# Empowering Kaitiaki

# Tangaroa Programme

# Connect


Connect
+
Enhance


Connect
+
Enhance
+
Empower

National SCIENCE Challenges

SUSTAINABLE SEAS
Ko ngā moana whakauka

National Science Challenges
SUSTAINABLE SEAS
Ko ngā moana whakauka

Introduction | Connect | Enhance | Empower | Conclusion

National SCIENCE Challenges

SUSTAINABLE SEAS
Ko ngā moana whakauka

Tangaroa

National SCIENCE Challenges | SUSTAINABLE SEAS
Ko ngā moana whakauka

Tangaroa

# Tāhuhu Matatau
# Te Ao Tangaroa

Introduction | Enhance | Empower | Conclusion

National Science Challenges | SUSTAINABLE SEAS
Ko ngā moana whakauka

Tangaroa

Tāhuhu Matatau
Te Ao Tangaroa

Project 3.1.3

**Empowering kaitiaki with mātauranga from Aotearoa & beyond**

National Science Challenges | SUSTAINABLE SEAS
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Tangaroa

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Project 3.1.3

**Empowering kaitiaki with mātauranga from Aotearoa & beyond**

**Investigate WS literature regarding marine ecology, spatial planning, monitoring & aquaculture**

National SCIENCE Challenges | SUSTAINABLE SEAS
Ko ngā moana whakauka

Tangaroa

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Project 3.1.3

**Empowering kaitiaki with mātauranga from Aotearoa & beyond**

**Investigate WS literature regarding marine ecology, spatial planning, monitoring & aquaculture**

**Mediate transfer via an online training and resource centre**

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Project Manager
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Anthony Cole

**Ngati Raukawa**

Senior Research Advisor

Waiaria Rameka

**Ngati Tuwharetoa,**

Senior Researcher

Regan Fairlie

**Ngati Porou**

Research Support

Ngāi Te Rangi *Iwi*

Ngāti Ranginui Iwi

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Tiki Bluegum, Whitiora Macleod
Hemi Ocallaghan

## Ngā Kaitiaki

Riki Nelson
Carlton Bidois

Introduction | **Connect** | Empower | Enhance | Conclusion

## Pipi Enhancement Project

Relocating Pipi away from dredging hazard

## Kaimoana Restoration Plan

Monitoring Kai stocks in mātatai reserve

## Oranga Taiao Oranga Tāngata

Restoring estuarine health, enhances health of people

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# Mātauranga

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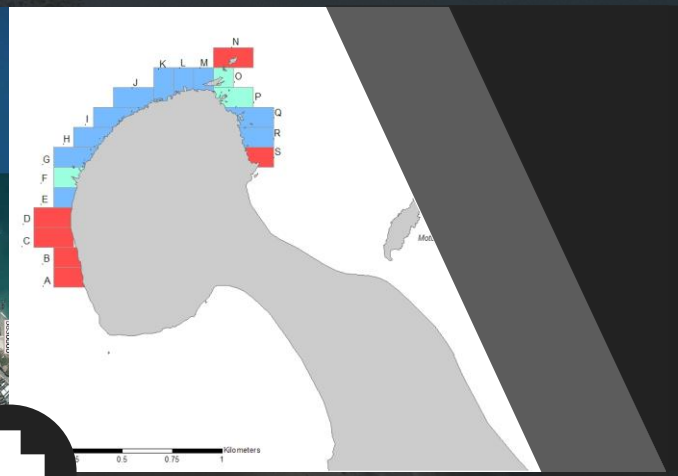
# WS Tools

## Mātauranga

## WS Tools

## Enhanced Outcomes



## Mātauranga

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## WS Tools

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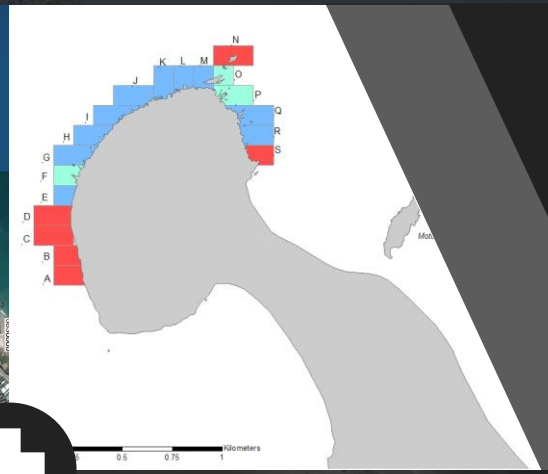
## Enhanced Outcomes



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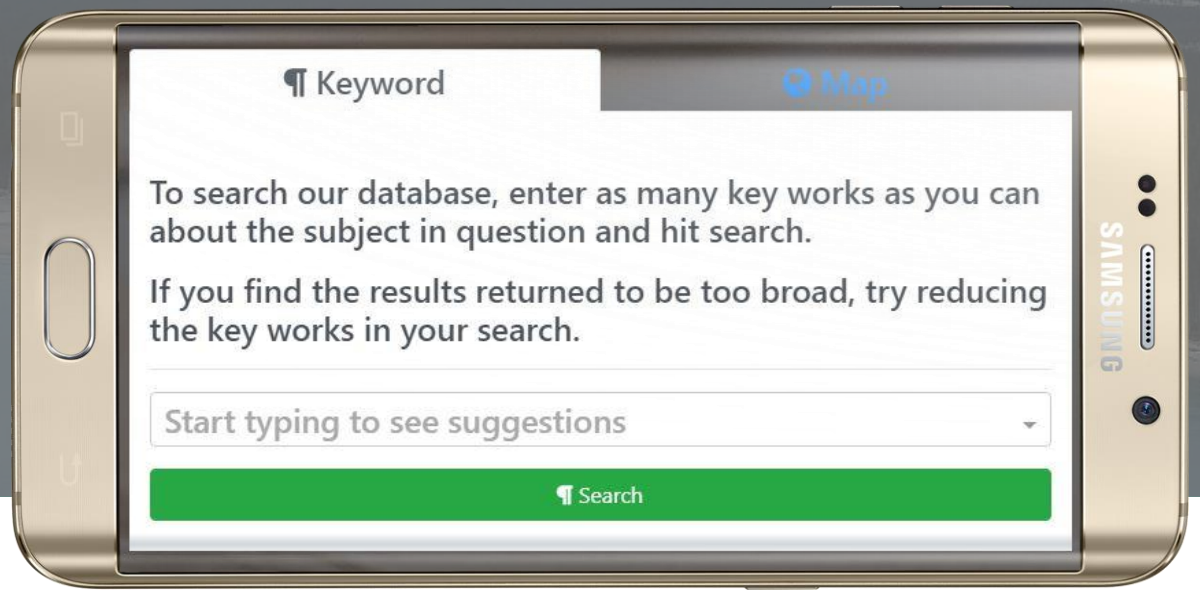
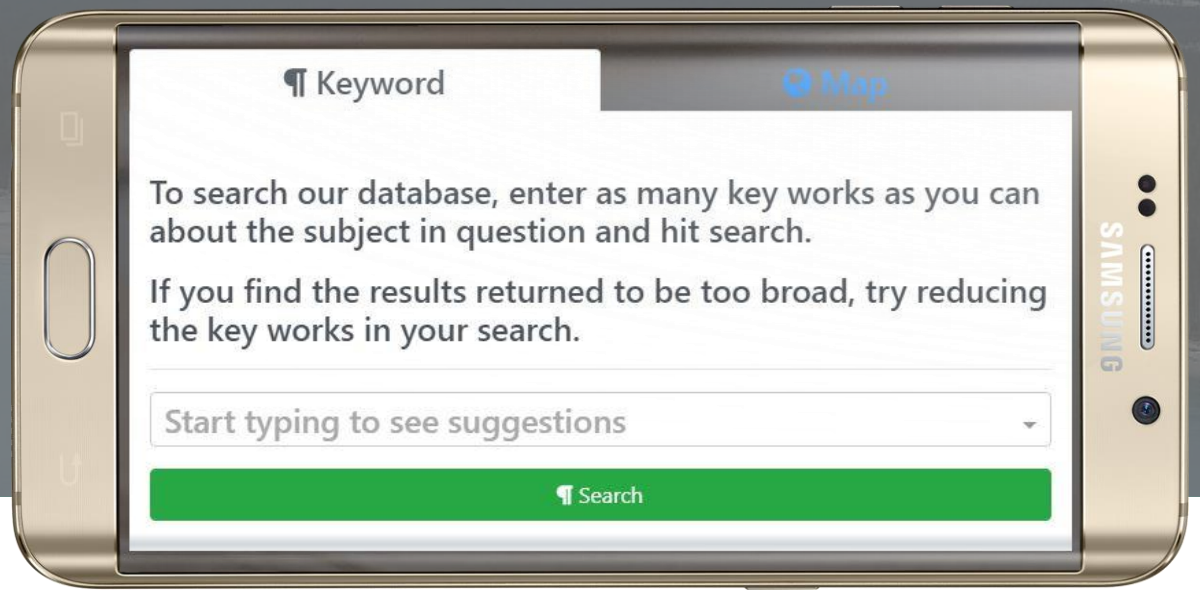
# Online Experience



# Online Experience

## Access Literature Reviews



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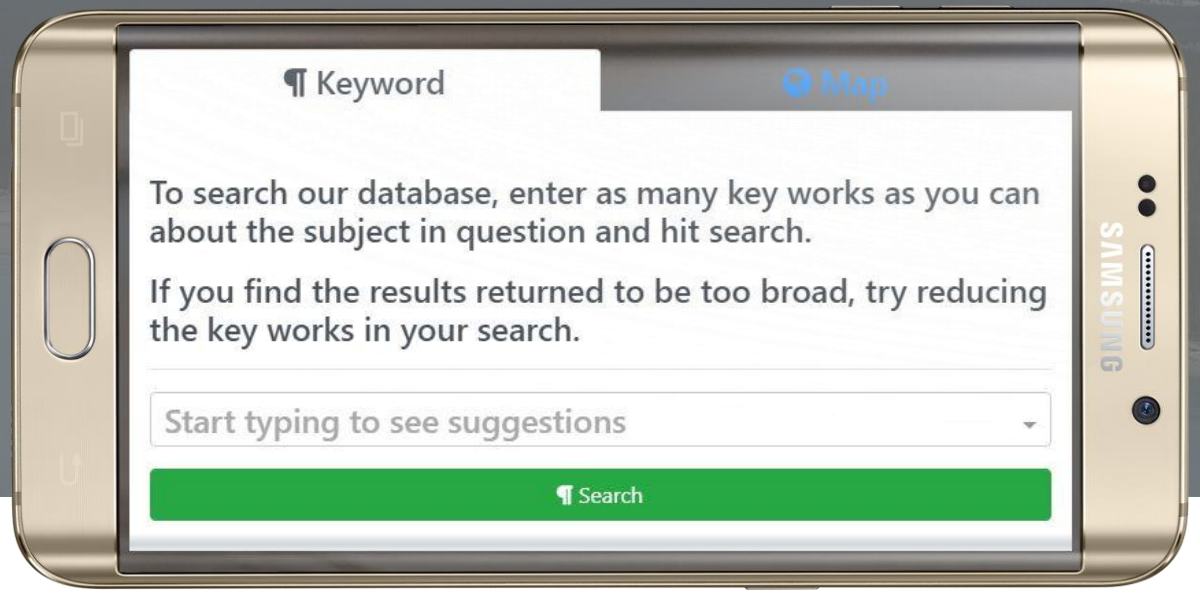
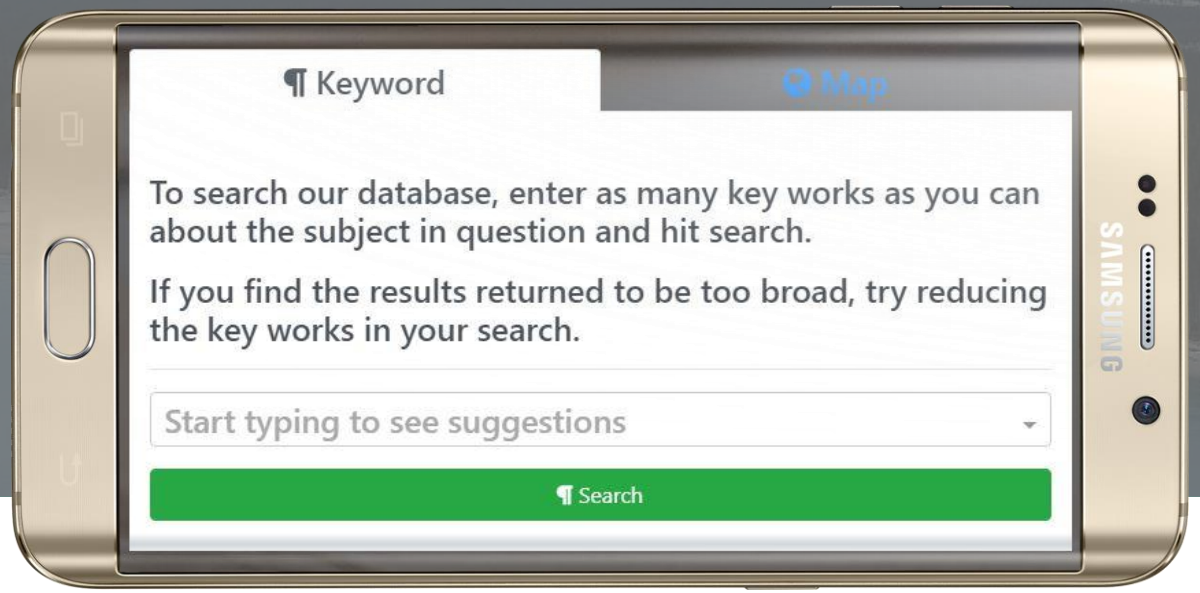
- Access Webinars & Tutorials



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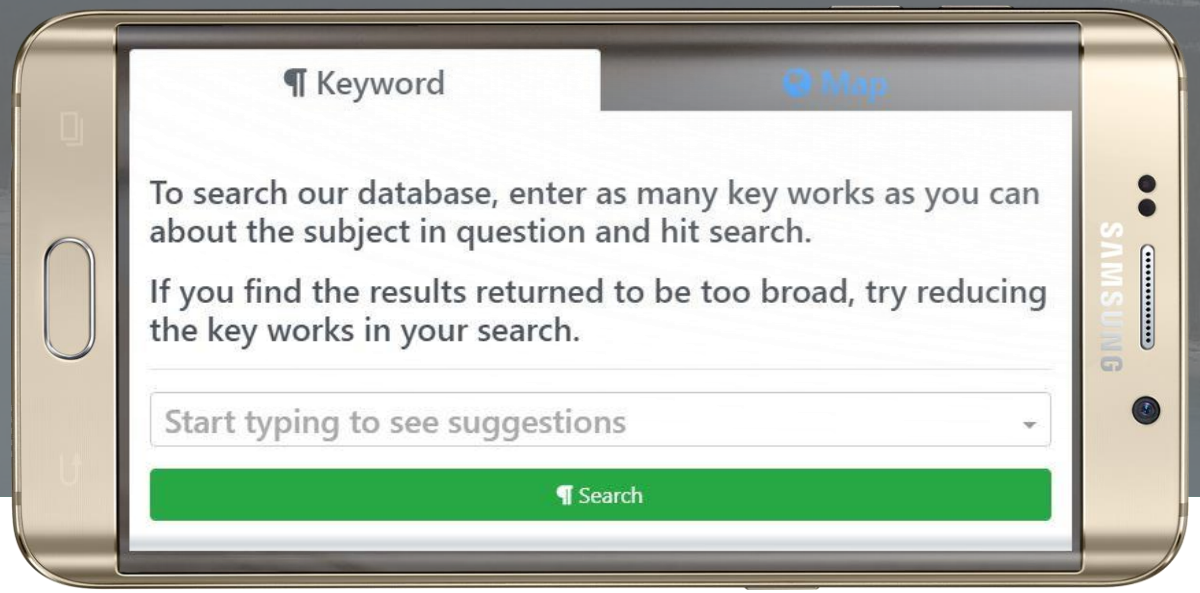


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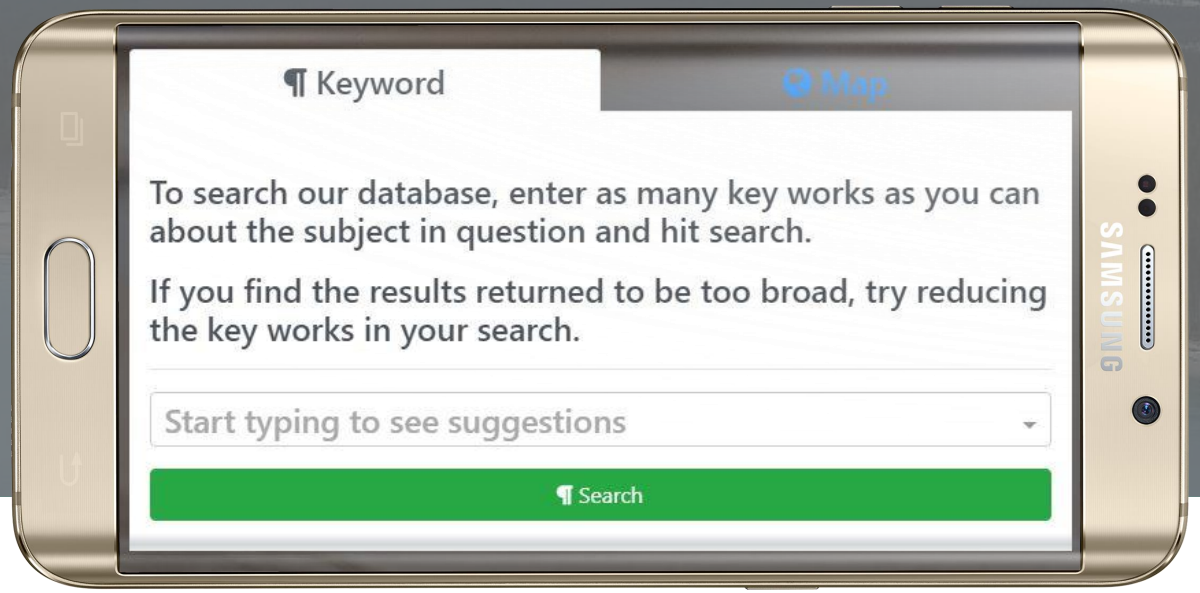


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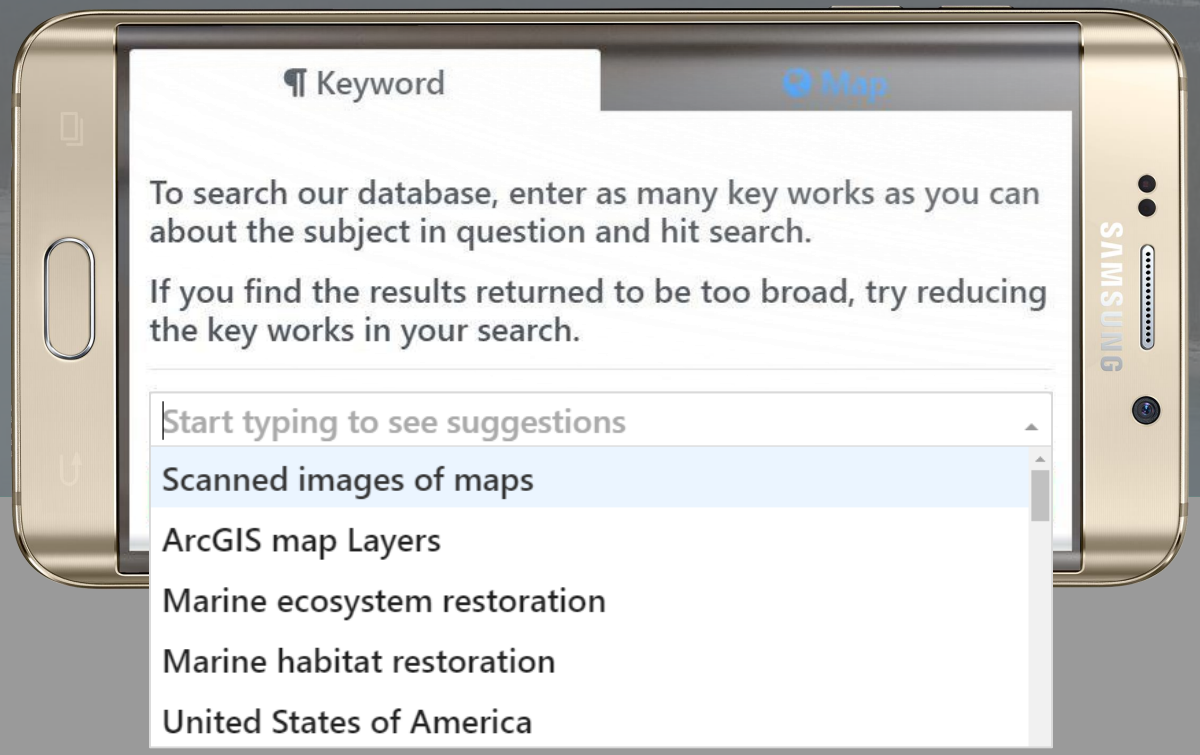


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Sustainable Seas Search Browse Explore

# Top Search Results - 7 results

## Muskegon lake habitat restoration projects

Utube video

Muskegon Lake Habitat Restoration Projects


Muskegon Lake in Michigan was a dumping ground for foundries and paper mills for decades. We have helped fund several projects to remove debris and contaminated sediments, to help improve habitat for fish.

Last updated 2018-03-13T03:19:07+00:00

## Repairing the Reef: West Hawai'i Focuses on Habitat

Utube video

Repairing the Reef: West Hawai'i Focuses on Habitat

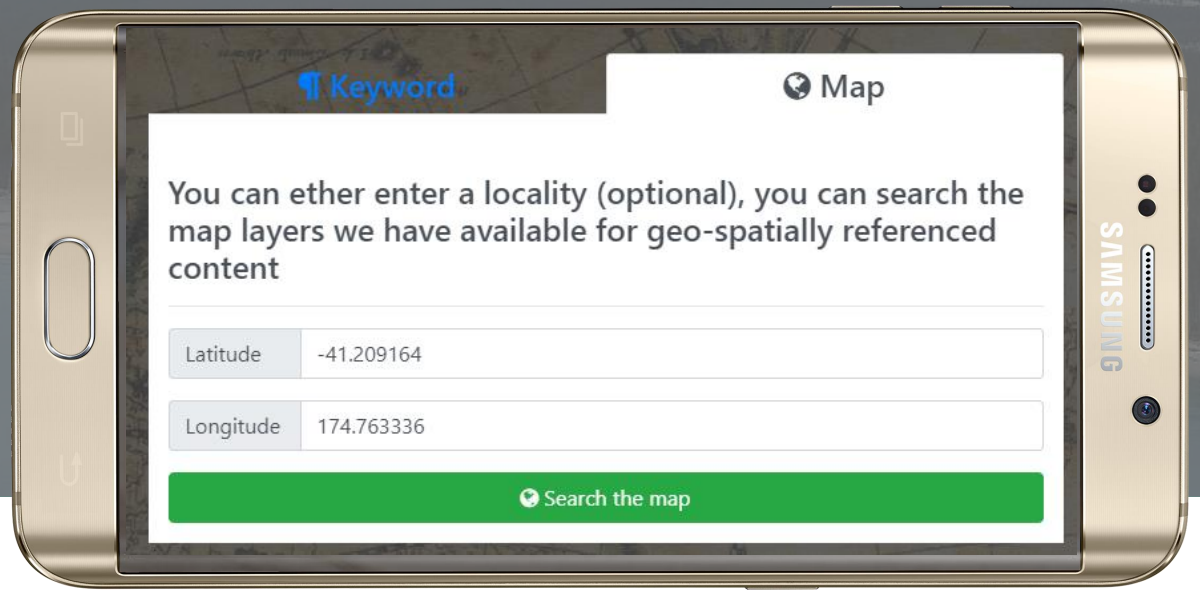
On Hawai'i Island, NOAA is partnering with The Nature Conservancy, local communities, government agencies, non-profit organizations and businesses to restore habitat and improve coral reef health along with other natural and cultural resources.

## Restoring native she shellfish hatchery

Utube video

Restoring Native Shellfish: T

The Olympia oyster is the only coast of the U.S. Populations ar oysters, and this new native she recover their populations.

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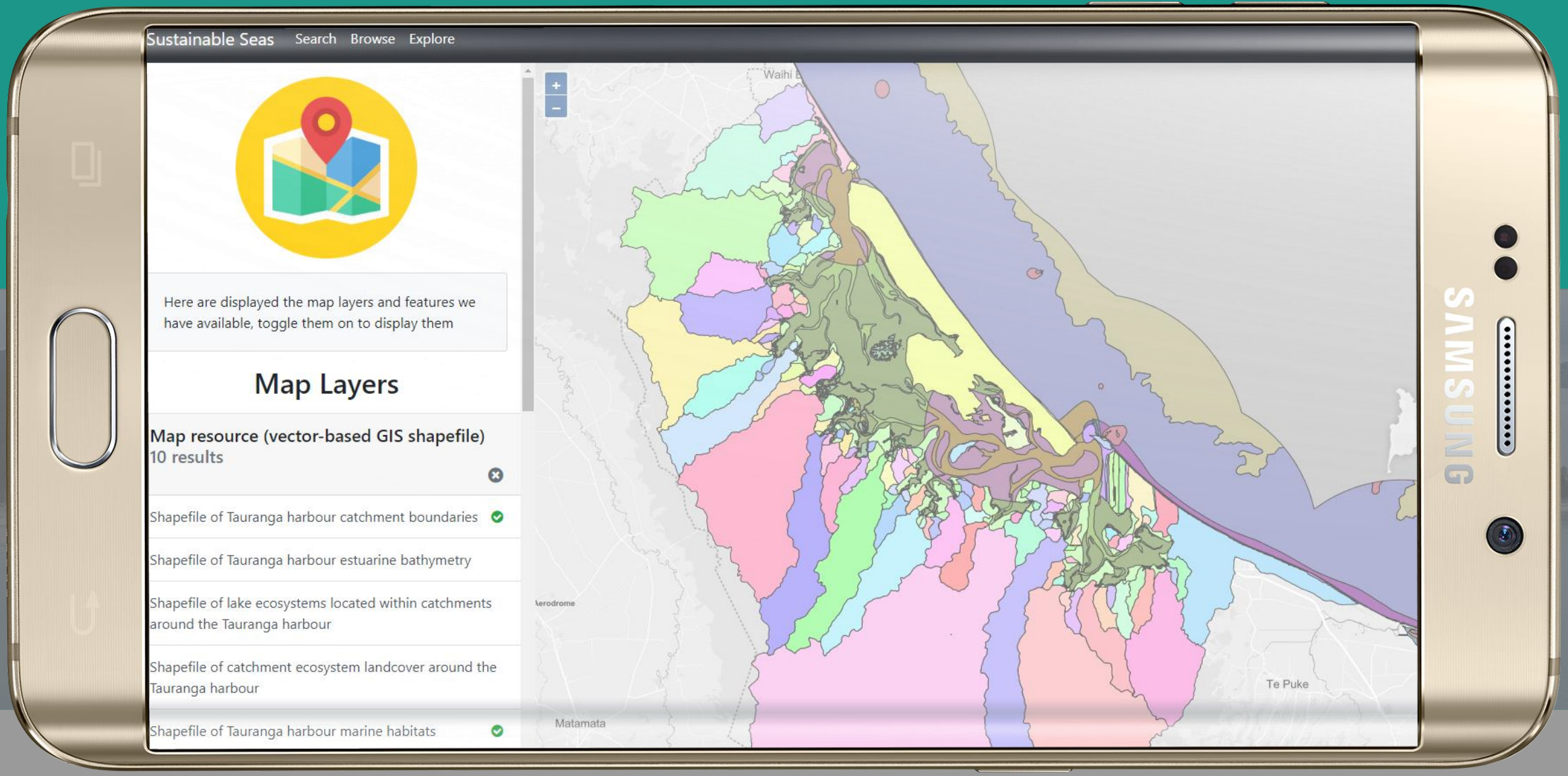
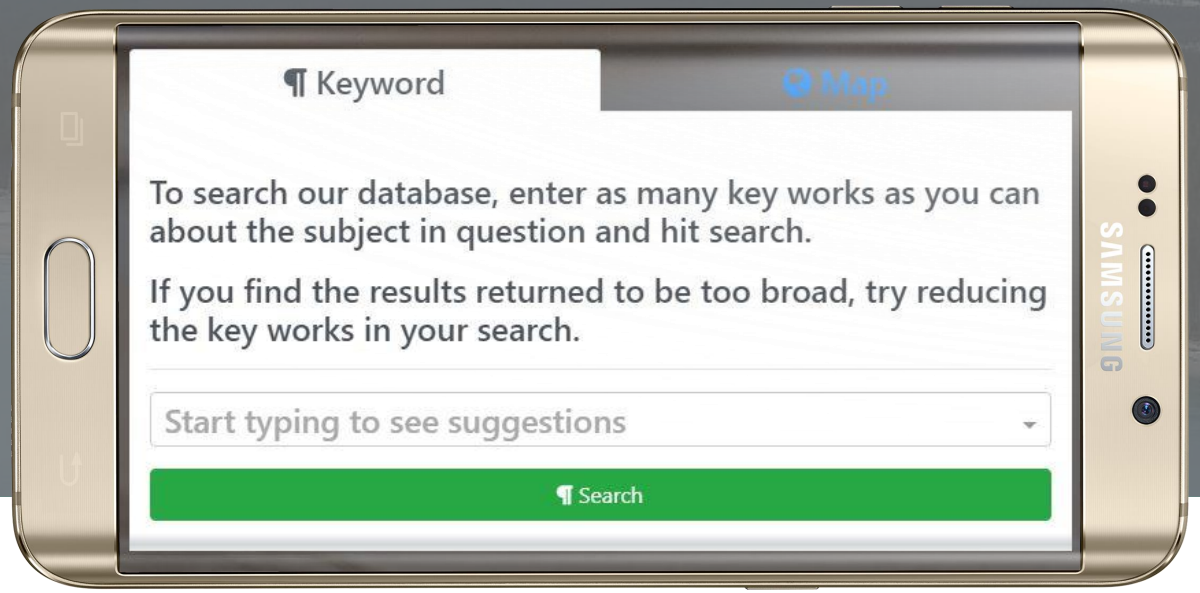

Sustainable Seas
Search
Browse
Explore
Here are displayed the map layers and features we have available, toggle them on to display them
Map Layers
Map resource (vector-based GIS shapefile)
10 results
Shapefile of Tauranga harbour catchment boundaries
Shapefile of Tauranga harbour estuarine bathymetry
Shapefile of lake ecosystems located within catchments around the Tauranga harbour
Shapefile of catchment ecosystem landcover around the Tauranga harbour
Shapefile of Tauranga harbour marine habitats
Waihi
Te Puke
Matamata
SAMSUNG

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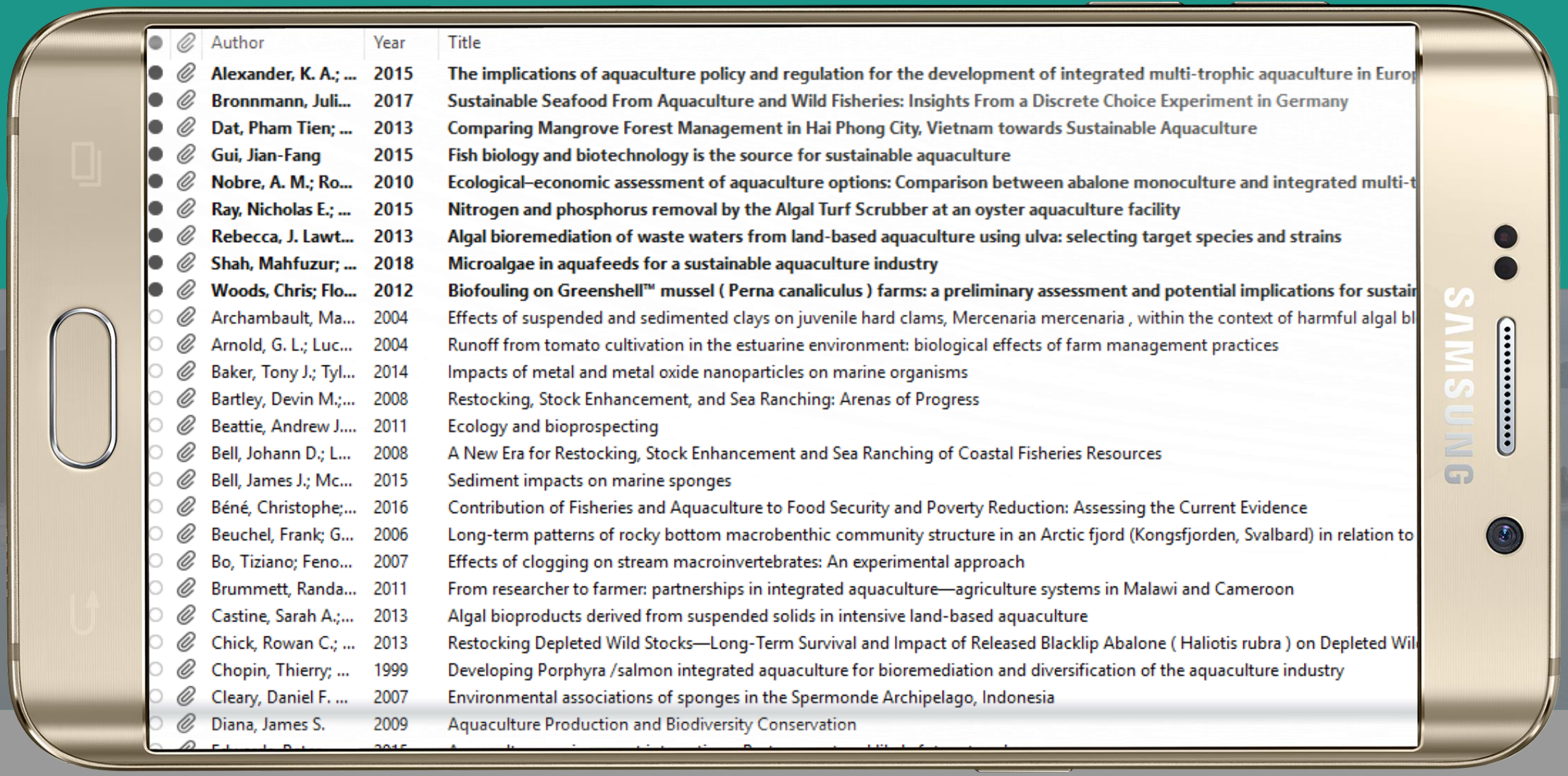
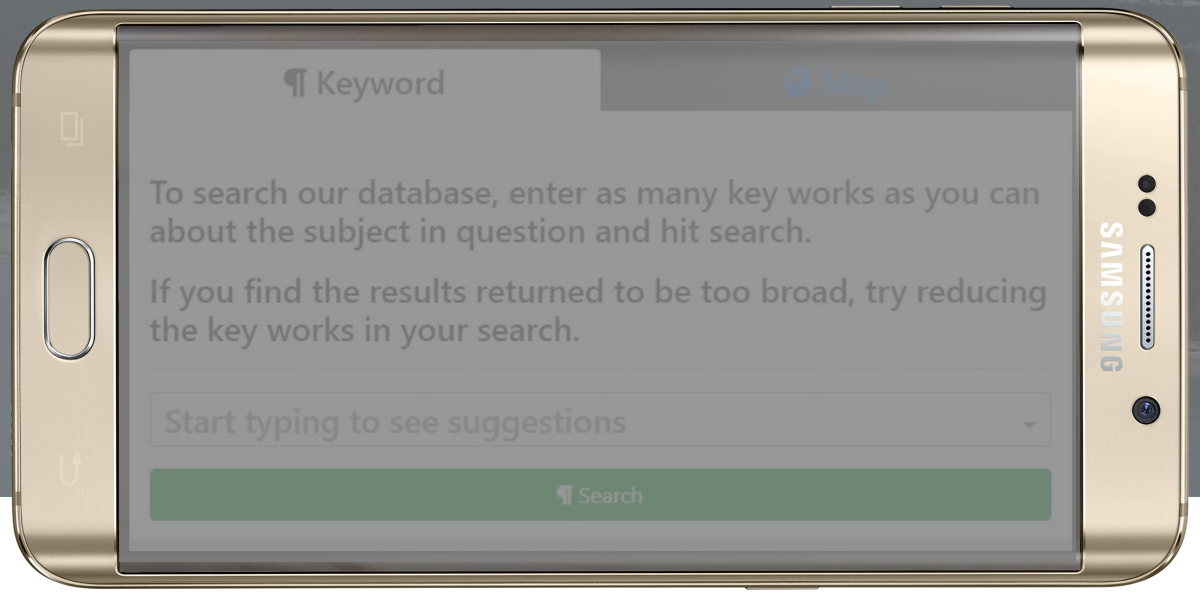


| Author | Year | Title |
|---|---|---|
| Alexander, K. A.; ... | 2015 | The implications of aquaculture policy and regulation for the development of integrated multi-trophic aquaculture in Europ |
| Bronnmann, Juli... | 2017 | Sustainable Seafood From Aquaculture and Wild Fisheries: Insights From a Discrete Choice Experiment in Germany |
| Dat, Pham Tien; ... | 2013 | Comparing Mangrove Forest Management in Hai Phong City, Vietnam towards Sustainable Aquaculture |
| Gui, Jian-Fang | 2015 | Fish biology and biotechnology is the source for sustainable aquaculture |
| Nobre, A. M.; Ro... | 2010 | Ecological–economic assessment of aquaculture options: Comparison between abalone monoculture and integrated multi-t |
| Ray, Nicholas E.; ... | 2015 | Nitrogen and phosphorus removal by the Algal Turf Scrubber at an oyster aquaculture facility |
| Rebecca, J. Lawt... | 2013 | Algal bioremediation of waste waters from land-based aquaculture using ulva: selecting target species and strains |
| Shah, Mahfuzur; ... | 2018 | Microalgae in aquafeeds for a sustainable aquaculture industry |
| Woods, Chris; Flo... | 2012 | Biofouling on Greenshell™ mussel ( Perna canaliculus ) farms: a preliminary assessment and potential implications for sustain |
| Archambault, Ma... | 2004 | Effects of suspended and sedimented clays on juvenile hard clams, Mercenaria mercenaria , within the context of harmful algal bl |
| Arnold, G. L.; Luc... | 2004 | Runoff from tomato cultivation in the estuarine environment: biological effects of farm management practices |
| Baker, Tony J.; Tyl... | 2014 | Impacts of metal and metal oxide nanoparticles on marine organisms |
| Bartley, Devin M.;... | 2008 | Restocking, Stock Enhancement, and Sea Ranching: Arenas of Progress |
| Beattie, Andrew J.... | 2011 | Ecology and bioprospecting |
| Bell, Johann D.; L... | 2008 | A New Era for Restocking, Stock Enhancement and Sea Ranching of Coastal Fisheries Resources |
| Bell, James J.; Mc... | 2015 | Sediment impacts on marine sponges |
| Béné, Christophe;... | 2016 | Contribution of Fisheries and Aquaculture to Food Security and Poverty Reduction: Assessing the Current Evidence |
| Beuchel, Frank; G... | 2006 | Long-term patterns of rocky bottom macrobenthic community structure in an Arctic fjord (Kongsfjorden, Svalbard) in relation to |
| Bo, Tiziano; Feno... | 2007 | Effects of clogging on stream macroinvertebrates: An experimental approach |
| Brummett, Randa... | 2011 | From researcher to farmer: partnerships in integrated aquaculture—agriculture systems in Malawi and Cameroon |
| Castine, Sarah A.;... | 2013 | Algal bioproducts derived from suspended solids in intensive land-based aquaculture |
| Chick, Rowan C.; ... | 2013 | Restocking Depleted Wild Stocks—Long-Term Survival and Impact of Released Blacklip Abalone ( Haliotis rubra ) on Depleted Wil |
| Chopin, Thierry; ... | 1999 | Developing Porphyra /salmon integrated aquaculture for bioremediation and diversification of the aquaculture industry |
| Cleary, Daniel F. ... | 2007 | Environmental associations of sponges in the Spermonde Archipelago, Indonesia |
| Diana, James S. | 2009 | Aquaculture Production and Biodiversity Conservation |

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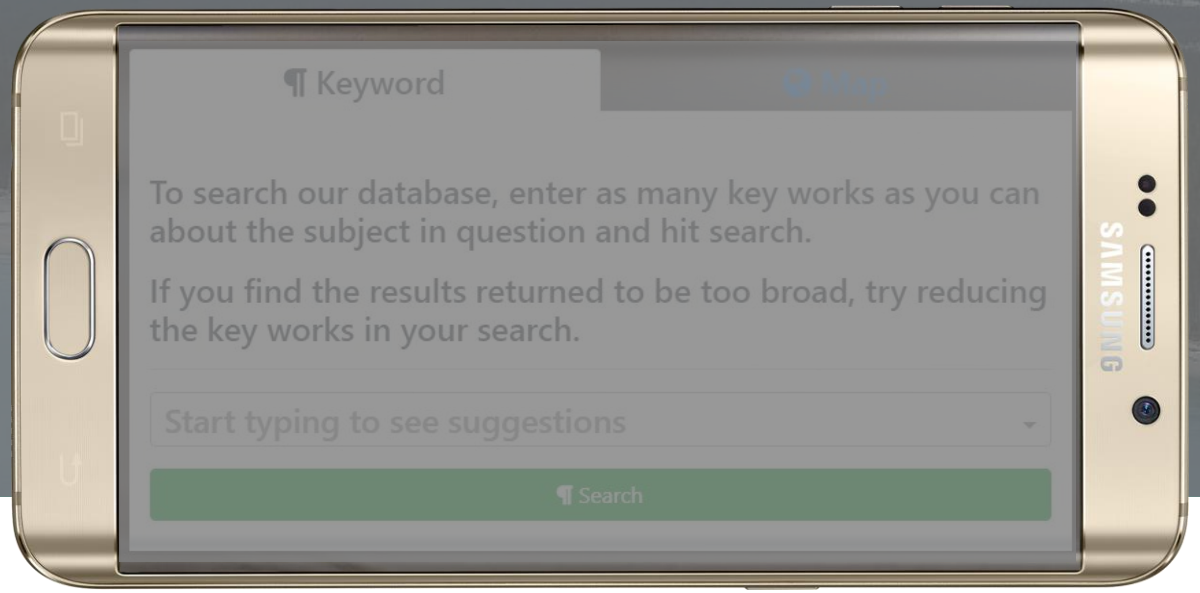


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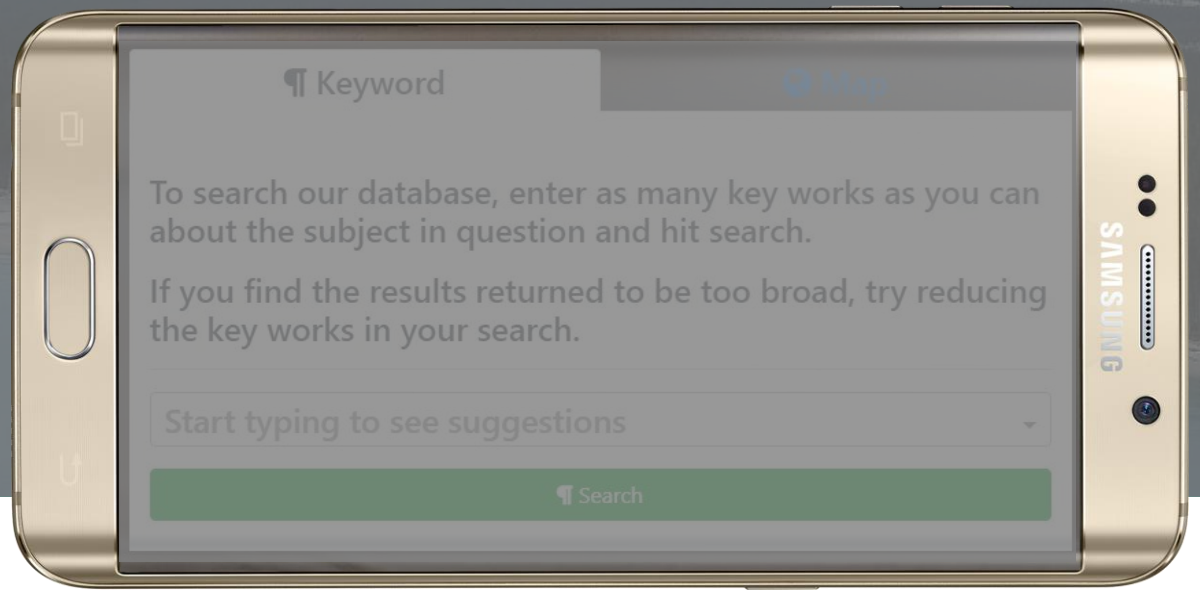
# Connect

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## Connect

## Enhance

## Online Experience

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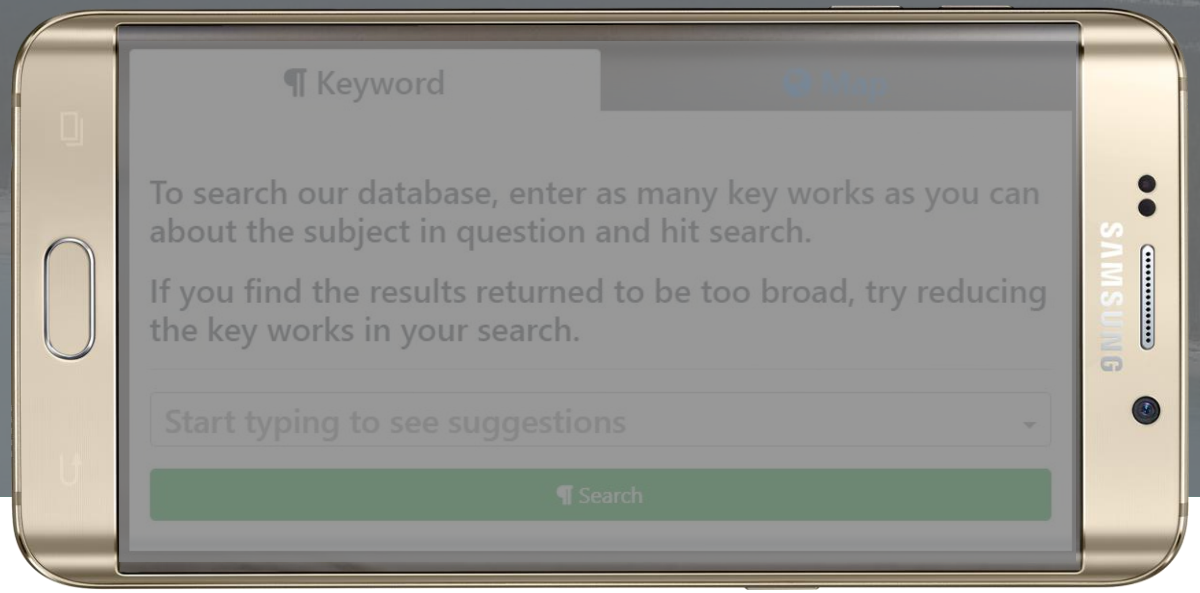


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Kia Ora | Connect | Enhance | Empower | Q & A

# Contact Us

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sustainableseasNC@niwa.co.nz


Our Story | Purpose | Kaitiakitanga | Sustainable Seas | Explore

- Tauranga Moana
- Whakapapa
- Te Ao Marama
- Taiao



To create a Pataka Mātauranga that hapū and kaitiaki can use for education, research, future co-management and planning activities. There is a strong desire on the part of kaitiaki and hapū to grow this initiative in ways that strengthen current investigative and analytical approaches to better understand how the learnings of Western science can 'empower' the expression of kaitiakitanga in the domain of Tangaroa

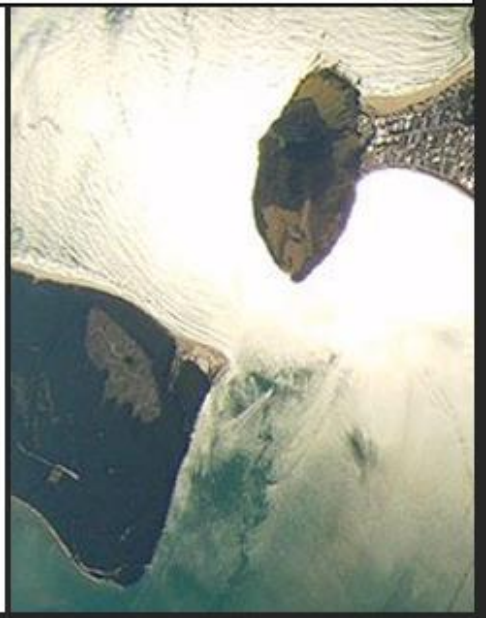


| Project | Description | Link |
| --- | --- | --- |
| Pipi Enhancement | The project involved moving pipi from dredge areas, to two selected areas, where they will be monitored by students from two schools, Te Wharekura o Mauao, and Te Puna Matauranga,Te Puna Primary | Manaaki Te Awanui |
| Paua Rahui | Rahui, a pre-European concept derived from an understanding that everything between the sky and earth was inter-connected, had been put in place in response to the "raping and pillaging of our marine environment" | Te Rarawa |
| Mana Moana | Tauranga Moana iwi marched to get Hauraki to reconsider their treaty claims. Hauraki are trying to acquire special rights in their territory. Tauranga Moana are adamant that they'll continue to fight the deal | #Mana Moana |

Our Story | Purpose | Kaitiakitanga | Sustainable Seas | Explore

The objective of the Sustainable Seas National Science Challenge is to enhance the value of New Zealand's marine resources, while providing a healthy marine environment for future generations

- Tangaroa
- Vision Mātauranga
- Our Seas
- Managed Seas
- Valuable Seas
- Dynamic Seas



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¶ Keyword | Map

To search our database, enter as many key works as you can about the subject in question and hit search.

If you find the results returned to be too broad, try reducing the key works in your search.

Start typing to see suggestions

¶ Search