





Designing an MPA Network for the Arafura and Timor Seas

The Arafura Timor Seas Ecosystem Approach Phase II (ATSEA-2)¹project will support protection of priority coastal and marine habitats and conservation of protected species in the Arafura Timor Sea region (right). The first step is the regional stock-taking of key biodiversity habitats, including coral reef, seagrass, and mangrove ecosystems, and identifying priority conservation areas. ATSEA-2 will use this information to support the design of a resilient network of marine protected areas (MPAs) and development of regional action plan to enhance protection of endangered marine turtles.



Given the ecological and social connectivity

throughout the ATSEA region, the four ATSEA countries (Indonesia, Timor-Leste, Papua New Guinea and Australia) will gain substantial benefits by collaborating on the management of marine resources through the design of an MPA network for the entire region. This may include benefits for multiple objectives including maintaining or enhancing fisheries, protecting biodiversity and adapting to climate change. It will also support the ATSEA countries to achieve their commitments to the UN Convention on Biological Diversity's (CBD Aichi target 11) and to set new MPA goals and designations for the CBD Post-2020 Global Biodiversity Framework (GBF) 2030 and the UN Sustainable Development Goals.

The ATSEA-2 Project has engaged the Coral Triangle Center in collaboration with Yayasan Konservasi Alam Nusantara (YKAN) — the Indonesian entity of The Nature Conservancy; Dr. Alison Green (MPA Network expert); and Dr. Nicolas Pilcher (sea turtle expert) to design an MPA network and develop a regional turtle action plan. Since there is limited time and resources available for the project, we see this as the first step in a regional collaboration among the four ATSEA countries to design an MPA network to protect biodiversity, enhance or maintain fisheries and adapt to climate change. To design the network, we will also work collaboratively with ATSEA-2's climate change



specialist Dr. Johanna Johnson, who is conducting a climate change vulnerability assessment for the region.

Our approach will be to conduct a marine gap analysis by considering existing and proposed MPAs in each of the four countries, and use the best available science, data and MPA design practices (i.e., Marxan, MPA network design

¹ https://atsea-program.com/

criteria) to identify potential gaps in the MPA network in the region. To do this we will seek advice from the four national governments (through the ATSEA-2 country representatives and relevant government agencies) to help guide the process by providing advice on their priorities and interests, and providing relevant spatial data. The result will be an MPA network design that will include existing and proposed MPAs and identify Areas of Interest for establishing new or expanded MPAs to fill gaps in the existing regional MPA network, for consideration by the relevant countries. For example, the MPA



network design may identify areas of interest recommended for new MPAs to apply design criteria at the regional scale such as the need for habitat representation, protecting rare, threatened and vulnerable species, incorporating connectivity and adapting to climate change.

- The main steps and timelines for the project include:
- August to October 2020: Gather data and seek advice from governments and leading scientific institutions in each country.
- Late October/November 2020: Complete first draft of an MPA network design and ecosystem valuation of the coastal/marine resources of the ATS region
- November 2020: Review of 1st draft of MPA network design by government representatives and scientists from each of the four countries.
- February 2020: Final MPA design completed after incorporating advice from national representatives.
- April 2020: Final report on design of resilient network of MPA, roadmap toward establishment of new MPAs and improving existing MPA management effectiveness, and regional action plan for enhanced protection of marine turtles.

About ATSEA-2 Project

ATSEA-2 is the second phase of the Arafura & Timor Seas Ecosystem Action (ATSEA) Programme and a regional partnership involving the Governments of Indonesia, Timor-Leste and Papua New Guinea with the support of the Australian Government in order to collectively manage high marine and fisheries resources in the Arafura and Timor Seas (ATS). The ATSEA-2 Programme started in 2019 and aims to promote sustainable development in the ATS region to improve the quality of life of its inhabitants through restoration, conservation and sustainable management of marine-coastal ecosystem as one of the area with highest productivity in the region to ensure the implementation of integrated concept, sustainable, and prosperity of the coastal people in transboundary area. ATSEA-2 is a Global Environment Facility (GEF) funded programme and managed under United Nations Development Programme (UNDP) as executing partner and Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) Resource Facility (PRF) as implementing partner. To know more about the project, please visit the website https://atsea-program.com/

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