

What is MTM?

Manaaki Taha Moana (MTM) is a research programme to restore and enhance coastal ecosystems and their services of importance to iwi/hapu, through a better knowledge of these ecosystems and the degradation processes that affect them.

We utilise Western Science and Mātauranga Maori knowledge and participatory modelling tools and processes to assist iwi/hapu to evaluate and define preferred options for enhancing/restoring coastal ecosystems. This evaluation of options is assisted by innovative IT and decision support tools (e.g. digital libraries, simulation modelling, interactive mapping, 3D depiction, real-time monitoring).

Action plans are being produced for improving coastal ecosystems in each rohe.

The research team works closely with iwi/hapu in the case study regions to develop tools and approaches to facilitate the uptake of this knowledge and its practical implementation.

Mechanisms will also be put in place to facilitate uptake amongst other iwi throughout NZ.



Research Providers:

School of People Environment and Planning,
Massey University

Taiao Raukawa Trust

Manaaki Te Awanui Trust

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MANAAKI TAHA MOANA: ENHANCING COASTAL ECOSYSTEMS FOR IWI

MTM Report No. 6



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Why are we conducting this research?

Tangata whenua have been concerned for some time about the degradation of coastal resources, the loss of kaimoana (seafood) or the increasing toxicity of remaining marine species, sedimentation, pollution, eutrophication of waterways, and the associated negative impact that such issues have on cultural identity and sense of pride (mana). For this reason, funding was successfully gained from the Ministry for Science and Innovation in New Zealand (formerly the Foundation of Research Science and Technology) for a 6-year environmental restoration study, from 2009-2015.

Previous Research:

Manaaki Taha Moana (MTM) builds upon previous research undertaken with Ngāti Raukawa ki te Tonga that examined land-based ecosystems. The MTM research is focusing on ways to restore coastal ecosystems and services of most importance to iwi and hapū in two regions: the Horowhenua coastline (from the Hokio Stream to Waitohu Stream) and in Te Awanui Tauranga Harbour. Accordingly, over the course of the 6-year programme, the MTM research aims to assess and help restore the holistic health of coastal ecosystems, including the economic, ecological, social and cultural aspects of coastal health. Our research goal is that actions will be implemented to enhance the resilience of coastal ecosystems so that they can make a positive contribution to iwi identity, survival and welfare.



What does this report cover?

The report provides a contextual background to MTM within the wider cross-cultural coastal restoration context in New Zealand, to describe the rationale for the MTM programme overall, and provides an overview of MTM Phase 1. Additional reports detail the specific research activities undertaken in both the Horowhenua and the Tauranga case studies of MTM Phase 1 (see www.mtm.ac.nz). However, this report focuses on the design, methods, key findings and recommendations of the 'stocktake' in Phase 1, in both case study regions.

It is intended that this report will clarify the rationale for the participatory action and kaupapa Māori research methods employed. Likewise, it is hoped readers will gain a better appreciation of how the diverse research activities within MTM Phase 1 'fit together', leading to the recommended case studies for detailed research in Phase 2. This report:

- (i) provides a rationale for the MTM research design and methodology;
- (ii) describes some innovative participatory action research methods utilised in Phase 1 to facilitate involvement of local communities;
- (iii) outlines plans for ongoing detailed case studies; and
- (iv) makes recommendations for future coastal research that can empower local communities to positively engage in coastal restoration and sustainable resource management practices.

The first section of the report provides an overview of MTM aims and objectives, the make-up of the MTM research team, and the key research activities completed in Phase 1.

Section 2 provides a brief introduction to the study of coastal ecosystems and ecosystem services. Section 3 explores knowledge and relationships that indigenous peoples, including Māori, have with the environment and discusses the importance of environmental research in New Zealand involving tangata whenua and mātauranga Māori (Māori knowledge). Section 4 outlines participatory action research and kaupapa Māori research, and describes why such methods are used in the MTM research programme to actively engage with local communities in the research.

The report then describes the Phase 1 research undertaken in Horowhenua & Tauranga.

The first objective of MTM was to develop a knowledge base of the past and current state of coastal ecosystems and their services in the two case study regions. This first 'stocktake' phase of MTM involved compiling and summarising existing knowledge about coastal environments, including western science and mātauranga Māori, to find identify research 'gaps' that required ongoing detailed investigation in Phase 2 of MTM.

The report concludes with a summary of achievements in the MTM programme thus far. This is followed by a short discussion of issues pertinent to the MTM research, including: the need for greater understanding of coastal ecosystem services and associated research; with tangata whenua; greater community awareness about contributors to, and consequences of, coastal degradation; and the role of participatory action research methods in cross-cultural environmental research.