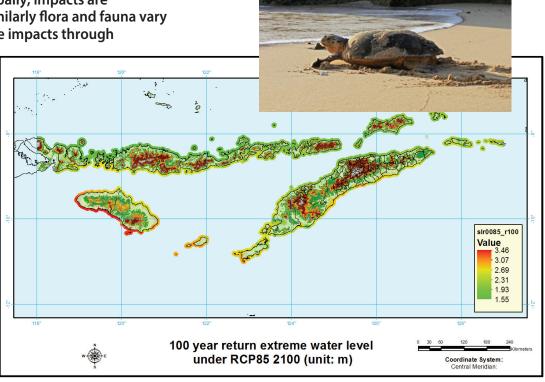
Extreme sea levels in the Lesser Sunda Islands, Indonesia

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Climate change and its associated impacts are widely recognized to affect conservation of flora and fauna. While felt globally, impacts are unevenly distributed. Similarly flora and fauna vary in their resilience to these impacts through

different evolutionary pathways and ecological interrelationships. The Lesser Sunda Islands have a mix of (rock) islands and coastlines interspersed with small capes and embayment coastlines and coastal fringes where the impacts of climate change and the ecology of the littoral zone intersect most vividly.



Projected 100 year return inundation area on Island under RCP85 2100 using STRM 30m DEM (red area)

The study modelled the physical risk of sea level rise and potential for inundation along the Lesser Sunda Islands coast, applying the latest general circulation models (GCM) data from the Coupled Model Intercomparison Project Phase 5 (CMIP5), combined with vertical land movement derived from the interpolation of SONEL and PSMSL data sets. The appropriate regional data was cut out from the global datasets and was combined with sea level pressure data so that extreme events in sea level could be projected along the region's coast out to the year 2100.





