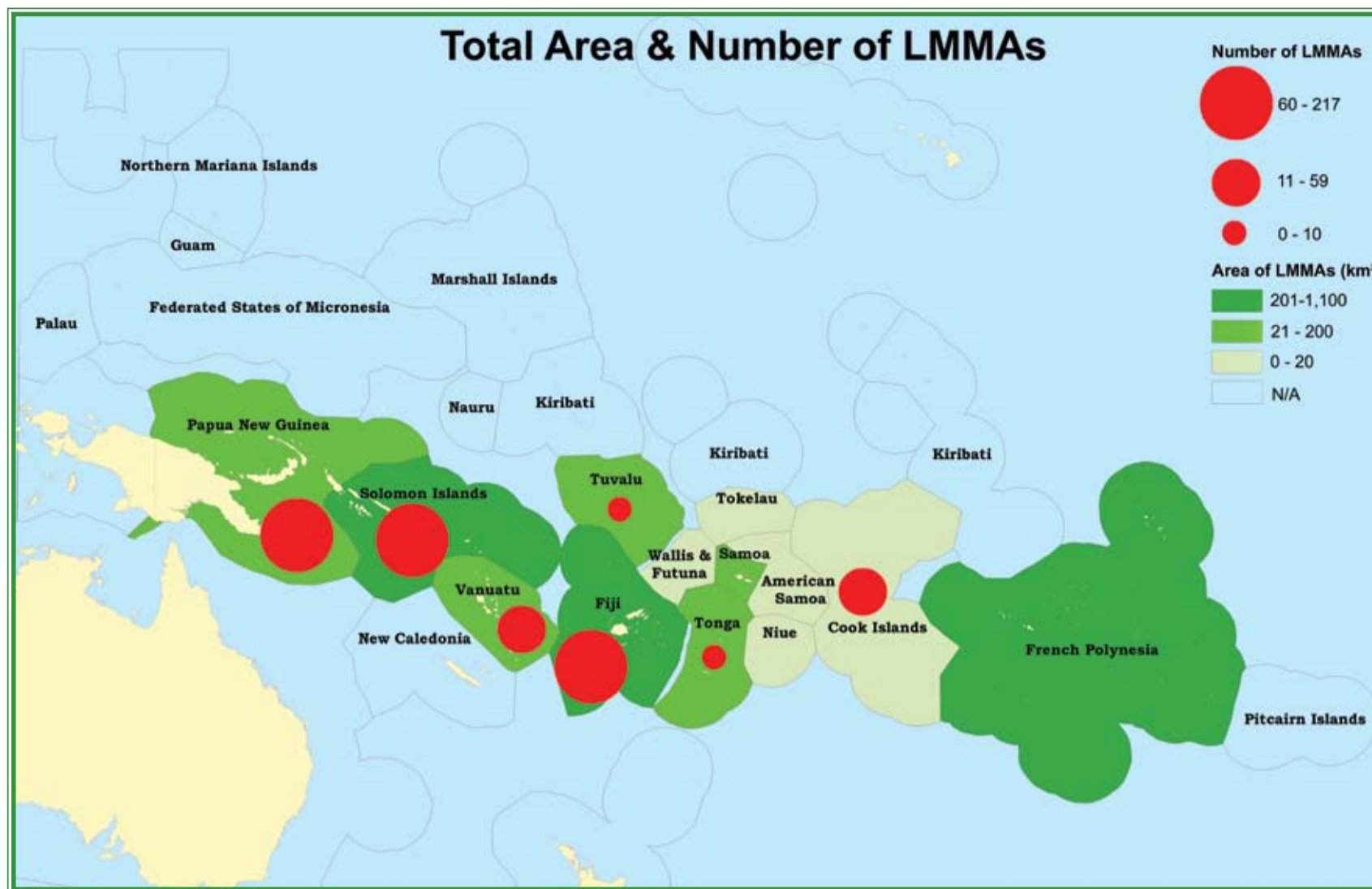


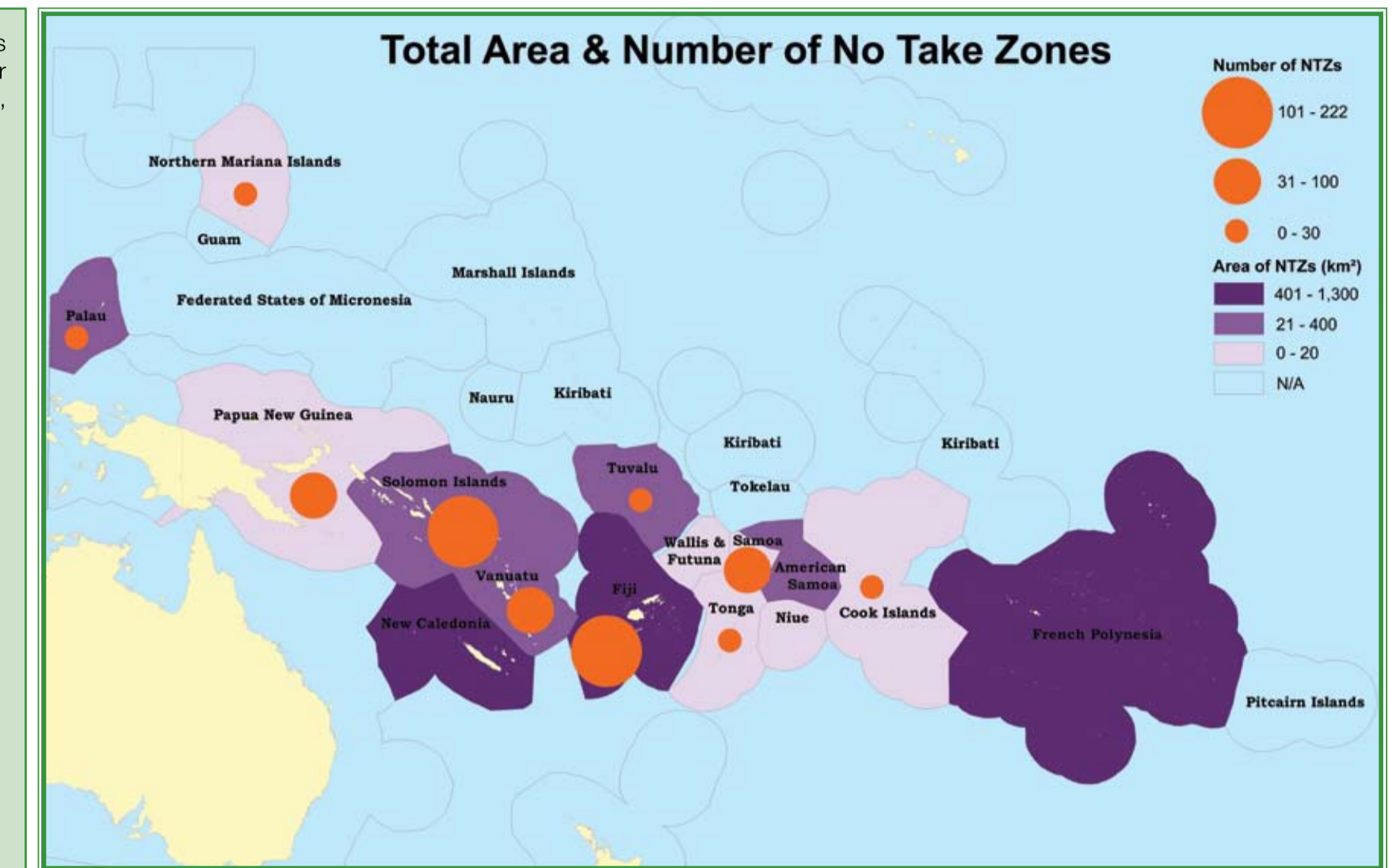
The Secretariat of the Pacific Regional Environment Programme (SPREP), in cooperation with WWF and the WorldFish Center's ReefBase Pacific Project, has documented and reviewed Marine Managed Areas (MMAs) in the South Pacific; Govan *et al.* (2009). Status and potential of Locally-Managed Marine Areas in the South Pacific: Meeting nature conservation and sustainable livelihood targets through wide-spread implementation of LMMAs. SPREP/WWF/WorldFish- ReefBase/CRISP. 95pp + 5 annexes. For further information go to <http://pacific.reefbase.org>. To download the full report visit [http://www.sprep.org/att/publication/000646\\_LMMA\\_report.pdf](http://www.sprep.org/att/publication/000646_LMMA_report.pdf). These maps present data published in that report, as well as additional information that explores the linkages between marine managed areas, coastal communities & livelihoods and critical habitats & biodiversity of Pacific Island Countries and Territories.



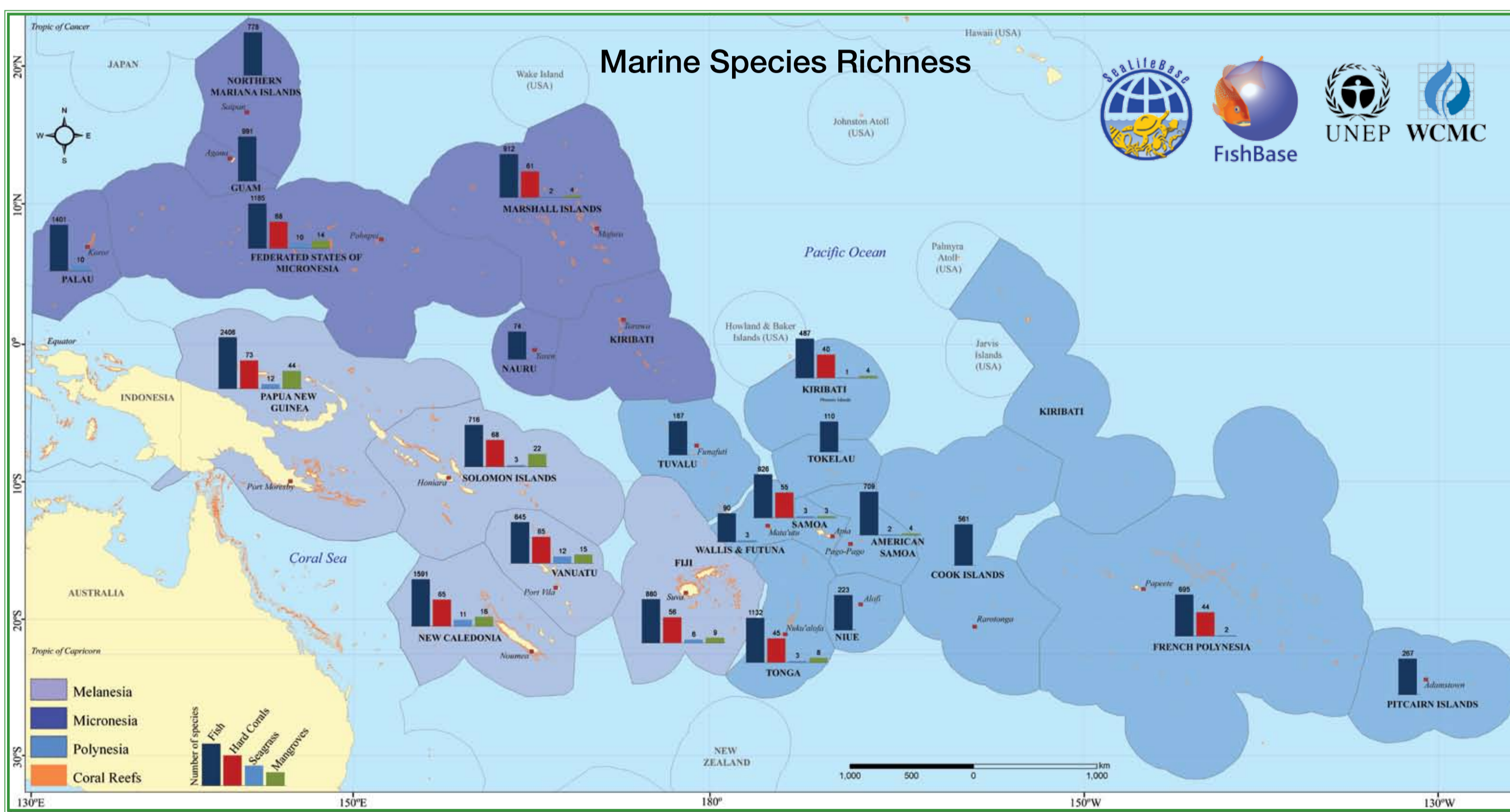
Marine Managed Area (MMA) refers to an area of marine, estuarine, and adjacent terrestrial areas designated using federal, state, territorial, tribal, or local laws or regulations intended to protect, conserve, or otherwise manage a variety of resources and uses [(derived from Baird *et al.* (1999)]. In the Pacific, MMAs take a variety of forms, ranging from large Marine Protected Areas (MPAs) such as the recently established Phoenix Islands Protected Area (spanning 410 500 km<sup>2</sup>), to relatively small but far more numerous (over 500 sites) Locally Managed Marine Areas (LMMAs) established by communities for sustainable resource management. A proliferation of LMMA establishment has occurred over the last decade, which has been carried out by over 500 communities across 15 independent countries and territories. The approaches used in LMMAs make use of existing community strengths in traditional knowledge, customary tenure and governance combined with a local desire to maintain or improve livelihoods within a framework of conservation and sustainable use. LMMAs may include No-take Zones (NTZs), where fishing activities are prohibited, or traditional 'taboo' (Box 1) sites, which may be permanently enforced or subject to periodic openings for harvest to meet nutritional and traditional needs.

**Box 1 : Pacific Island terms describing traditional bans or closures (Govan *et al.* 2008, Parks and Salafsky 2001):**

|                  |       |
|------------------|-------|
| Cook Islands     | ra'ui |
| Fiji             | tabu  |
| French Polynesia | rahui |
| Hawaii           | kapu  |
| Marshall Islands | mo    |
| New Zealand      | rahui |
| Palau            | bul   |
| Papua New Guinea | sambu |
| Samoa            | sa    |
| Solomon Islands  | tabu  |
| Tuvalu           | tabu  |
| Vanuatu          | tabu  |
| Tokelau          | lafu  |



## Critical Habitats & Biodiversity

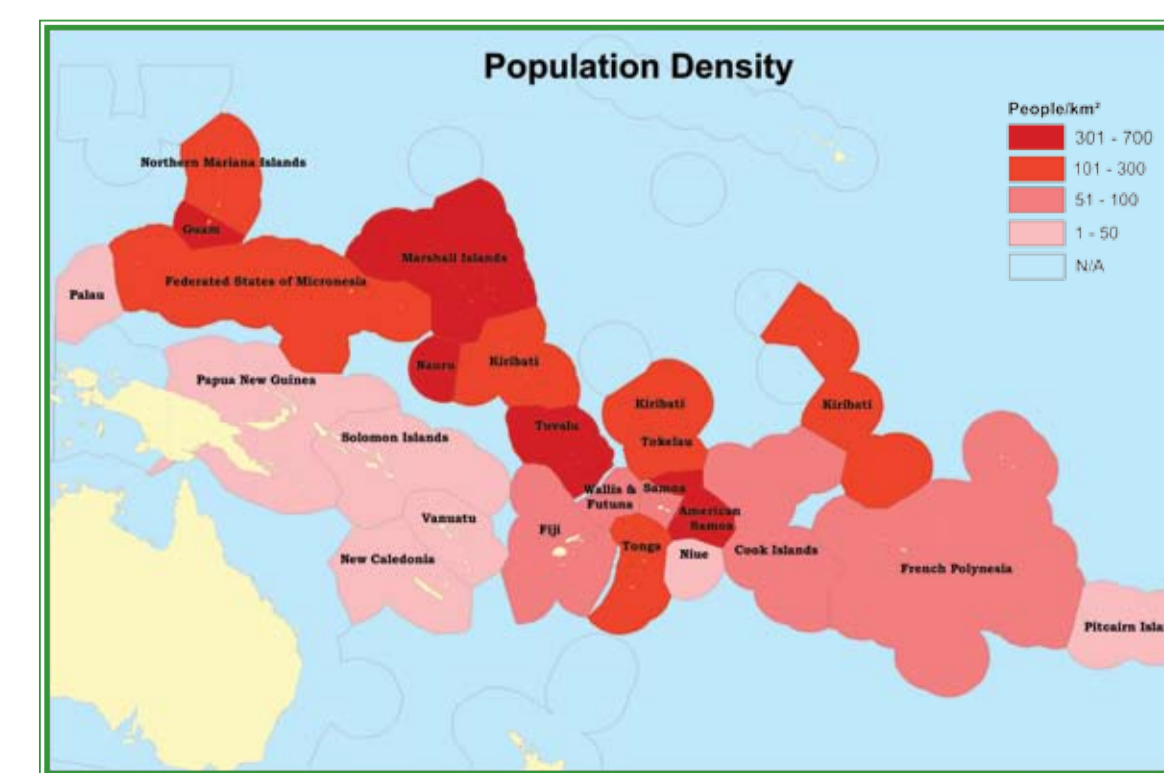
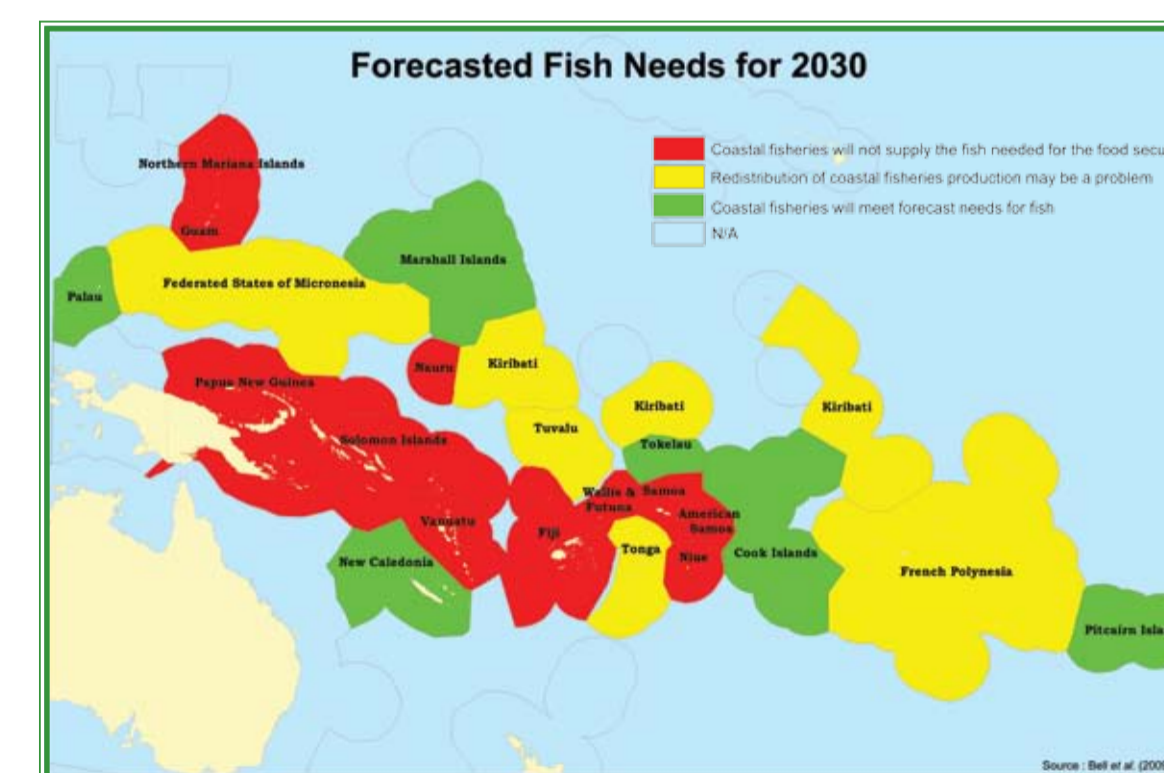
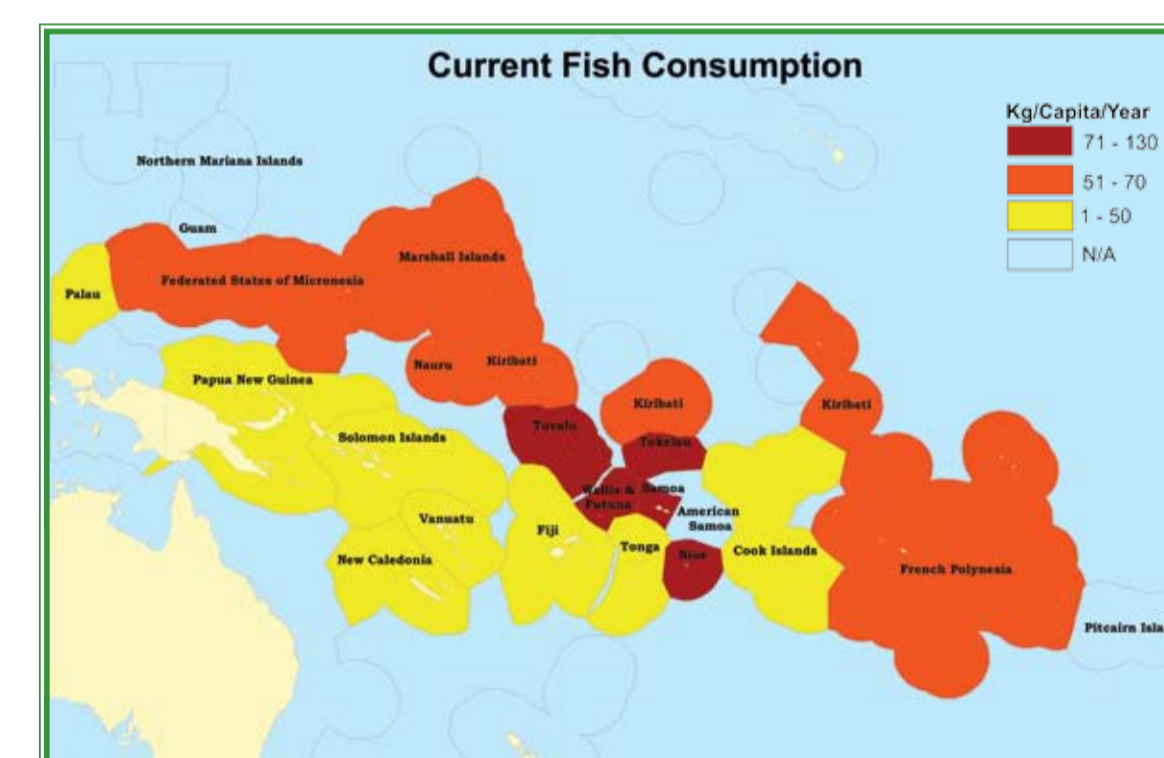


**Sources:** (1) <http://www.fishbase.org> (2) <http://earthtrends.wri.org/> (3) DiDonato, E., C. Birkeland and D. Fenner. 2006. A Preliminary List of Coral Species of the National Park of American Samoa. Tech. Rep. 155, Pacific Cooperative Studies Unit University of Hawaii. 39pp. (4) <http://www.botany.hawaii.edu/basch/uhnpcesu/hms/npsapln2/index.htm> (5) Green, E. and Short, F. 2003. World Atlas of Seagrasses. UNEP WCMC TIE. University of California Press, Berkeley, USA. 298pp (6) Miller, M. *et al.* 2008. The State of Coral Reef Ecosystems of Navassa Island, pp. 117-129. In: J.E. Waddell and A.M. Clarke (eds.), The State of Coral Reef Ecosystems of the United States and Pacific Freely Associated States: 2008. NOAA Technical Memorandum NOS NCCOS 73. NOAA/NCCOS Center for Coastal Monitoring and Assessment's Biogeography Team. Silver Spring, MD. 569 pp. (7) N'Yeurt, A. and C. Payri. 2004. A preliminary annotated checklist of the marine algae and seagrasses of the Wallis Islands (French Overseas Territory of Wallis and Futuna), South Pacific. Aust Syst Bot 17(4): 367 - 397pp.

Mangrove forests, seagrass beds and coral reefs are important and conspicuous natural systems found along coastal areas throughout the Pacific. These habitats form the basis of complex natural systems, contain unique biodiversity and provide critical ecosystem services including fish and wildlife habitat, biofiltration, and important elements of coastal protection. These coastal habitats also support a distinctive set of fisheries and associated livelihoods for the people of the Pacific. Local pressures of development, increasing populations and associated demands for food and cash require effective management of interactions between people, habitats and biodiversity. External pressures of climate change-induced sea level rise, increasing frequency of severe weather events and elevated sea surface temperatures highlight the need to maintain healthy and resilient habitats and coastal communities.

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Bell, J. D., M. Kronen, A. Vunisea, W.J. Nash, G. Keeble, A. Demmke, S. Pontifex and S. Andreofouet. 2009. Planning the use of fish for food security in the Pacific. Marine Policy 33:64-76pp.  
Govan, H., W. Aalbersberg, A. Tawake and Parks, J. 2008. Locally-Managed Marine Areas: A guide to supporting Community-Based Adaptive Management. The Locally-Managed Marine Area Network. (<http://www.lmmanetwork.org>)  
Parks, J. E. and N. Salafsky (eds). 2001. Fish for the Future? A Collaborative Test of Locally Managed Marine Areas as a Biodiversity Conservation and Fisheries Management Tool in the Indo-Pacific Region: Report on the Initiation of a Learning Portfolio. World Resources Institute and Foundations of Success. Available online at [http://www.lmmanetwork.org/pdfs/fish\\_for\\_the\\_future.pdf](http://www.lmmanetwork.org/pdfs/fish_for_the_future.pdf)

## Coastal Communities & Livelihoods



Human populations in many Pacific countries are relatively low when compared globally. In general Pacific populations are concentrated in rural and urban communities situated on the coast. These communities typically demonstrate a high reliance on fresh fish, sourced from coastal marine areas. Pacific ways of life, traditions, housing materials and protection from extreme weather events are also all inextricably linked with healthy and resilient coastal ecosystems. However, in the face of population increases, losses of habitat and biodiversity, climate change and other external pressures, it is anticipated that coastal systems will be unable to meet future demands for fish. On the basis of current levels of fish consumption and estimates of coastal fisheries production, fish related food security needs will not be met in half of the Pacific Island Countries and Territories by 2030 (Bell *et al.* 2009). At national and local scales, fisheries resource management achieved through LMMAs seems to be one of the few tangible mechanisms for supporting critical food security services that are derived from coastal systems.

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