



Hinemoana Halo

Ocean Initiative

Hinemoana ki uta, Hinemoana ki tai

Restoring our connection to the oceans,
from our high seas to our coastal waters



Hinemoana Halo

Acknowledgements

This report has been prepared by Mere Takoko, Jasmine Kaa and Linda Bercusson, with support from Conservation International Aotearoa partners.

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He Ohaki

*Ko Hinemoana ahau, te kōkā me te atua o te aumoana me ngā tai
Te hīnātore o te hukatai e kake ana ki a Tamanui e whitiwhiti ana.
Anō ahau ngā kano o Tūāwhiorangi e hahau ana i ngā akau ia te rā. Kei ngā
matata, kei ngā iaia katoa ahau o Kahurangi whetūao.
Kei ngā hōhunutanga o Rarohenga anō hoki.*

Ko Hinemoana ahau, ko Hinemoana – TE ORANGATONUTANGA...

*Hāunga, e kore he tapu o te oranga. E mate ana ōku tamariki.
Pēnei i te konene e āmiomio haere ana i ngā ātārangi o te tipua e noho i te auhi.
Kua whakarerea te tini o te hakuturi, ko ngā maharatanga mōku e kohimu noa
iho i te ngutu. Ia rā, ko te kōripi o toku mauri - toku āwheo – te mauri e hono ana
i ngā mea katoa ka mahiti. Rokohanga ia, tākerehaia ai a Papatuanuku, mā ngā
morehu kaitiaki e whakaora i toku mauri.*

Kia mōhio ai tātau, me hoki whakamuri ki te ōrokohanga o ngā mea katoa...

Hawaiiki nui, Hawaiiki roa, Hawaiiki pāmamao.





Hinemoana ki uta, Hinemoana ki tai

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“Oceania is vast, Oceania is expanding, Oceania is hospitable and generous, Oceania is humanity rising from the depths of brine and regions of fire deeper still, Oceania is us. We are the sea, we are the ocean, we must wake up to this ancient truth...”

Epeli Hau’ofa, author of “A New Oceania: Rediscovering our Sea of Islands.”

Section 1

Moana People Rising

In the Pacific, the moana or ocean does not divide the islands, it unites them. For centuries, Indigenous peoples have recognised that the oceans are a creative force of nature and form the foundation of our blue planet. Our oceans play a crucial role in regulating the Earth’s climate and can help reduce impacts of climate change by storing large amounts of carbon, absorbing approximately a quarter of anthropogenically generated atmospheric carbon.

Aotearoa (New Zealand), together with Pacific Island nations, is on the front lines of the climate crisis. Globally the ocean is changing, and this is already affecting Island nations. In order to build climate resilience, Pacific peoples are looking towards Indigenous knowledge and western science to achieve climate mitigation and adaptation strategies. Recent IPCC (Intergovernmental Panel on Climate Change) and United Nations reports have highlighted how traditional knowledge systems could do more to address climate change than many current approaches. The momentum to ensure the full and equitable inclusion of Indigenous peoples within climate change policy and global leadership is now a key priority.

After decades of advocacy, there is growing international support and recognition that promoting the recovery of Indigenous cultures and ocean biodiversity is intimately linked with mitigating the impacts of climate change. Conservation International Aotearoa has now joined this global effort through the Hinemoana Halo Ocean Initiative (Hinemoana Halo).

Now, more than ever, as the oceans of Hinemoana rise, the people of the Pacific are also rising to save our ocean heritage. We invite you to join us as we navigate this journey.

Polynesian voyagers and navigators are helping to foster a region-wide movement that has helped many small island states to reclaim Indigenous knowledge important to understanding the cycles of nature and climatic variations. In turn, this renaissance has also inspired communities to reconnect with their ocean heritage.



Marumaruatua – the traditional double hulled voyaging canoe based in Rarotonga, Cook Islands



“Ko Paikea te tipuna taniwha tangata.”

A popular saying from the Ngāti Porou tribe, celebrating their ancestry to Paikea, the Whale Rider

Section 2

Restoring the Mauri of Hinemoana

Indigenous people from Aotearoa and the Pacific have a deep connection to the moana (ocean). However, the ocean is warming and rising. As it does so, Pacific peoples face unprecedented threats to their way of life. Every day, the mauri (life force) and halo of Hinemoana, also become more and more depleted.

Conservation International Aotearoa has established the Hinemoana Halo to deliver a new and vital partnership with Indigenous Māori tribes to provide ocean climate leadership, in coordination with Pacific leaders from across the region. This initiative will advance a region-wide movement to reconnect with our shared ocean heritage and legacy as kaitiaki (guardians) of the moana.



Hinemoana

Indigenous peoples of the Pacific continue to enjoy a special relationship with the moana and taonga (keystone) species that sustain us all. This relationship is reflected in traditional songs, chants, prayers, and oral histories. Many sacred artforms, spiritual beliefs and practices also embody this deep connection to the gods of the Ocean, including Hinemoana.



Tuahiwi-Nui-a-Hinemoana

The Kermadec Islands are a 620,000 km² area northeast of Aotearoa and was traditionally known by ancient Polynesian navigators and voyagers as Tuahiwi-Nui-a-Hinemoana (the great ridgeback of Hinemoana). It is now known by its most famous island, Rangitāhua.

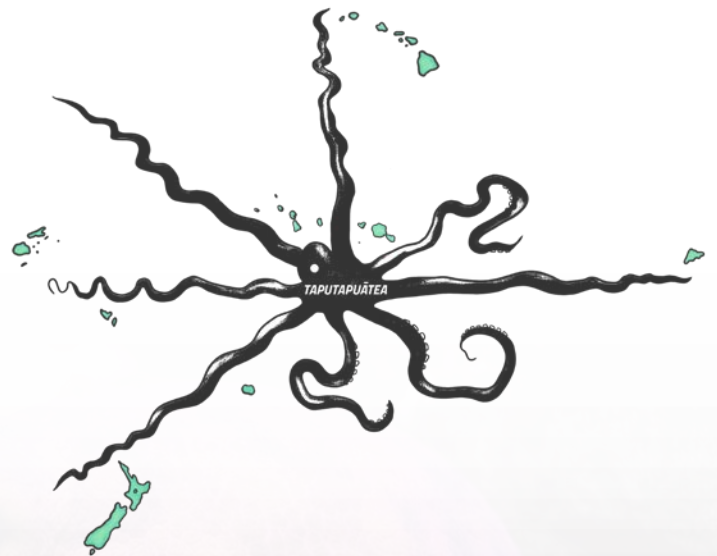
Considerable interest over the past decade has been devoted to understanding the potential of blue carbon ecosystems, and to provide a range of co-benefits to humanity. To date, many western-led scientific bodies have largely focused on seagrass meadows, saltmarshes, and mangroves. Recently, however, there has been a growing appreciation among Indigenous peoples and scientists within the Pacific region, of the economic potential that the recovery of whale populations and other taonga species.

In the Sixth Assessment Report of the International Panel on Climate Change (2022), whales were proposed as potential blue carbon ecosystems because a living whale sequesters a large amount of carbon over a long lifespan, and when it dies, it sinks to the seabed where that carbon is transferred to a host of other creatures that feed on the carcass. Additionally migratory whales provide a rich source of iron and nitrogen in their excrement which they transfer from rich Antarctic waters to impoverished tropical waters, sparking phytoplankton blooms that absorb carbon dioxide from the atmosphere.

Across the Pacific, the protection and survival of the Pacific's remaining whale populations, such as the humpback, has become synonymous with the resurgence of Indigenous culture and heritage. Large and long-lived migratory whales make a significant contribution to sequestering carbon, promoting the growth of phytoplankton that absorb carbon dioxide from the atmosphere, and transferring energy and nutrients from rich polar waters to oligotrophic tropical waters.

Re-establishing Indigenous leadership and ocean guardianship

Some species, such as humpback whales, are widely regarded as taonga for Pacific marine ecosystems. The contribution of these species to ecosystem services and livelihoods is increasingly under threat. Protection and recovery of populations of migratory species is critical for maintaining a healthy Pacific Ocean.¹



Section 3

A Blue Carbon Economy for the Pacific

“When it comes to saving the planet, one whale is worth thousands of trees.”

Ralph Chami, International Monetary Fund.

Assistant Director at the International Monetary Fund’s Institute for Capacity Development and Blue Green Future co-founder, Ralph Chami estimates that over the course of their lifetime, a great whale sequesters approximately 33 tons of CO₂, equivalent to 30,000 trees, and estimates that if whales were to return to their former abundance, they could capture approximately 1.7 billion tonnes of CO₂ annually, a carbon sequestration service worth \$13 per person per year.²



Ralph Chami
Blue Green Future co-founder
Assistant Director, ICD, IMF

Chami believes the risks to humanity are twofold, – climate change and biodiversity loss. He has developed a model for valuing natural assets, including blue and green nature as well as flora and fauna, and a framework for developing the natural capital markets for ecosystem services.



“Addressing climate change and biodiversity loss is urgent. The two are linked through human activity so if we are really to make any difference in the fight against climate change, we need to also tackle the risk to nature because they are happening simultaneously. We don’t really have time to tackle climate and then natural capital. We need to handle both risks at the same time.”³

A new paradigm is needed to ensure that a living and thriving nature is protected and restored. This paradigm puts the economy and society inside nature; recognising that nature is our home. If nature grows, our societies and economies thrive. Thus, nature is valuable to our health and to our economic well-being.

This new paradigm allows us to create a natural capital market that leads to regeneration of nature and equity for its stewards but only if it follows two principles: that the funds raised go to protect the natural assets/ecosystems and biodiversity – in perpetuity. And that the funds also support the livelihoods and well-being of the indigenous and local communities stewarding the assets.

1 Pacific Islands Regional Marine Species Programme 2022–2026, SPREP

2 Chami et al. Nature’s Solution to Climate Change; Finance & Development, December 2019

3 International Whaling Commission Workshop, 6 April 22. Socio-Economic Values of the Contribution of Cetaceans to the Ecosystem Functioning Workshop - YouTube

Re-envisioning natural carbon assets and the ocean-climate nexus

The Hinemoana Halo initiative will work with scientific, economic, and financial institutions in partnership with Indigenous communities to expand our current knowledge about the range of ecosystem services currently recognised by the UNFCCC (United Nations Framework Convention on Climate Change) with the aim of establishing a new class of natural assets for carbon and biodiversity credits.

This medium to long-term goal could see Pacific governments recognise the potential of a bespoke blue carbon economy for the Pacific that is aligned to traditional Indigenous values and community aspirations. There is a growing body of research suggesting that great whales play a significant role in capturing carbon from the atmosphere. A key focus for the initiative will be to invest in feasibility research to test and confirm existing and new scientific, cultural, and economic evidence to generate political support for the value of vital ecosystem services performed by great whales in the Pacific.

Kia kotahi te hoe - paddling in unison

Conservation International Aotearoa is partnering with a range of regional partners including the South Pacific Whale Research Consortium, a group of scientists spread across the Pacific Rim with the experience and expertise to develop reliable abundance estimates for the numbers of whales in the various sub-populations of the Oceania population of humpbacks.

The future is blue and green

Blue Green Future is a company well-known as a pioneer in valuing the ecosystem services of flora and fauna and developing a new nature-positive economic paradigm and nature markets that deliver equitable and regenerative outcomes for people and planet.



Recognising our regional ocean assets

The Hinemoana Halo Initiative will undertake biodiversity assessments and a valuation of ecosystem services performed by whales in the Pacific to explore the socio-economic benefits of using natural ocean systems to reduce the risks of climate change.



We are all people of Oceania

The Secretariat for the Pacific Regional Environment Programme (SPREP) is the Inter-governmental organisation with the responsibility for coordinating environmental management of terrestrial and marine species for its 15 member countries and 6 territories whose EEZs collectively cover approximately 10% of the planet's oceans.

Section 4

Valuing our Moana

The Hinemoana Halo initiative aims to promote the valuation of ecosystem services performed by whales in Oceania and to generate a source of funding for Pacific Island governments and communities to conserve and care for the breeding grounds of migratory great whales.

The logistics and costs required to implement an effective regime continues to be a challenge across the Pacific Ocean which covers approximately 63.8 million square miles and spans 32% of the total surface of our blue planet.

Humpback whales
Migratory interchange from Aotearoa to Antarctic

The warm tropical waters of the South Pacific are an important breeding ground for whales.

Whales and the South Pacific

Healthy whale populations are emblematic of a healthy ocean, without which none of us will survive. Today, there are an estimated 1.3 million great whales worldwide, down from 4-5 million before industrial hunting. One of Hinemoana Halo's principle drivers is to create a sustainable financial mechanism to support Indigenous-led ocean protection and restoration initiatives. Investigating the scientific, cultural, and economic value of Pacific humpbacks will be among the first projects to be funded.

The value of living nature

Humpback whales return with great predictability each winter to the same islands where they were born.

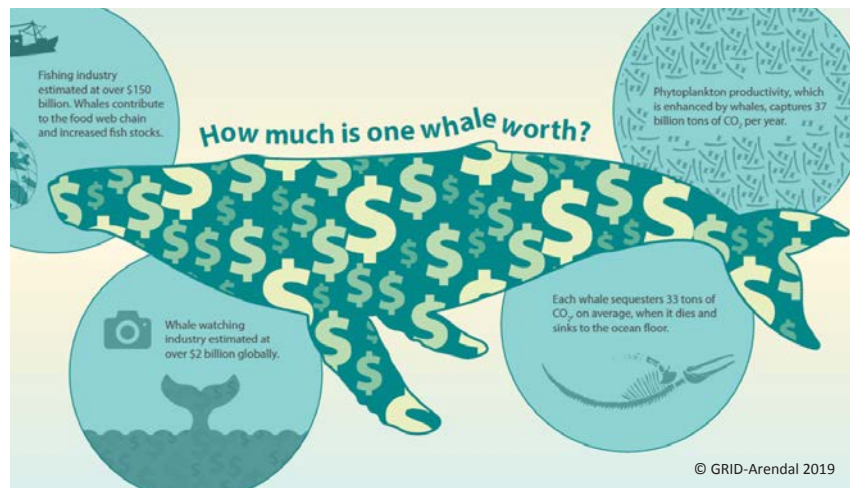
Whale-watching is an important economic activity for many communities in Aotearoa, Tonga, Niue, Cook Islands, New Caledonia, and French Polynesia, revitalising local communities and generating millions of dollars in revenue.

Whales are an international public good

By stimulating phytoplankton growth, whales contribute to the 37 billion tonnes (41 billion tons) of CO₂ these tiny ocean creatures draw from the atmosphere each year.

Restoring these beautiful species back to our waters

Industrial whalers in the late 18th and 19th centuries would upset the millennia-old connection of Indigenous peoples with whales and lead a region-wide plunder of the oceans. With their insatiable hunting of southern right whales and sperm whales, the former was driven to the brink of extinction in Aotearoa's waters and across the Pacific Islands. By the mid-20th century, once abundant populations of great whales were almost gone.



The ecosystem services of one whale is worth at least \$2 million

Scientists have described the commercial hunting of whales in the 20th century – in terms of sheer biomass – as the greatest wildlife exploitation episode in human history.⁴ The near collapse of whale populations has mirrored the near collapse of the Indigenous cultures that lived in a symbiotic relationship with the oceans. As western influence grew, the ancient practice of Polynesian wayfaring also declined as traditional education and Indigenous cultural practices were outlawed by colonial policies, alienating Indigenous people from their lands, resources, and way of life.



To the brink...and only partially back

Humpbacks were mostly too fast for European sail whalers but this changed in the 20th century during which they were hunted on a massive scale by industrial fleets of factory ships and explosive harpoon boats in their Antarctic feeding grounds and by land stations in Australia and Aotearoa as survivors passed close to shore on their annual migrations.

Around 250,000 whales are thought to have been extracted from our ocean. The impact of commercial whaling was devastating to migratory whale populations and precipitated an enormous loss of biomass.

Compounding this depletion was nearly a decade of illegal hunting by the Soviet Union. Between 1959 and 1968, Soviet whalers killed close to 46,000 Pacific humpbacks on their summer feeding grounds, information that only came to light after the collapse of the USSR in 1996.

By 1964, the Aotearoa/Tonga humpback population had diminished from an estimated 10,000 to probably fewer than 250 whales.⁵ This collapse reflected a worldwide trend in humpback numbers because of commercial whaling activities.

⁴ Philip J. Clapham and Leila T. Hatch, *National Oceanic and Atmospheric Administration*, 2000

⁵ (Donoghue, 2000)

Section 5

Hinemoana Halo Investment Proposal

The Hinemoana Halo initiative is a dual ocean protection and financing solution that will promote significant co-benefits, from jobs and infrastructure, to marine habitat and wildlife restoration.

Conservation International Aotearoa aims to raise US\$100mn by 2030 for a sustainable financing mechanism to fund Indigenous-led blue carbon projects. We are currently working with governments, financial institutions, philanthropic foundations, and partners to invest in eligible projects across Aotearoa's waters.

The initiative will also support the investigation into the value of ecosystem services performed by whales in the Pacific and to generate a source of funding for both Indigenous peoples and Pacific Island governments to conserve and care for the breeding and feeding grounds of migratory great whales.

Our investment goals and objectives

1. Establish Aotearoa's first Indigenous-led voluntary Blue Bond and support tribes to protect, manage and monitor Aotearoa's coastal waters and high seas (including EEZ).
2. Create a sustainable financial mechanism to fund ocean protection and provide direct benefits to Indigenous communities, including jobs and infrastructure.
3. Promote self-determination among Māori and Pacific Indigenous peoples to protect, manage and monitor coastal waters and high seas in partnership with local communities and governments, using both Indigenous knowledge and science.
4. Develop a marine and habitat plan that will accelerate the recovery of populations of taonga species, particularly whales, to return to Aotearoa and Pacific waters.
5. Empower indigenous peoples and Polynesian voyagers and educators to work collectively to monitor and protect the migratory corridors of whales and taonga species from the Pacific to Aotearoa's waters and beyond to Antarctica.

Our Hinemoana Halo Blue Bonds

The Hinemoana Halo Blue Bond will promote financing into nature-based solutions including:

- (1a) marine protected areas and rāhui
- (1b) wetland and seagrass restoration
- (1c) taonga species recovery
- (1d) marine algae and krill recovery
- (1e) seaweed recovery
- (2) sustainable supporting industry development, including: (2a) fisheries (2b) aquaculture (2c) energy (2d) tourism and (2e) CDR technologies.



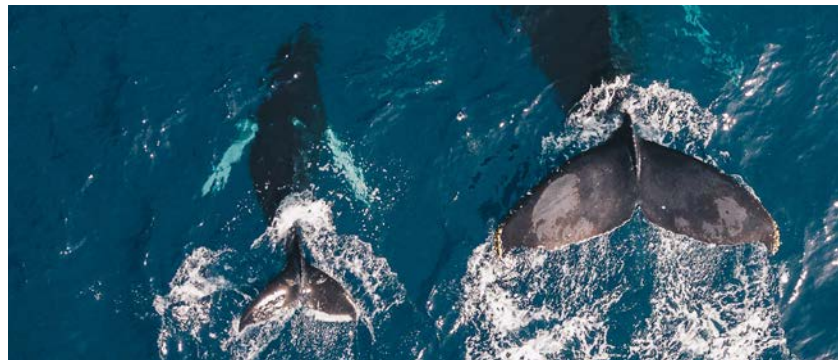
Aotearoa has the fourth largest EEZ in the world (4 million km²). Less than 1% of this ocean is fully protected. Right now, just one large-scale MPA is in the process of being established in Aotearoa's waters, the Kermadec Ocean Sanctuary (620,000 km²).

Who are our partners?

- Conservation International Aotearoa has established partnerships with Māori and Pacific Indigenous peoples along with scientists, economists, and investors. The aim will be to establish a comprehensive strategy to conserve and care for the breeding grounds and migratory corridors of Pacific whales by 2030.
- The establishment of the Hinemoana Halo initiative and accompanying feasibility research will be achieved by working in unison with our indigenous partners. In addition, we are working with the Secretariat for the Pacific Regional Environment Programme (SPREP), Blue Green Future, the Association for Pacific Rim Universities, and the South Pacific Whale Research Consortium.

Why Invest in Aotearoa?

- Aotearoa offers one of the world's safest places to invest in. With its thriving and stable economy and political system, creativity and innovation, the ease of doing business and unmatched quality of life make it an attractive place to invest.
- Your investment will support the establishment of Aotearoa's first recognised and Indigenous-led blue carbon regime and blue bond. The Hinemoana Halo initiative will provide critical scientific, cultural, and economic evidence to support the creation of new classes of natural assets for carbon and biodiversity offsets.
- Your investment will support the UNFCCC's recommended climate policy of supporting Indigenous people's self-determination and leadership in local climate adaptation and mitigation solutions.



HINEMOANA HALO TO PROTECT THE SOUTH PACIFIC OCEAN

Giving a voice to Indigenous communities, the Hinemoana Halo initiative will support groups to utilise traditional ocean customs and practices to protect Aotearoa's coastal waters and high seas (including EEZ).

Our long-term aim will be to work with Indigenous peoples and governments to put in place a contiguous rāhui or customary marine protected area extending from the Pacific to Aotearoa to protect the migratory corridors of whales as they make their way to and from Antarctic waters. The Hinemoana Halo Bond will finance projects in Aotearoa and across the Pacific to achieve these goals.



*Nāku te rourou, nāu te rourou, ka ora ai te iwi
With your basket and my basket, we will sustain everyone*

Māori proverb

BE A GOOD ANCESTOR

PROTECT OUR LEGACY FOR FUTURE GENERATIONS



Learn more

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