



MĀTAURANGA MĀORI PROTOCOLS FOR DETERMINING AND MANAGING THE STATE OF WAITĀ

Assessments of fish stocks are done in isolation and do not account for the interactions between different stocks or interactions with the broader marine environment (MfE & Stats NZ, 2019). Marine management approaches and tools based on mātauranga Māori take a more holistic view of the environment, taking into account the health of ecosystems and the wellbeing of communities who are linked to them. Some Māori fishing companies use kaitiaki-based business models and mātauranga Māori to ensure the Māori marine economy is both profitable and sustainable over the long-term (Rout et al, 2019).

Mātaitai reserves are marine management tools which allow Māori to develop localised management regimes for traditional fishing areas. They generally allow for customary and recreational fishing but prohibit commercial fishing (Paul-Burke, 2020). Legislation empowers tangata whenua to establish fishing bylaws to restrict any activities that they consider will threaten the sustainability of the fisheries in a reserve, subject to consultation and ministerial approval. Iwi in any area can also establish similar bylaws through the Crown treaty settlement process (MPI, 2021d). About 17,430km² or about 10 percent of our territorial sea (out to the 12 nautical mile limit) is protected by marine reserves. Almost all this marine reserve area is in the Kermadec and Subantarctic Islands. (See indicator: [Protection in the marine environment.](#))

In 2011, the container ship *Rena* ran aground on Astrolabe Reef (Ōtāiti) near Tauranga, spilling approximately 350 tonnes of oil into the sea in one of the worst Aotearoa maritime environmental disasters. Research in the post-disaster period used the Mauri Model Decision Making Framework (Mauri Model) methodology which assessed the whole system including community, hapū, and whānau mauri alongside environmental impacts. The mauri of the local communities was negatively affected by the disaster, with measured declines in social and cultural wellbeing. The mauri of the environment increased as the recovery process progressed, showing the deep connections between the health of communities and ecosystems (Faui et al, 2017).