THE PACIFIC ISLANDS REGION

The waters of the Pacific Islands region cover an area of around 40 million square kilometres, or over 10 per cent of the Earth's surface and equivalent to about one third of the area of the Earth's land surface. Most of this area falls within the national jurisdiction of 15 Pacific Small Island Developing States, so that they are custodians of a significant part of the surface of the Earth and, in particular, custodians of a large part of one of the Earth's major international waters ecosystems. The waters hold the world's largest stocks of tuna and related pelagic species.

The defining physical feature of the body of international water shared by Pacific Island communities is the Western Tropical Pacific Warm Pool Large Marine Ecosystem (WTP LME). The WTP LME comprises a huge body of water, lying to the west of the strong divergent equatorial upwelling in the central equatorial Pacific known as the "cold tongue" and between the sub-tropical gyres in the North and South Pacific. It provides approximately 90% of the catch of tunas and other pelagic species in WCPF Convention Area.

The key physical and biological characteristics of the WTP LME are:

- sea-surface temperatures of 28.5 degrees C or greater
- a relatively deep surface mixed layer, with the Sea Surface Temperature minus 0.5 degree C isotherm typically 100-150 metres depth
- relatively low salinity (<34.5 ppt) with a very well defined salinity front on the eastern boundary with the cold tongue
- relatively low primary productivity compared to the cold tongue, but with important El Niño related interannual variability
- westward-flowing surface currents that infuse primary production from the cold tongue
- relatively high secondary production characterised by zooplankton and micronekton species with high turnover and metabolic rates due to the warm-temperature environment; and
- high secondary production that in turn supports a complex pelagic ecosystem ranging from zooplankton and micronekton to large apex predators such as tunas, billfishes and sharks.

The Pacific Islands Oceanic Fisheries Management Project supports important elements of scientific understanding regarding this unique ecosystem such as data collection, stock assessment and ecosystem analysis (including seamounts).