

Chapter 1 Introduction

Australian governments have been committed to the establishment of a National Representative System of Marine Protected Areas (NRSMPA) since 1998. In 2007 the first network of Commonwealth marine reserves (CMRs) was proclaimed with the establishment of 14 reserves in the South-east Marine Region. In November 2012, 40 new CMRs were proclaimed in the South-west, North-west, North, Temperate East and Coral Sea, finalising the Australian Government's contribution to the NRSMPA.

Management plans for these new reserves were drafted following their proclamation. However, the Australian Government re-proclaimed the reserves in December 2013, which had the effect of setting aside the management plans. This was the first step in the Government's commitment to reviewing the new reserves and how they were to be managed. The Commonwealth Marine Reserves Review (the CMR Review) commenced in August 2014 with the release of the terms of reference and announcement of the appointment of panel members. The CMR Review had two interrelated streams:

- (i) The Expert Scientific Panel (ESP) addressed the science underpinning the current CMRs and their future management.
- (ii) The Bioregional Advisory Panels (BAP) enhanced consultation with stakeholders about the CMRs.

The ESP was appointed to advise on the science underpinning the CMRs and make recommendations for strengthening it into the future. Options for zoning and allowable uses were considered, as were options for addressing the most significant information gaps hindering robust, evidence-based decision-making for the management of CMRs. The ESP also considered future priorities for research and monitoring of biodiversity, especially those relating to the understanding of threats to marine biodiversity.

Concurrently, the BAP, comprising three panel members for each of the five marine regions and two co-Chairs, was appointed to consult across commercial, recreational and charter fishing groups, community and Indigenous groups, environmental interest groups, and tourism and other marine industry groups to identify areas of contention with the reserves. They were tasked with developing options for zoning and management arrangements to address these contentions and make recommendations for improving the inclusion of social and economic considerations into decision-making for marine reserves, with particular regard for their management, including suggestions for ongoing engagement of regional stakeholders.

The two BAP co-Chairs, who were also members of the ESP, provided a link between the two panels and assured that deliberations and findings from the ESP could be considered for the work of the BAP. Specifically, they made formal requests for scientific findings by the ESP on issues that emerged from their consultations. In this report the ESP presents a number of findings it made to assist the work of the BAP. In addition, the ESP makes recommendations

to Government consistent with its terms of reference. These recommendations are directed at the establishment of a robust adaptive management framework for the CMRs into the future.

The full terms of reference for the CMR Review are at appendix 1.

The structure of this report reflects the systematic approach of the ESP in addressing its terms of reference. The scope of the ESP terms of reference did not extend to the outer boundaries of the CMR estate—a position foreshadowed by the Minister for the Environment in his media release following the re-proclamation of the reserves in December 2013 and made in a statement at the time of the International Union for Conservation of Nature (IUCN) World Parks Congress in November 2014. Mindful of the work of the BAP, in relation to its first specific term of reference:

i) advise on options for zoning, and zoning boundaries, and allowed uses consistent with the Goals and Principles;

the ESP confined itself to consideration of the science underpinning zoning and specific questions referred to it by the BAP. The ESP's second and third specific terms of reference are closely interrelated:

ii) advise on future priorities for scientific research and monitoring relating to marine biodiversity within the marine reserves, especially any relating to the understanding of threats to marine biodiversity within the marine reserves;

iii) advise on options for addressing, the most significant information gaps hindering robust, evidence-based decision-making for the management of the marine reserves.

The ESP's approach on these issues was based on a review of the available science and consultation with national scientific experts in these areas. The ESP expects that a number of its findings and recommendations to the Government will help to inform those charged with the future planning and management of the CMR estate.

In chapter 2, the ESP reviews the process and science that informed the design and zoning of the 40 reserves proclaimed in 2012. This included, among other things, the Government's marine bioregional planning programme and the Integrated Marine and Coastal Regionalisation of Australia (IMCRA).

In chapter 3, the ESP outlines significant new science that has become available since the reserves were designed and proclaimed and how this might inform future zoning and management. In order to do this, references are made to earlier science as appropriate.

This chapter of the ESP report has been informed by:

- a literature review
- public submissions from the BAP consultation process that addressed ESP terms of reference
- a Marine Science Expert Forum, hosted by the ESP, which brought together marine scientists from a range of organisations around Australia

- other direct communications with marine scientists from the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and other research organisations.

Every endeavour was made to obtain and review all relevant new scientific information to inform chapter 3 and associated findings. Many chapter 3 findings are framed as advice to the BAP on areas of contention identified through the consultation process and formally communicated to the ESP by the BAP.

Lastly, in chapter 4 the ESP has drawn on all of the above to identify:

- information gaps that hinder robust management of the marine reserves
- future priorities for scientific research within the CMRs, especially any relating to threats to marine biodiversity
- a necessary communications approach to support the recommendations made.