

AQUACULTURE

Organisations

- [NIWA](#)
- [Moana New Zealand](#)
- [Aquaculture New Zealand](#)

- [Te Ohu Kaimoana](#)
- Other...

Visions

- Aquaculture NZ** | To be a \$1 billion industry by 2025
- Moana NZ** | To connect the world to the true taste and rare magic of New Zealand's best kaimoana
- NIWA** | To conduct leading environmental science to enable the sustainable management of natural resources for New Zealand and the planet

Initiatives

- Previous**
 - NIWA – Northland Marine Research Centre upgrade in 2020
 - Moana NZ & Graeme Dingle Foundation – Kiwi Can Online, includes 11 Northland schools

- Current**
 - Aquaculture NZ – A+ programme setting world-leading environmental standards; joined the Government Industry Agreement to strengthen biosecurity management
 - Moana NZ – sustainability initiatives, use of Demand Flex technology in pāua refrigeration facilities to ease energy load; flooring mat programme which repurposes old nets

- NIWA – research programmes investigating algae farming in Northland; conducting cultural keystones species research; moving juvenile eels over power stations; researching declining eel populations
- NIWA/NRC/Northland Inc/Kānoa (MBIE) – constructing a commercial scale kingfish recirculating aquaculture system in Ruakaka (fish farming on land), which is producing jobs for the area
- Moana NZ – using flip farming technology; growing oysters from spat to harvest (thereby filtering harbours); Tasty Tio, supporting high school students at Parengarenga Harbour
- Aquaculture NZ – mussel spat collection/harvest; mussel farming (small scale), oyster farming

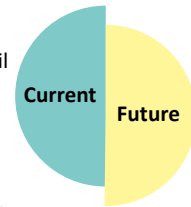
37%
Of NZ's oysters are produced in Northland

100 litres
Of water filtered each day by an adult sized Pacific oyster

\$230m
Kingfish industry in Northland planned for 2030

These include:

- Community, iwi
- Northland Inc, Northland Regional Council (NRC), Kānoa/MBIE
- NGOs (Papa Taiao Earthcare)
- Scientists, conservationists (Scion, GNS Science, MetService)
- Aotearoa Fisheries Ltd, ports, Northpower



- Kaipara Moana Remediation?
- Apiculture?
- ... are there others?



Collaborators

Challenges

- **Climate change** – will cause sea levels to rise, ocean acidification, increased disease outbreaks, changes to currents & heat stress
- **Declining eel populations** – efforts made to move juvenile eels over the Wairua Falls power station as they swim upstream as part of their life cycle
- **Market disruption** – COVID causing export issues
- **Lower pricing points** due to competition
- **Consumer demand** for sustainability
- **Pressure on natural ecosystems**
- **Space** – difficulties accessing new farming space
- **Infrastructure** – to grow industry, what is needed?
- **Labour** – shortages affecting production, lack of training opportunities

Opportunities

- **New product & species opportunities** – e.g. farmed seaweed being researched in Northland; oysters; finfish
- **Infrastructure** – hatchery & nursery for mussel & oyster juvenile production, survival
- **Iwi** – greater iwi involvement
- **Settlement** – aquaculture settlement opportunities in Northland
- **Sustainability** – habitat restoration & conservation; can be a low emissions industry
- **Geo-political** – e.g. between Australia and China means more demand for NZ products
- **Employment opportunities**
- **Global demand for premium seafood**
- **Advancement of ocean technologies**
- **Open ocean farming**



- **Support coastal projects** – could aquaculture support the Kaipara Moana Project and apiculture to remediate coastal areas, e.g. by planting pollinating natives around waterways & providing seaweed as fertiliser?

- **Develop a strong brand proposition** – could aquaculture work with other sectors to strengthen their branding and overcome low pricing?
- **Collaborate on export issues** – could aquaculture work with other sectors to improve export strategies?

Potential cross-sector collaboration

References

[NIWA Annual Report 2019-2020](#)

[Moana New Zealand Integrated Annual Report 2020](#)

[Te Oneroa-a-Tōhe Beach Management Plan](#)

[Aquaculture - Northland NZ Website](#)

[Aquaculture Strategy New Zealand Government](#)

[Aquaculture for NZ A sector overview 2020](#)

