



Conservation Council Fish Forum

FORUM #5

Marine protected areas and fisheries management



Photo: Matt Hoare

Format of the evening

- Introduction
- Brief presentations from Kelly Crosthwaite (PIRSA), Jon Emmett (DEH) and Bob Kearney
- Forum discussion
- Informal discussion over drinks and nibbles



Forum discussion ground rules

- Respect for all stakeholders
- Save questions until after all talks
- Only one person talking at a time
- Introduce yourself before speaking
- Keep it brief (some things are best left for informal discussion afterwards)



Introduction - why we wanted this forum topic

Aim is to gain insight and understanding through open, constructive discussion with government managers and other stakeholders



Barriers encountered at the working groups

- Threats have not been identified
- Fishing is not a threat to biodiversity
- Our fisheries are well managed so 'no take' areas are not required
- Marine Parks are not about fisheries management

What is the scope of fisheries management?



Australian Government

Department of the Environment and Water Resources

**GUIDELINES FOR THE ECOLOGICALLY SUSTAINABLE MANAGEMENT
OF FISHERIES - 2007**

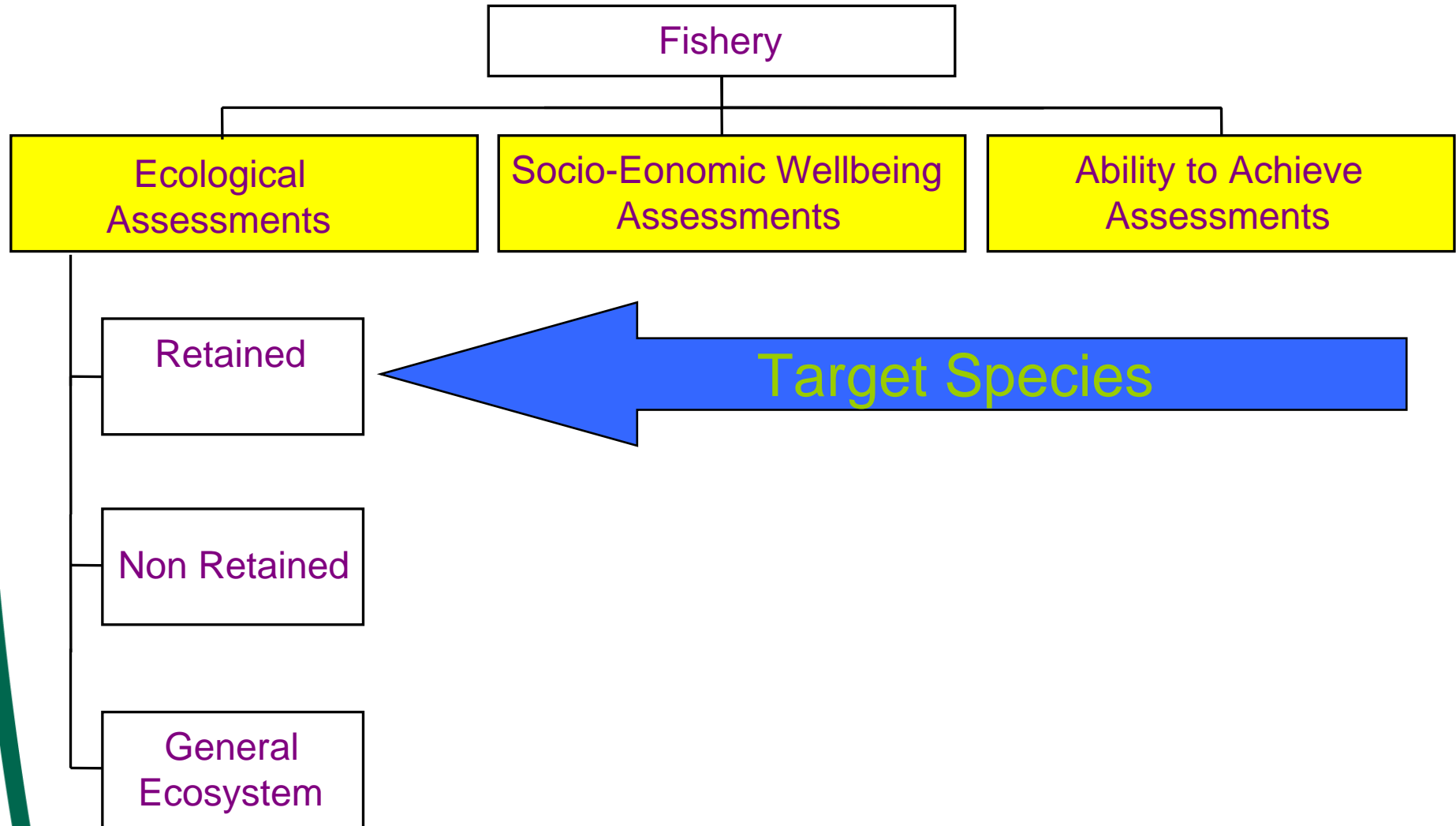


**Ecologically
Sustainable Development**

Catching Sustainability

FRDC – Subprogram

National ESD REPORTING FRAMEWORK



SA Fisheries Resources - Current Status and Trends 2006

Fisheries	Stock status	Assessment reliability	Catch trend	Effort trend
Southern Rock Lobster (<i>Jasus edwardsii</i>)				
Northern Zone	Over fished	Reliable	Decreasing	Decreasing
Southern Zone	Fully fished	Reliable	Increasing	Increasing
Abalone (<i>Haliotis laevigata</i>, <i>Haliotis rubra</i>)				
Southern Zone Greenlip	Fully fished	Reliable	Stable	Stable
Southern Zone Blacklip	Fully fished	Reliable	Stable	Stable
Central Zone Greenlip	Fully fished	Reliable	Stable	Stable
Central Zone Blacklip	Over fished	Reliable	Decreasing	Decreasing
Western Zone Greenlip	Fully fished	Reliable	Stable	Stable
Western Zone Blacklip	Fully fished	Reliable	Stable	Stable
Giant Crab (<i>Pseudocarcinus gigas</i>)				
Southern & Northern Zones combined	Fully fished	Indicative	No trend	No trend
Sardine/Pilchard (<i>Sardinops sagax</i>)				
Sardine Fishing Zone	Fully fished	Reliable	Increasing	Increasing
Western King Prawn (<i>Melicertus latisulcatus</i>)				
Spencer Gulf	Fully fished	Reliable	No trend	No trend
Gulf St Vincent	Over fished	Reliable	Decreasing	No trend
West Coast	Environmentally limited	Indicative	Decreasing	Decreasing
Marine Scale Fish				
King George Whiting (Spencer & Vincent)	Over fished	Reliable	Decreasing	Decreasing
King George Whiting (West Coast)	Fully fished	Reliable	Stable	No trend
Snapper	Fully fished	Reliable	No trend	No trend
Garfish	Over fished	Reliable	Decreasing	Decreasing
Southern calamary	Fully fished	Indicative	Decreasing	Decreasing
Blue Crabs (<i>Portunus pelagicus</i>)				
Blue Crab Fishing Zone	Fully fished	Reliable	Increasing	Increasing

Source:
PIRSA (2007)
*South
Australian
Fisheries
Resources —
Current Status
and Recent
Trends 2006*

*(South
Australian
Fisheries
Management
Series
Paper number
49)*

‘No take’ areas for fisheries management

- ‘enhanced fisheries stability’ - a more precautionary and ‘bet-hedging’ management strategy for fisheries
- possible benefits from spillover of adults and juveniles, or export of larvae, BUT careful design is required and negative consequences need to be considered

A major opportunity for fully and over-exploited fisheries to adopt a more precautionary and lower-cost approach to management that is highly likely to deliver improved benefits.



National ESD REPORTING FRAMEWORK

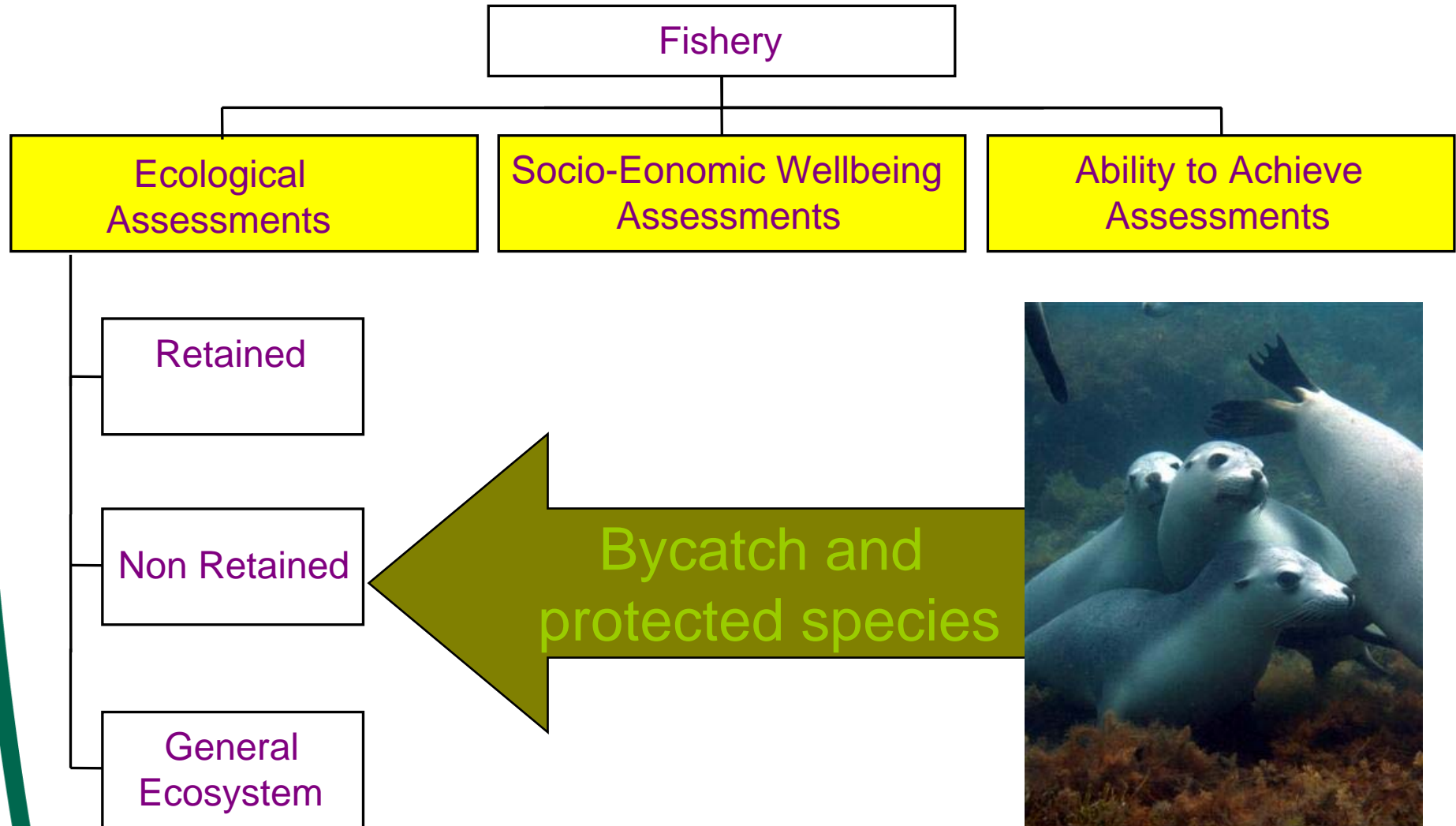
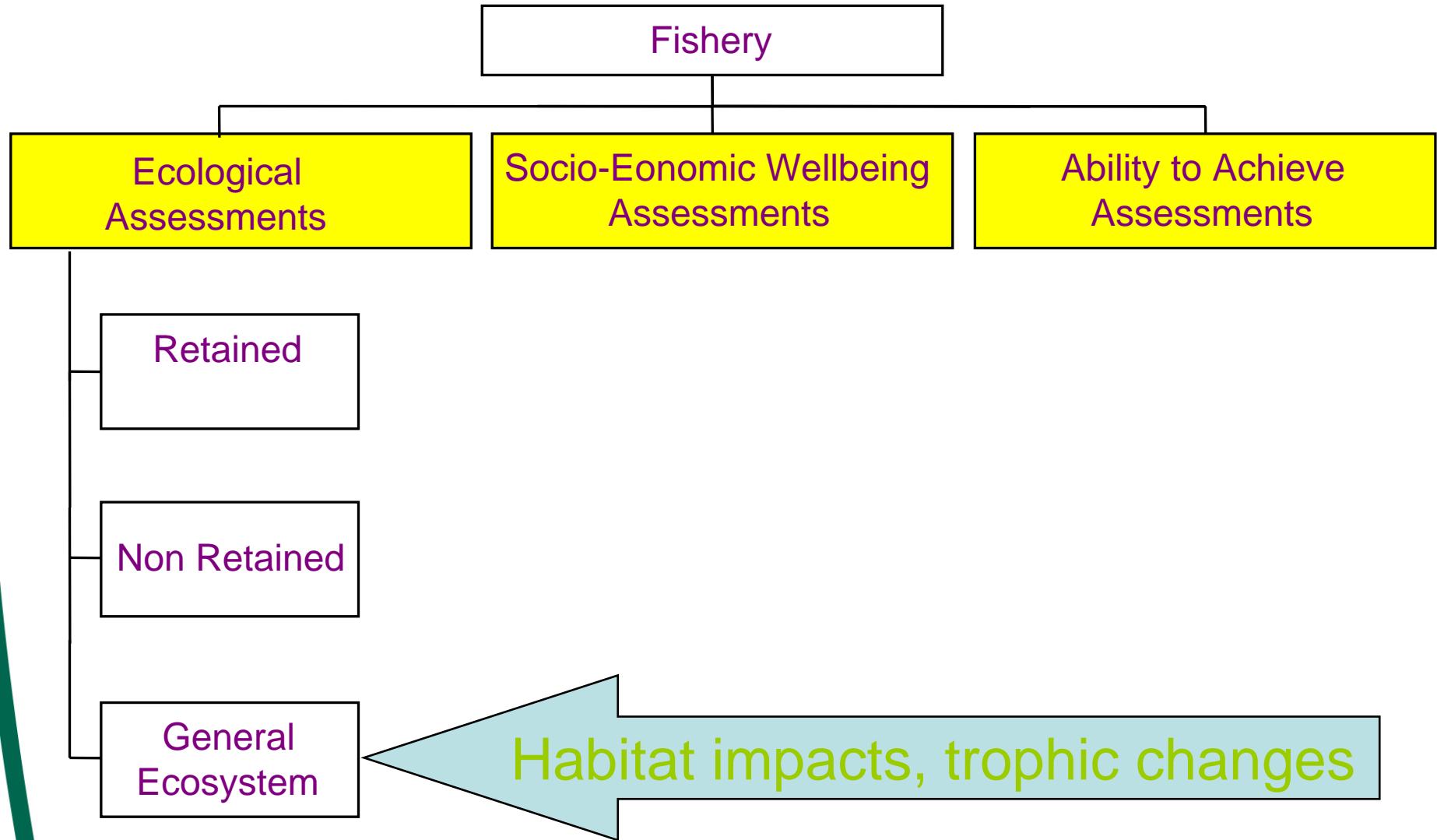
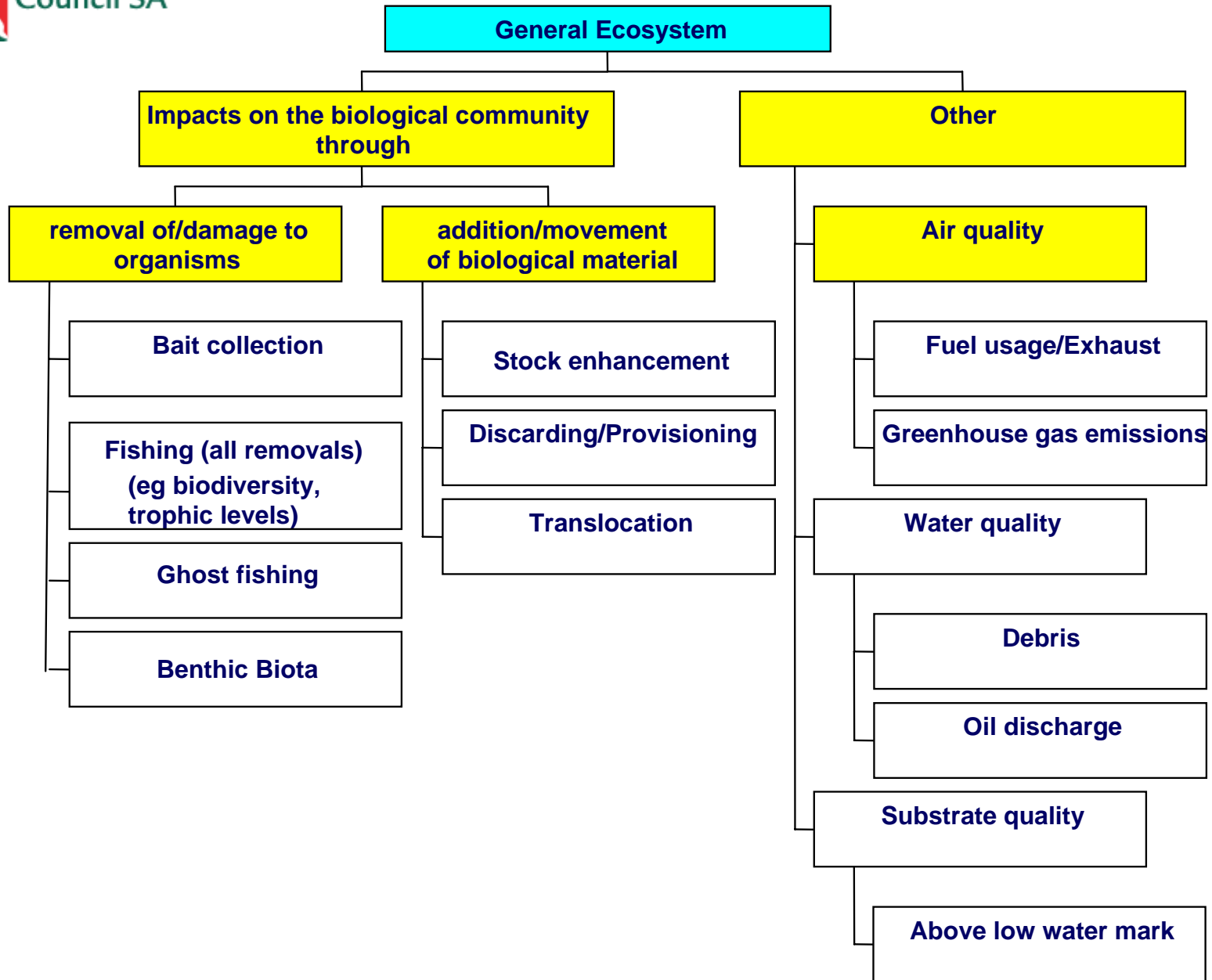


Photo: DEH

National ESD REPORTING FRAMEWORK





Threats associated with extractive use include:

- alterations to ecosystem function;
- destabilisation of community structure through extraction at specific trophic levels;
- disruption of competitive interactions and predator–prey relationships;
- reduction in relative abundance of top-order predators in marine ecosystems;
- reduced local genetic diversity within species and local species extinctions.



An FRDC project proposal has been developed to investigate the ecosystem effects of rock lobster and abalone fishing on temperate rocky reefs in South Australia, in response to the emerging need for improved understanding of the broader ecosystem impacts of fishing. The proposed study is intended to assist the process of developing a representative system of Marine Protected Areas (MPAs) for South Australia and improve the scope for fisheries managers to integrate broader ecosystem requirements into fisheries management regimes.

PIRSA to develop measures to assess ecosystem impacts of the fishery. Consideration should be given to the appropriateness of reference areas that would allow comparison between fished and unfished areas.

Sanctuary Zones can:

- Provide reference areas
- Address cumulative impacts
- Provide focus areas for other conservation tools
- Provide insurance against management failure
- Increase resilience
- Enhance education and eco-tourism opportunities

Are we missing opportunities for greater synergies with fisheries management?

Summary

- The threat of fishing to marine biodiversity has been widely acknowledged
- Sanctuary zones are a vital tool for addressing this threat in a number of ways
- This will help to address an important gap in current fisheries management – broader ecosystem effects