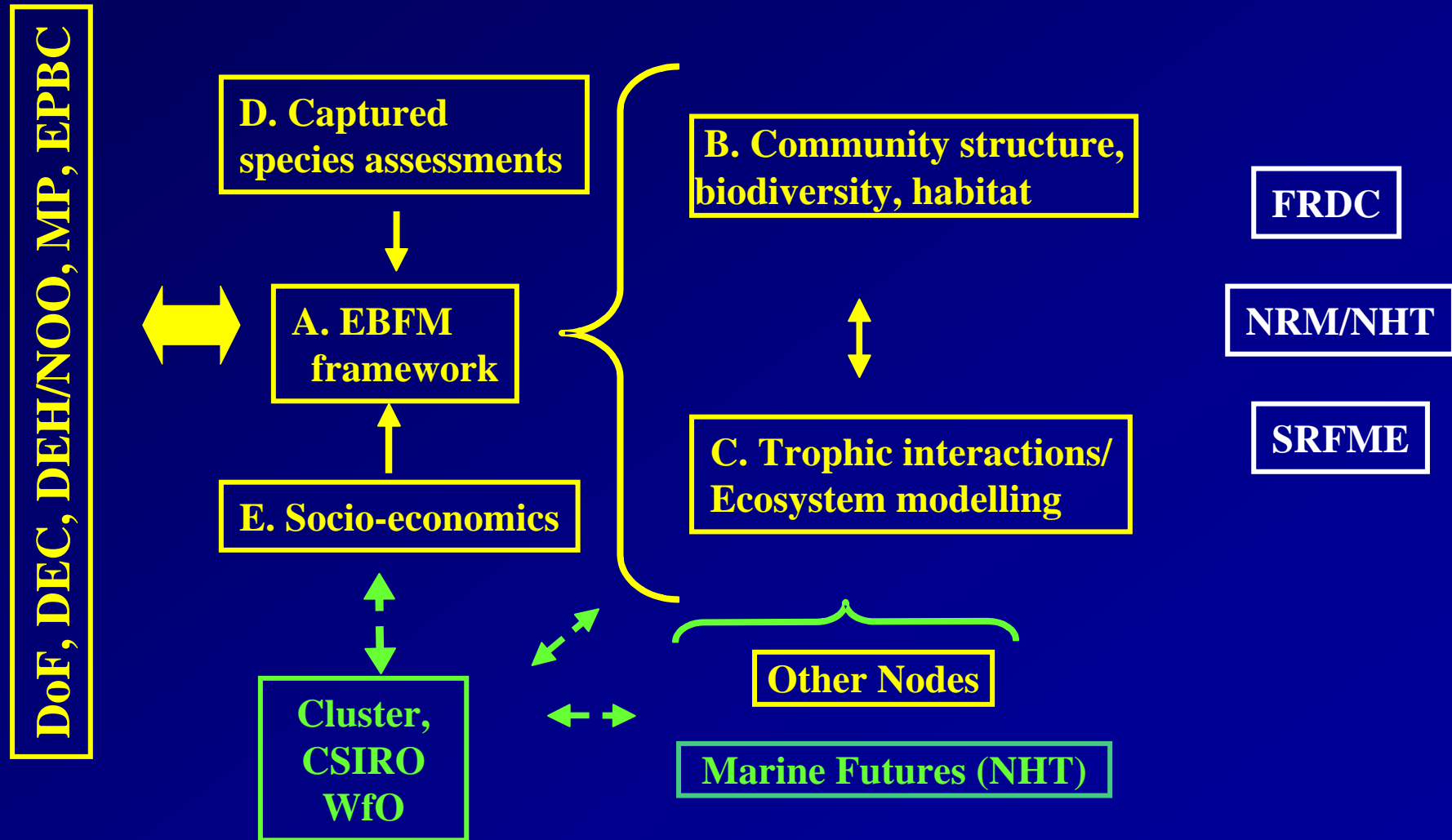
## 2. Multi-fisheries Assessment Ecosystem Based Fisheries Management (EBFM)



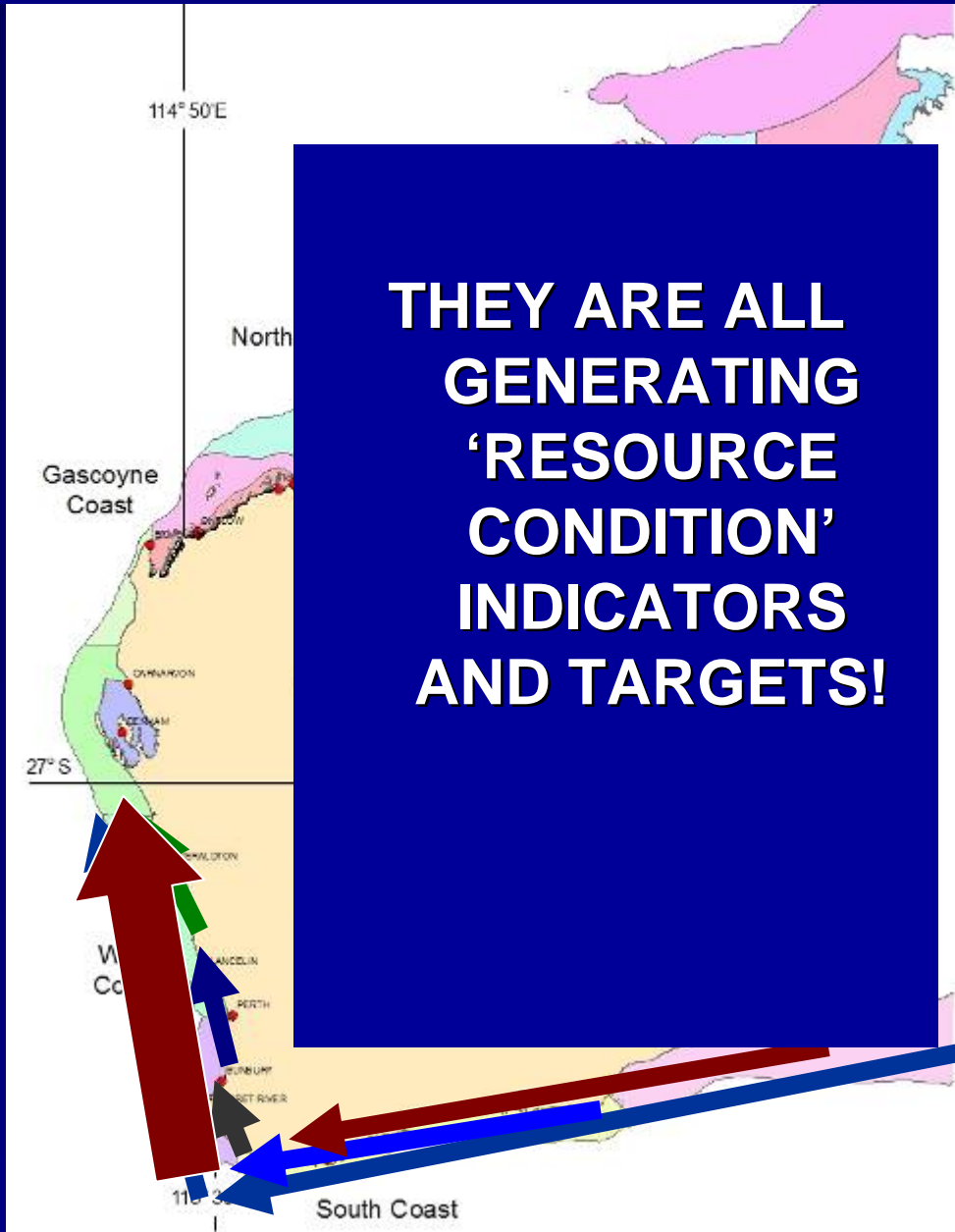
## 3. Regional Marine Planning - EBM



# Components of research and relationships with other research?



# REGIONAL MARINE PLANNING???



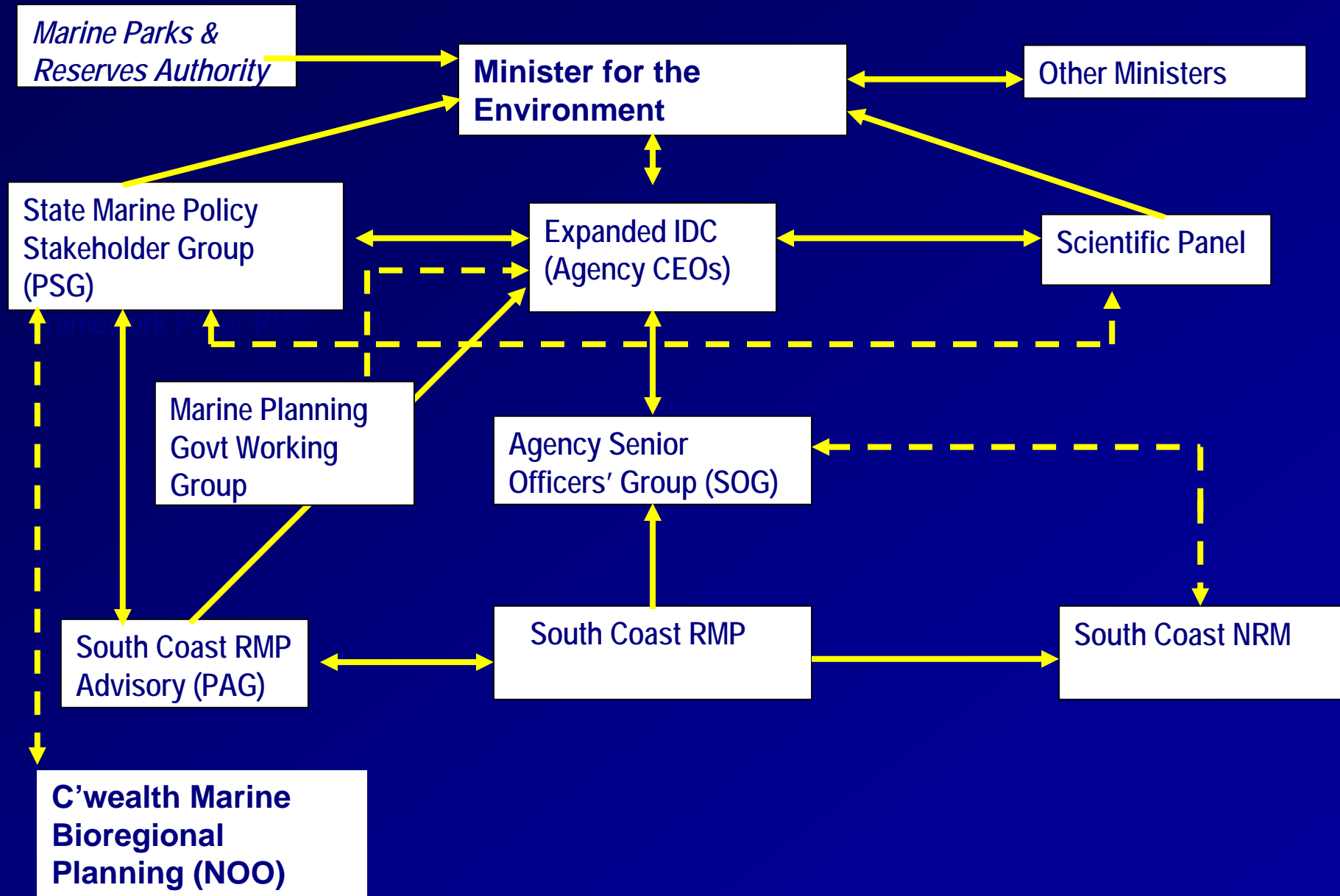
**Commonwealth  
Marine Planning  
Process**

**State Marine Planning  
Process**

**4 Separate NRM -  
Catchment Councils:  
coastal and marine  
planning processes**

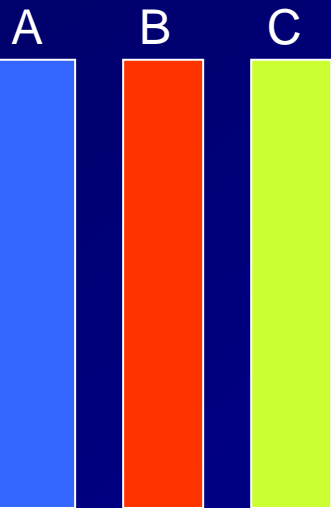
**Fisheries - EBFM**

# Regional Marine Planning

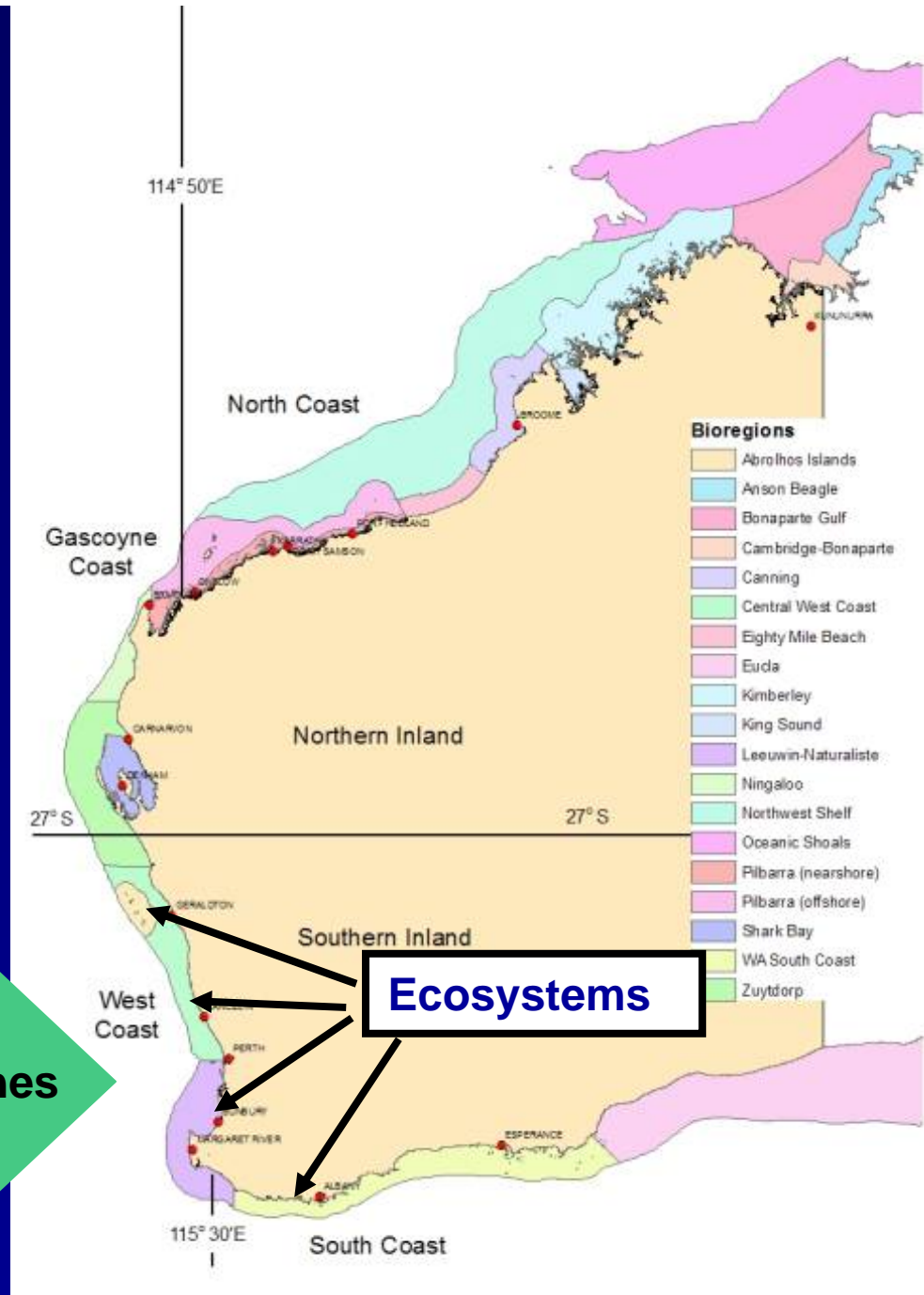


# Reporting Scales

Fishery (Stocks)



Cumulative catches



# Alignment and integration

- **Array of activities – confusing**
- **Insufficient alignment at all levels – improving**
- **Delay progress – “just do it”**

# Ecosystem management NOW

- **Biodiversity & ecosystem functioning**
- **Indicators (what to measure?) – must start relatively simple if we are to start now**
- **But . . . further develop understanding of complex aspects**
- **Responsible agencies must be involved in guiding development of indicators to achieve management outcomes**

## **Need:**

### **Resources for:**

- ongoing communication & liaison**
- maintenance of current impetus**
- management of science delivery**

