

# Conceptual model development for key habitats in Victoria’s marine protected areas

## Background

Natural systems can be complex, with many interacting components and many potential outcomes from management actions. It is difficult for non-specialists and managers to conceptualise these systems, and therefore to make decisions regarding their management. Conceptual Models are a useful tool for improving understanding between values, threats, emerging issues and management actions in marine protected areas.

## Aims

- Develop conceptual models for key habitats in Victorian marine and estuarine environments managed by Parks Victoria.

## Results

- Conceptual models showing explicit links between values, threats and management options were developed for 6 marine and estuarine habitats
- Conceptual maps (without explicit links) were also developed to provide information on what is included in the models.

## Implications

- These conceptual models are being used across Parks Victoria for multiple marine protected area management purposes including the development of Conservation Outcomes and management planning.

## Relevant parks and ecosystems

All marine national parks and sanctuaries, and estuaries managed by Parks Victoria. Seagrass, Mangroves & Saltmarsh, Water Column, Soft Sediments, Estuaries, Subtidal Reef and Intertidal Reef.

## More information

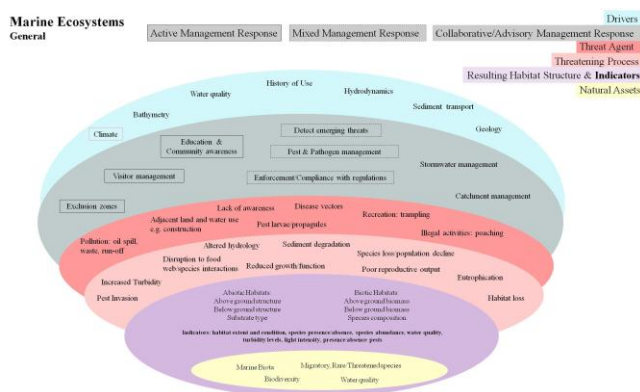
Contact Science and Management Effectiveness Branch, Parks Victoria on 13 1963

## Publications and presentations

Pocklington, J. B., Carey, J. M., Murshed, M. D. T. and Howe, S. A. J. 2012. Conceptual Models for Victorian Ecosystems: Marine and Estuarine Ecosystems. Parks Victoria Technical Series 66.

Pocklington, J. B., Carey, J. M., Murshed, M. D. T. and Howe, S. A. J. 2012. Conceptual Models for Victorian Ecosystems: Marine and Estuarine Ecosystems, Seagrasses, Mangroves & Saltmarsh. Australasian Society for Phycology and Aquatic Botany annual conference.

Murshed, M. D. T. 2010. Development of Causal Maps for Subtidal and Intertidal reefs of Victoria’s Marine Ecosystems. MSc Thesis. Department of Botany, University of Melbourne.



Left: example of a conceptual map from Pocklington, J.B. et al 2012. Right: subtidal reef habitat, photo credit – Julian Finn, Museum Victoria