Significant Ecological Marine Area Assessment Sheet

Name: Ahipara Banks

Summary:

The deep reefs of Ahipara Banks have been assigned a high ecological ranking based on their extensive size, the relative rarity of this habitat type and the transitional nature of their location at the boundary of two Bioregions - the Central Bioregion and the Northeast Bioregion. [1] This offshore reef system is a unique example of an offshore rocky reef of this type and size along the West Coast and southern extreme of the Northeast Bioregion. The reefs lie offshore from Tauroa Point and Ahipara.

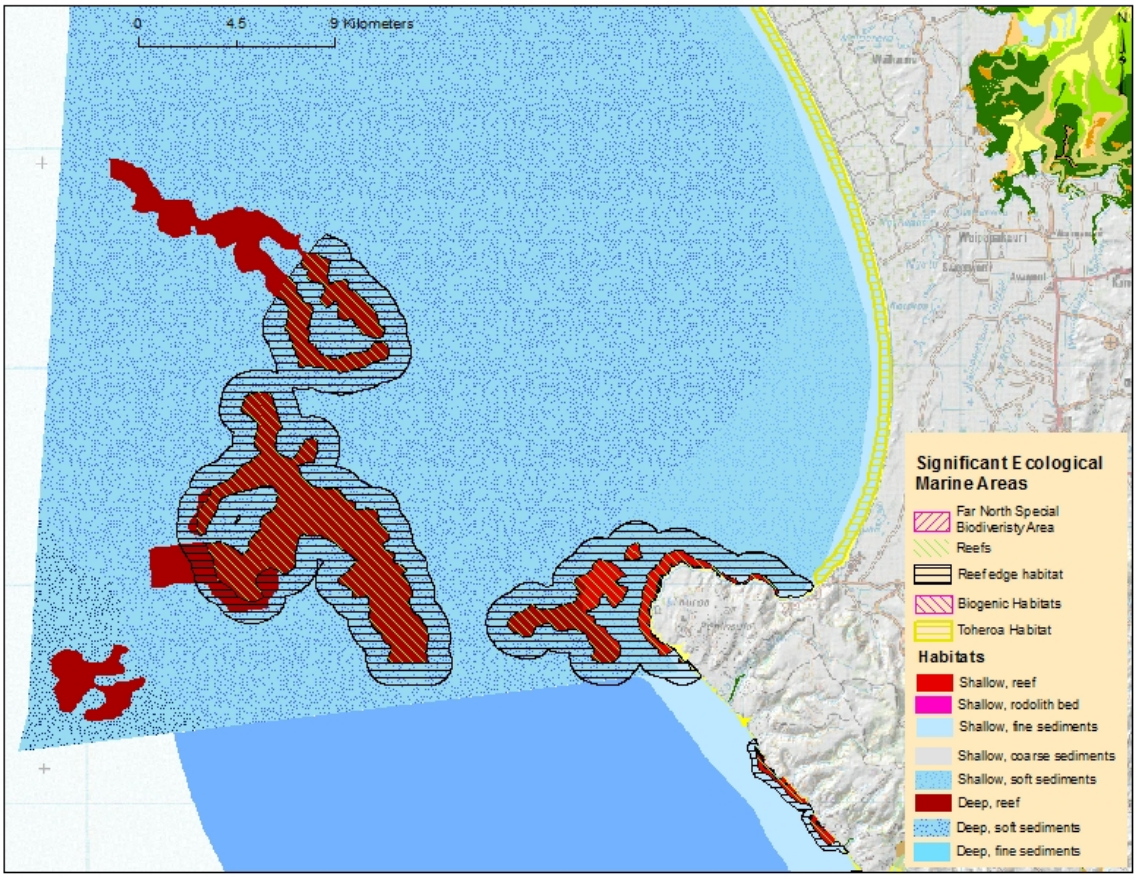

Figure 1 Habitat map of Ahipara Banks showing reef and mapped significant ecological area

Description:

The west coast of Northland typically has a relatively smooth outline, with gradually sloping sandy habitats. Ahipara Banks is the notable exception. It is a large and complex reef system located approximately 13 km off of Tauroa Point. The reefs have been mapped in the Northland marine habitat map project [2], however the mapping of this area

[1] Department of Conservation & Ministry of Fisheries, 2008. Marine Protected Areas: Classification, Protection Standard and Implementation Guidelines.

[2] Kerr, V. 2009: Marine habitat map of Northland: Mangawhai to Ahipara vers. 1. Northland Conservancy, Department of Conservation, Whangarei. 33 p.

was only supported by limited available bathymetry data. The reef system is irregular and has considerable structure with a vertical heights ranging up to 20 meters in some places. The reef system runs roughly north to south and varies from 2km to 10m across in an east to west direction. Depths at the most seaward extreme are approximately 100m, with 30m being the shallowest depth of the reef. The area of the reef system is estimated at 7,500 ha. Ahipara Banks is a renowned recreational fishing area.

An aerial view of Tauroa Pt showing extensive rocky shoreline and shallow reef habitats. This important shallow reef complex connects with the deeper and extensive offshore reef complexes locally know as ' Ahipara Banks'.

Oceanography

The area is influenced by the north-flowing Westland Current and occasionally in summer months by the south-flowing West Auckland Current. Sea surface temperatures range between 15–22°C. This is a high wave energy area with swells of 1.5 – 2.5 m on average and often exceeding 8m. Swells of this size would have an effect on a reef even at 30-50m depth.

Ecological Values

The Ahipara Banks reef is extensive and complex in topography creating a special deep reef environment that is extremely rare on the entire west coast of the North Island. The depth range of 30 – 100 m means that this reef system is described as a deep reef. Although the biological community there has not been studied or described in detail, the area is known as an outstanding habitat for many species of fish and crayfish. In the summer months, when the influence of the West Auckland Current is affecting these waters, there are many game fish species present at these reefs. Most of the reef would be too deep to support macro algae communities. Instead there would be a complex filter-feeding encrusting invertebrate community on the reef supporting marine life there.

The marine ecology values of Ahipara Banks are further summarised in the Nearshore

Classification produced by the Department of Conservation[3]. A further and more detailed review of natural features and ecology was completed by NIWA in 2005.[4] Both publications have comprehensive references covering previous descriptive work done in Northland. The later report summarises some of the local scale habitat mapping work done in the region. More recently regional scale marine habitat maps has been progressed by Kerr.[5]

Northland Marine Mammals

Information on the presence and conservation status of marine mammals in relation to Northland's coasts and estuaries has been reviewed by Baker. [6] [7] Thirty-five species of marine mammals are known from Northland waters (within the 12 n ml limit). Some marine mammal species are resident or semi-resident and breed along the Northland coast, and others are transients. There is a paucity of sightings of marine mammals on the West Coast. This is largely due to the remote nature of these waters. Three threatened species are amongst the species most likely to be encountered in inshore waters: Bryde's whales *Balaenoptera edni*, bottlenose dolphins *Tursiops truncates*, and Orca *Orcinus orca*. The common dolphin *Delphinus delphis,* which is not threatened, is also commonly seen in estuaries and along the coast. Transient New Zealand fur seals are reported occasionally in small numbers on this coast.

Assessment of Ecological Significance

Table 1 Ranking score of ecological significance of Ahipara BanksShallow Reefs [8]

Ahipara Banks Shallow Reefs x Estuary Shorebird Values: Assessment of Ecological Significance			**Rank**
Overall Ranking		**Notes**	**High**
Representation	supports most taxa expected for habitat type	Diversity is likely to be large for its type but only two sites studied	DD, R
	large example of its type	These reefs good example and a large example of type	H
Rarity and Distinctiveness	supports indigenous species threatened, at risk, or uncommon, nationally or within the relevant ecological scale	Marine mammal status unknown NZ Dotterel use nearby beaches	DD, R

[3] Department of Conservation, 2005. Near Shore Marine Classification System. Compiled by Vince Kerr for Northland Conservancy, Department of Conservation. Revised September 6, 2005. http://www.marinenz.org.nz/nml/files/documents/3_northland-mpa.html

[4] Morrison, M., 2005. An Information Review of the Natural Marine Features and Ecology of Northland. Prepared for the Department of Conservation. NIWA Client Report: AKL 2005-50.

[5] Kerr, V., 2015. Marine habitat map of Northland's west coast, (draft). Unpublished GIS project in progress. Kerr & Associates, Whangarei, Northland. Email: vince@kerrandassociates.co.nz.

[6] Baker, A. N., 2005. Sensitivity of marine mammals found in northland waters to aquaculture activities. Report to the Department of Conservation, Northland Conservancy. A. N. Baker Cetacean Biology Consultant, Kerikeri.

[7] Baker, C.S, Chilvers, B.L., Constantine, R., DuFresne, S., Mattlin, R.H., van Helden, A. & Hitchmough, R., 2010. Conservation status of New Zealand marine mammals. New Zealand Journal of Marine and Freshwater Research, 44:2, 101-115.

[8] Table 1 details the ranking criteria and scoring that was used to determine the overall high ranking given to the ecological significance of this area. The criteria used have been adopted from Appendix 5 of the Northland Regional Council Proposed Policy Statement. See reference to Methodology report or other council documents to call up

	supports species endemic to the Northland-Auckland region or at distributional limits within the Northland region	Level of endemism is not well known but these reefs system are the northern extreme of this Bioregion	M, R
	distinctive of a naturally restricted occurrence	Shallow rocky reefs are rare in this entire Bioregion some important examples	H
	developed as a result of unusual environmental factor(s) or is part of an ecological unit that occurs within an originally rare ecosystem	Very complex geological history and rare occurrence on this coast and in this Bioregion	H
	identified as nationally or regionally rare habitat(s) in MPA Plan	Not evaluated as of yet	R
Diversity and Pattern	high diversity of indigenous ecosystem or habitat types	Expected to be high for this habitat and Bioregion but only documented in two sites.	M
	high diversity of indigenous taxa	Expected to be high for this habitat and Bioregion but only documented in two sites.	DD, R
	its composition reflects the existence of diverse natural features or ecological gradients	Expected to be high for this habitat and Bioregion	DD, R
	contains intact ecological sequences	Good example of sequence of deep reefs, sand, shallow reef, intertidal habitats	H
Ecological Context	provides or contributes to ecological linkages, networks, buffering functions	Expected to be high for this habitat and Bioregion	DD, R
	supports the natural functioning of freshwater or coastal ecosystems	Expected to be high for this habitat and Bioregion	DD, R
	supports life stages of indigenous fauna	Expected to be high for this habitat and Bioregion	DD,R

Assessed by: Vince Kerr	Date: September 2015
Information Source(s) *see below*	**2-7**
Reliability of Information *see below*	**+**

Rank (overall score) H = high, M = moderate, L =low, DD = data deficient, R = recommended for further investigation

Information Source(s) 1 = quantitative report, 2 = qualitative report, 3 = habitat map or classification, 4 = expert opinion, 5 = personal communication, 6 = anecdotal information, 7 = visit and observation

Reliability of Information expressed as a scale of confidence ranging from high (+++) to low confidence (---)

Criteria Rank - score for each individual criteria) H = high ranking, M = moderate ranking, L = low ranking, DD = data deficient, R = recommended for further investigation, NA = not assessed for this criteria