

# Eastern Lesser Sunda Islands and Timor Coastal Area IMMA

## Summary, continued.

area. Sightings are mostly of single individuals, although 5 individuals were sighted in Oelolot-Ndoo Island and Rote Island. The species is increasingly vulnerable due to habitat loss and overlap with human activities such as seaweed farming.

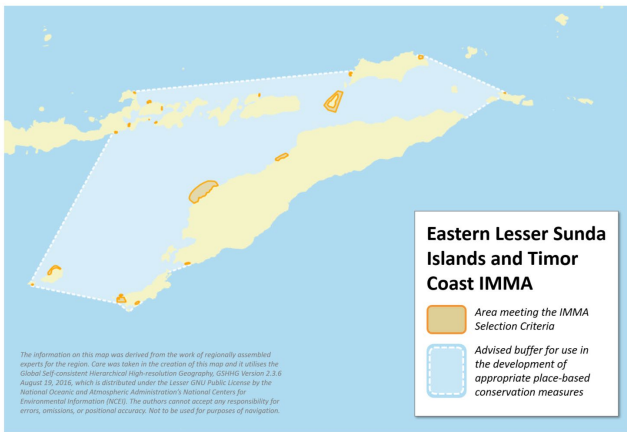
## Description

Eastern Lesser Sunda Islands and Timor Coastal Area IMMA supports diverse and highly productive coastal ecosystems and pelagic habitats including seagrass beds totalling 23,279 hectares.

The Lesser Sunda is influenced by Indonesian Throughflow from the western Pacific water and Indian Ocean as well as upwelling currents. It contains small islands, seamounts, deep seas and canyons. This area is an IMMA because of the existence of small and resident populations of vulnerable species, the dugong, dugong feeding areas and species diversity.



Figure 1: Dugong sighting at Alor MPA. Photo: ME Lazuardi



## Area Size

1,257 km<sup>2</sup>

## Qualifying Species and Criteria

Dugong – *Dugong dugon*

Criterion A; B (1); C (2)

## Other Marine Mammal Species

### Documented

*Grampus griseus*, *Peponocephala electra*, *Stenella attenuata*

## Summary

The Eastern Lesser Sunda Coastal Area IMMA comprises a non-contiguous area of water and small islands from Bali to the Wetar Islands. It contains the four provincial administrative areas of Bali, West Nusa Tenggara, East Nusa Tenggara, and Maluku. This area consists of coastal areas of the Sabu Islands, Rote Islands, the eastern part of Flores, and Timor Island. In addition, it shares a border with Timor Leste and northern Australia. The numerous seagrass meadows make this ideal habitat for dugongs (*Dugong dugon*). Sighting information from a participatory mapping to document coastal community local knowledge, a ground-truthing survey and direct sightings, have confirmed that dugongs are found at 25 locations within the



Figure 2: Dugong in Alor MPA. Photo: ME Lazuardi

## Criterion A: Species or Population Vulnerability

*Dugong dugon* (Muller, 1776) has been assessed as a Vulnerable species by the IUCN Red List since 1982. The data on the population in Indonesia or even across the Lesser Sunda remains limited. It is estimated that there are around 1,000 individuals in Indonesia (Marsh et al., 2002). Therefore, the Indonesian government declared the dugong as a fully protected species along with all other marine mammals (Government Regulation – No. 7.1999). The species is becoming increasingly vulnerable due to habitat lost and overlap with human activities such as none eco-friendly seaweed farming activities.

## Criterion B: Distribution and Abundance Sub-criterion B1: Small and Resident Populations

According to sightings information from a participatory citizen mapping process, that gathered information from more than 1500 fishers and coastal

community's local knowledge, as well as ground-truthing surveys and direct sightings, dugongs have been recorded in at least 25 locations within the IMMA area.

Most were single individuals, with 5 individuals sighted in Oelolot-Ndoo Island, and Rote Island (Merryanto et al., 2017; unpublished data from The Nature Conservancy; unpublished data from Misool Foundation). One individual dugong is seen regularly at Mali Beach Alor (Juraj et al., 2016).

## Criterion C: Key Life Cycle Activities Sub-Criterion C2: Feeding Areas

In the Eastern Lesser Sunda Islands and Timor Coastal Area dugongs are recorded close to seagrass areas (Merryanto et al. 2017). Seagrass habitats in Alor consist of *Halophila ovalis*, *Halodule uninervis*, *Enhalus acoroides*, *Thalassia hemprichii*, *Cymodocea rotundata*, *Cymodocea serrulata*, and *Syringodium isoetifolium* (Juraj et al., 2016).

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**MARINE MAMMAL  
PROTECTED AREAS  
TASK FORCE**



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