

Western Lesser Sunda Islands and Sumba Coastal Area IMMA

Summary, continued.

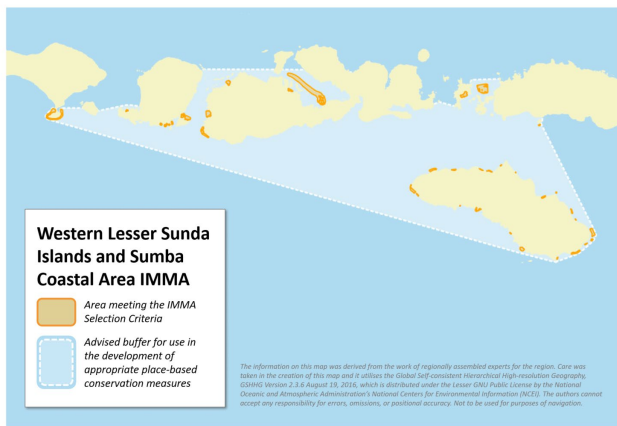
Sightings are mostly of single individuals, although three individuals sighted were observed in Komodo National Park. The species is increasingly vulnerable due to habitat loss and habitat overlap with human activities such as seaweed farming.

Description

Western Lesser Sunda Islands and Sumba Coastal Area IMMA consist of coastal area of Bali Islands, Lombok Islands, Sumbawa Islands, the western part of Flores, and Sumba Island. This area supports diverse and highly productive coastal ecosystems and pelagic habitats including seagrass beds totalling 23,279 hectares.

Our knowledge of dugong habitats in the Western Lesser Sunda Islands and Sumba Coastal Area is based on confirmed photos, participatory mapping of fisherman, coastal community local knowledge and direct sightings (Jurajj et al., 2016; Marsh, 2002; Mustika, 2005; Merryanto et al., 2017; unpublished data from The Nature Conservancy; unpublished data from Misool Foundation). These activities have documented 41 locations where dugongs have been recorded.

The Lesser Sunda is influenced by throughflow from the western Pacific water and Indian Ocean as well as up welling currents. It contains small islands, seamounts, deep seas and canyons.



Area Size

756 km²

Qualifying Species and Criteria

Dugong – *Dugong dugon*
Criterion A; B (1); C (2)

Other Marine Mammal Species

Documented

Stenella attenuata, *Stenella longirostris*

Summary

The Lesser Sunda Coastal Area (LSCA) 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 (WNT), East Nusa Tenggara (ENT) and Maluku. The Western Lesser Sunda Islands and Sumba coastal area IMMA consists of coastal areas of the Bali Islands, Lombok Islands, Sumbawa Islands, the western part of Flores, and Sumba Island. This IMMA has numerous seagrass meadows which are associated with frequent sightings of dugongs (*Dugong dugon*). Sighting information from a participatory mapping process (which gathered information from more than 1500 respondents), the coastal community's local knowledge, a ground-truthing survey and direct sightings, have confirmed that dugongs are found at 41 locations within the area.

Criterion A: Species or Population Vulnerability

The Dugong (*Dugong dugon* - Muller, 1776) has been assessed as a Vulnerable species on the IUCN Red List since 1982. The data on dugong populations in Indonesia or even in 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 non 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 41 locations within the area. Most were single individuals, and 3 individuals sighted in Komodo National Park (Mustika, 2005; Merryanto et al., 2017; unpublished data from The Nature Conservancy; unpublished data from Misool Foundation). Individual dugongs have been sighted by surfers at Uluwatu and Padang beaches on the southwest extremity of the South Bali Peninsula (Marsh, 2002).

Criterion C: Key Life Cycle Activities

Sub-Criterion C2: Feeding Areas

In the Lesser Sunda Coastal Area dugongs are recorded close to seagrass areas (Merryanto et al., 2017), in particular around beds of *Halophila ovalis*,

Halodule uninervis, *Enhalus acoroides*, *Thalassia hemprichii*, *Cymodocea rotundata*, *Cymodocea serrulata*, and *Syringodium isoetifolium*.

Supporting Information

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**MARINE MAMMAL
PROTECTED AREAS
TASK FORCE**



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