

Kia Hiwa Rā Kia Hiwa Rā

Research Scholarship – Calling for Expressions of Interest (EOI)

E te ihi, te rahi, te katoa, kia ora koutou

Taranaki Whānui ki te Upoko o te Ika and Ngāti Toa Rangatira are partners with NZTA Waka Kotahi and the Alliance delivery partners in Te Ara Tupua Project. The partnership is established through Te Ara Tupua Mana Whenua Steering Group (MWSG).

The MWSG is excited to announce this opportunity for funded research that will implement the Kaitiaki Strategy and contribute to our vision for a thriving new reef habitat that enhances the mouri of Te Whanganui-a-Tara, restores our ability to harvest kaimoana, and upskills uri as kaitiaki and ecologists.

Naturally, we seek research proposals from students who whakapapa to Te Atiawa Taranaki Whānui and Ngāti Toa Rangatira however, we are open to receiving proposals from a Māori student or group of researchers who are passionate about working with mana whenua to restore our harbour ecosystems and who seek to integrate mātauranga Māori into this research. The reef units are a novel approach to biodiversity offset and we expect this research will add positively to future projects within Te Whanganui-a-Tara and coastal projects nationally.

Please share this opportunity with your whanau and encourage students (young and old) to send us an expression of interest. We hope to award the scholarship later this year with research commencing early 2025.

Mana Whenua Steering Group: Kim Skelton (Chair); Lee Hunter; and Jenny Ngarimu.

Reef Project Background:

Te Ara Tupua Alliance has recently installed reef units on the western bed of Wellington harbour to mitigate coastal reclamation as part of Te Ara Tupua shared pathway project:

- 56 engineered reef 'pyramid' units placed;
- Covering 5ha;
- Each unit is 4mL x 4mW x 5mH; and
- Weigh approximately 22 tonnes.

The reef is intended to provide a thriving habitat with more fish and well-developed shellfish and plant populations. These ecological gains will support the health and mouri of Te Whanganui-a-Tara for all to enjoy for many generations to come.



Image 1: Placement of reef units commenced in May 2024 and were completed in June 2024.

Image 2: Artist impression of reef unit on sea floor 5 years after

Research overview:

It is proposed to facilitate a research programme that can experimentally trial restoration measures or interventions on the reef units, to contribute to local knowledge surrounding the efficacy of reef units to improve and promote native biodiversity outcomes. Mātauranga Māori alongside western science will result in better outcomes for the reef, as both bodies of knowledge can be used to provide a holistic perspective and apply the unique biological knowledge of Te Whanganui-a-Tara.

Te Ara Tupua Kaitiaki Strategy and Reef Project *Please read the attached strategy.*

Potential research questions:

We are particularly interested in proposals that incorporate a mātauranga Māori lens.

1. Experimentally trial the translocation and/or seeding of native species onto the reef units.
2. Assessing how fish and/or mobile species respond to the reef units as habitat compared to natural rock reefs.
3. Assessing the effectiveness of removing pest predators from the reef units.
4. Assessing the effectiveness of removing invasive species from the reef unit surfaces.

Expression of Interest (EOI) requirements:

This research is funded, and the opportunity is available to an individual Māori student studying at post-graduate level. We may also consider high quality EOIs from a group of students/researchers. If this is of interest, please provide:

1. A cover letter explaining your 'why'.
2. Your iwi affiliations.
3. Your CV (relevant to this EOI) with appropriate referees.
4. Your biology / ecology technical skills.
5. Your mātauranga Māori knowledge and application to research.
6. Your availability to undertake this research (e.g., start date and location).
7. A brief description of your research proposal and funding requirements, including the organisation(s) that will support you during this research.
8. How you will give effect to the Kaitiaki Strategy and principles in your research.

Each EOI will be assessed by a panel with expertise in mātauranga Māori and ecology.

Please direct any queries and all expressions of interest to:

Dr. Lucy Underwood – Marine Ecologist, Te Ara Tupua Alliance

lucy.underwood@te-ara-tupua.co.nz

EOI closes **Friday 23 August 2024**

Further links and reef project information:

<https://www.nzta.govt.nz/media-releases/new-reef-planned-for-te-ara-tupua-nga-uranga-to-pito-one/>

Te Ara Tupua Kaitiaki Strategy

Taken from Resource Consent Application and Assessment of Effects on the Environment (AEE) NKP-TAT-000-REP-PP-NS-000004:

As discussed in Section 1.2.2 Taranaki Whānui ki te Upoko o te Ika and Ngāti Toa Rangatira are partners in the Project and this partnership has been established through the MWSG. The partnership recognises that Mana Whenua have a holistic and interconnected relationship to all aspects of te taiao (water, land and air) through whakapapa (genealogy). For Mana Whenua, this relationship is especially significant with Te Whanganui-a-Tara. This is embodied in the Te Ara Tupua narrative of Ngake and Whātaimai creating the Harbour and the traditional stories and histories denoting the importance of Te Whanganui-a-Tara to Mana Whenua at that time.

The MWSG has developed the Te Ara Tupua Kaitiaki Strategy underpinned by a set of principles that guide mana whenua aspirations and expectations for the Te Ara Tupua Project, create a foundation on which the intangible impacts of the Project can start to be assessed, and provide a mechanism for mana whenua interests to be provided for. These principles link to the connection to the environment in both a physical and spiritual way which guides the behaviours to protect and care for it. The core principles of the Kaitiaki Strategy are mana and mouri as without these, mana whenua is lost in how they act and uphold their responsibility to co-exist with environment and uplift their people.

The MWSG expects that the Kaitiaki Strategy is also considered as part of this proposal. Table 6.1 provides an assessment of how the Kaitiaki Principles have been given effect to. This helps identify the cultural impacts of the proposal, both tangible and intangible.

Table 6.1. Kaitiaki principles and how they are given effect to:

Principles	How it is given effect to
<p>Ranginui – the connection to the various spiritual realms of the great and vast heavens, the source of light and understanding growth and ultimate link to the celestial family.</p>	<p>The reef enhancement concept is a novel approach to biodiversity compensation and will be the first of its kind in Aotearoa.</p> <p>This novelty and pursuit for growth and innovation, can be compared to the deity - Tāne and his journey to Te Tihi o Manono in the heavens in search of the three Kete of Knowledge; Te Kete Tuatea (Basket of Light), Te Kete Tuauri (Basket of Darkness) and Te Kete Aronui (Basket of Pursuit). With these three Kete, Tane returned to Te Ao Tūroa (Te Ao Marama, Te Ao Hurihuri) and brought knowledge to the living world.</p> <p>The kete are continually being added to as new mātauranga is being discovered. Our pursuit of excellence, and desire to try new approaches while integrating mātauranga Māori and western science ensure that Tāne' journey to the heavens is remembered and celebrated through this kaupapa.</p> <p>The body of knowledge for reef enhancement is also a relatively novel concept worldwide. The proposal will add significantly to the current body of knowledge for both mātauranga Māori and western science. This knowledge will inform future projects within Te Whanganui-a-Tara and other projects nationally looking to compensate coastal reclamation while working with mana whenua in the future.</p>
<p>Mouri – the mouri of Te Ara Tupua – the living relationship between the ngahere, the cliffs, the waterways, Hinemoana and everything that lives within that environment have their own individual and interdependent vitality.</p>	<p>The reef enhancement within the vicinity of Te Ara Tupua has direct synergy to the mouri of Te Whanganui-a-Tara. The addition of the reef has the potential to enhance and lift the mouri of the area on a previously barren seafloor. The proposal is expected to transform the area into a thriving offshore reef habitat with vegetation and reef fish species under this proposal.</p> <p>The expectation of Mana Whenua is that the reef will grow and support other tamariki of Tangaroa eventually leading to the development, growth and expansion of reef networks in Te Whanganui-ā-Tara there by contributing to a new ecosystem/circle of life within the Harbour through increasing available habitat and connectivity.</p>
<p>Wai Tai, Wai Māori – Ngā waituku kiri tai noa atu ki Hinemoana – the connection between the springs, streams, aquifers, rivers and all waterways that bring with them their life, mouri and mana which eventually mingles together with Hinemoana.</p>	<p>The function of the reef enhancement and the likely positive ecological outcomes within the eco-system of Hinemoana and Tangaroa, has the potential to provide sustenance to marine organisms and fish life as an important cog in the marine environment. Its role to provide substrate will likely result in positive biodiversity outcomes for marine ecology (fish and habitat creation) leading to a positive impact on Te Whanganui-a-Tara and its health and mouri.</p>
<p>Ahua – the character of Te Ara Tupua is seen, the beauty, the mystique, the wonder, the wild and rawness – the identity of TeAra Tupua endures beyond the present through capturing and captivating the hearts and minds of the few and the many.</p>	<p>The proposal has the potential to leave a legacy for future generations and strengthens our ties to the moana. Its āhua will endure beyond the present and forever remind us of the importance of Te Ara Tupua, its past narrative, its connection to today and the connections for the next generations to come.</p>

Principles	How it is given effect to
<p>Tātai Whakapapa – the history, the connections, the relationships and friendships – they shape the land and the people.</p>	<p>The proposal has the potential to provide connections to Tangaroa and Hinemoana through ability to harvest kai moana in this area of the harbour once the reef ecosystem is established. Mahinga kai enjoyed by many in Te Whanganui-a-Tara, as sustenance to become part of the human eco-system and harvested for human and non-human consumption. The ecosystem will thrive as well providing food source for fish and other species.</p>
<p>Whānau – the care of manuhiri and people is embedded in the identity of Te Ara Tupua seeking to ensure a strong sense of connection imbuing a strong sense of responsibility towards Te Ara Tupua.</p>	<p>The proposal has the potential to provide the ability for whānau to eventually harvest kaimoana and mahinga kai from a restored reef habitat and eco-system. It has huge potential to support other initiatives across to Harbour which support ecosystems in other areas of Te Whanganui-a-Tara making it feasible for families to enjoy the activity of kōhi kai as a whānau unit.</p>
<p>Mana Whenua – Te Ara Tupua is seen as a living piece of the identity of Mana Whenua who take pride in this space, taking on the obligation of care, responsibility and giving life to its history and story.</p>	<p>Mana Whenua will have an enduring responsibility for Te Whanganui-a-Tara. The completed reef enhancement will become part of Te Whanganui-a-Tara and therefore the enduring responsibility that mana whenua have for its success. This responsibility will be supported by the proposal through involving Mana Whenua in monitoring, upskilling and knowledge sharing. This will support customary management of the resource.</p> <p>The reef enhancement acknowledges the mana of iwi, hapū, marae and whānau as it provides the opportunity to contribute to the restoration of mauri in the harbour for generations to come and engage with Tangaroa and Hinemoana (mana tangata). Lifting mana tangata would create a “state of thriving” (mauri ora) for mana whenua in providing real outcomes to upskill and improve career prospects and incomes to ensure economic uplift.</p>
<p>Papatūānuku – the mountains, the cliffs, the landforms, the geology, ngahere, birds – they all need each other to exist.</p>	<p>The proposal is no different relying on parts of the marine environment to grow and develop within that special eco-system that exists with Te Whanganui-a-Tara.</p> <p>Although living in a different environment, the connection to Papatūānuku and its importance within our world is undeniable. The role of the reef enhancement within the special eco-system will provide hard substrate in a barren marine environment which would provide the potential to attract marine life and enhance ecological outcomes for the whole harbour. Although providing hard substrate would require the placement of 48 or 54 concrete units. These structures would be in Te Whanganui-a-Tara in perpetuity.</p>