



Seachange

Tai Timu Tai Pari

Hauraki Gulf Marine Spatial Plan

HAURAKI GULF MARINE SPATIAL PLAN

AQUACULTURE

Background

New Zealand's aquaculture industry is currently based around three species: Greenshell™ mussels (a trademarked name of farmed green-lipped mussels), Pacific oysters and king salmon.

Around 58 per cent¹ of New Zealand's oyster production and 25.5 per cent² of New Zealand's mussel production occurs in the Hauraki Gulf. Within the Gulf there are regional

differences in production. Marine farms in the Auckland part of the Gulf produce more oysters and those in the Waikato produce most of the Greenshell™ mussels that come out of the Gulf. There are also more marine farms in the Waikato, with the main concentrations at Coromandel and Manaia harbours, and offshore from Wilson Bay.

Mussels and oysters are filter feeders, so good water quality is essential for marine farming. Nutrients may increase phytoplankton so help support aquaculture, but sediment and faecal bacteria can reduce production.

Pacific oyster farm

Photo: Aquaculture New Zealand

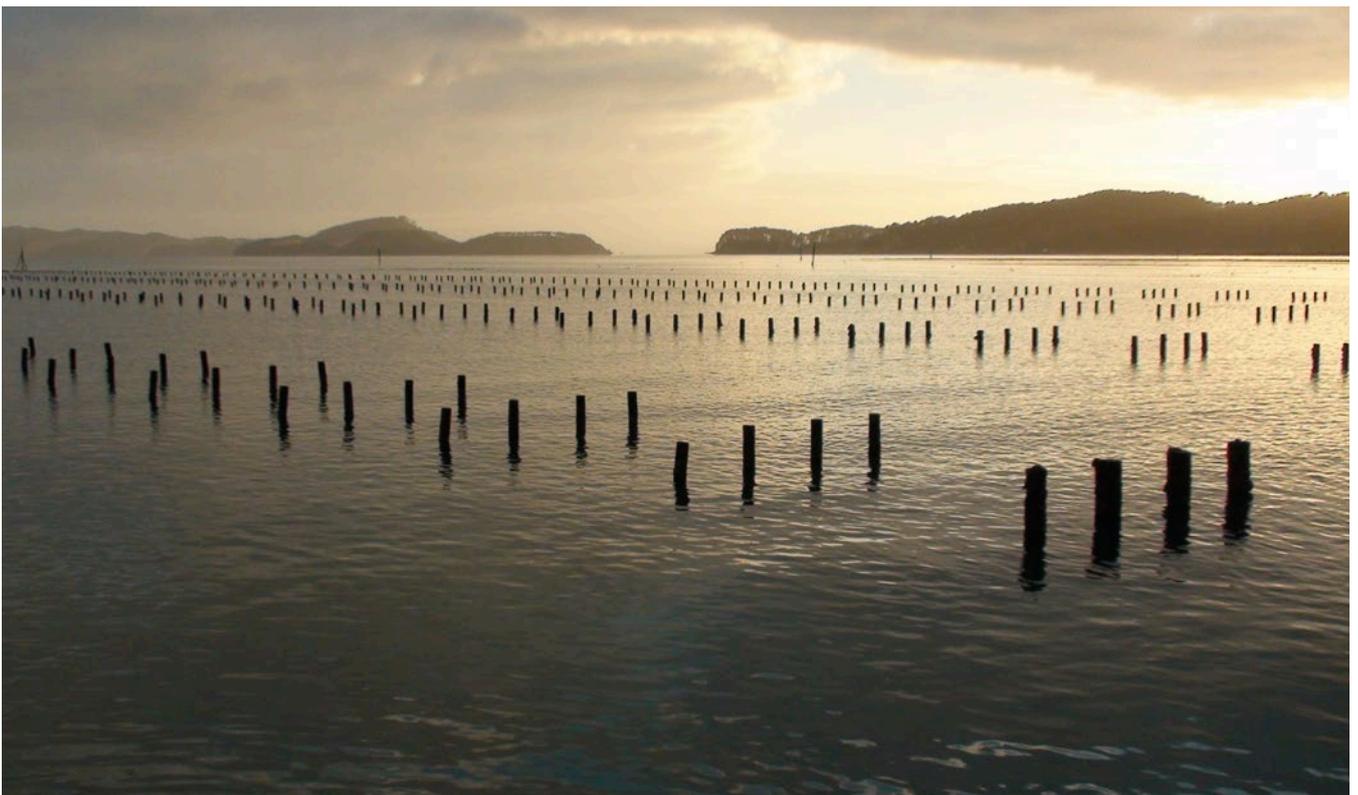


Table 1: Pacific oyster production in the Hauraki Gulf

	Waikato (greenweight tonnage)	Auckland (greenweight tonnage)	Total NZ production (greenweight tonnage)
2008	609	854	2852
2009	504	846	2819
2010	488	603	2456
2011	370	444	1817
2012	205	453	1267
MEAN	435.2	640	2242.2

Source: Aquaculture New Zealand

Note: Oyster production started to decline in 2011 due to the outbreak of an oyster virus, but production is now recovering.

Table 2: Greenshell™ mussel production in the Hauraki Gulf

	Waikato (greenweight tonnage)	Auckland (greenweight tonnage)	Total NZ production (greenweight tonnage)
2008	20749	2484	90085
2009	17445	2449	89992
2010	23511	2581	93831
2011	18751	4066	101051
2012	19508	4216	87881
MEAN	19992.8	3159.2	92568

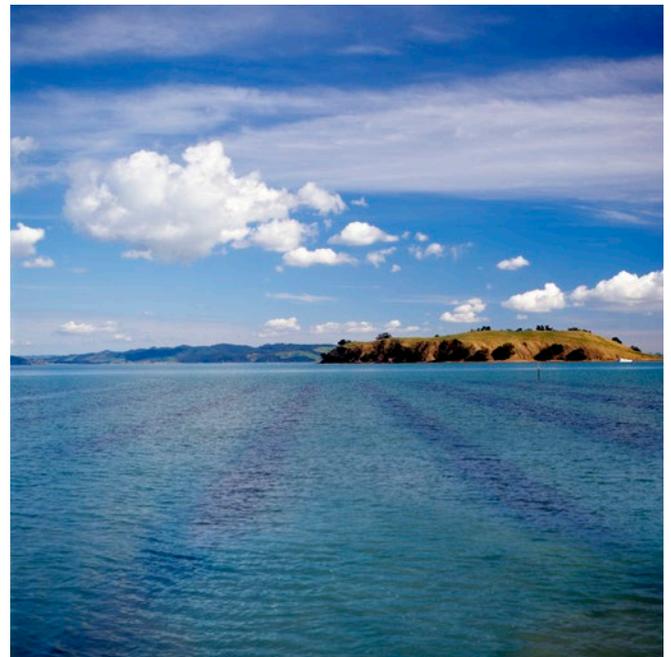
Source: Aquaculture New Zealand

Marine space used for aquaculture

The Auckland region has 251ha of existing marine farms, with applications underway for another 4600ha of marine space for marine farms and spat catching.³ Most of these applications are in the western Firth of Thames and about half of them were transferred to the Waikato Regional Council when the boundary was realigned.

In the Waikato region there is a little over 1900ha of marine space allocated to aquaculture. This includes farms that are currently operating and space that has been zoned for aquaculture but not yet operational or consented. The operational farms consist of nearly 70ha of inter-tidal oyster farms and about 950ha of mussel farms. Marine space for finfish farms has been zoned (a total of 390ha in two locations), but these areas have not yet been released for farming. Potential finfish species are kingfish, hapuku and snapper.

³ Auckland Council, 2013



Photos: Aquaculture New Zealand



Aquaculture planning

Regional councils are responsible for deciding what locations and species are appropriate for farming in their coastal marine areas. This provides a planned approach to allocation of water space and development of the industry.

Regional councils consider, and if appropriate grant, consents for marine farms. Key to the consenting process is an 'Assessment of Environmental Effects' prepared by the applicant. That assessment looks at the effects of the proposed activity and considers those effects against the purpose of the Resource Management Act 1991 to promote the sustainable management of natural and physical resources.

Consent conditions associated with the permits are set by regional councils to ensure a 'no more than acceptable' level of ecological impact occurs due to aquaculture related activities. Councils are required to monitor compliance with these conditions on a regular basis and ensure all aquaculture practices are being carried out in a sustainable manner.

Marine farmers must also register as a fish farmer with the Ministry for Primary Industries and pass the Undue Adverse Effects test. The Undue Adverse Effects test assesses the effects of proposed marine farm areas on

Benefits of aquaculture

Economic impacts

Aquaculture is worth an estimated \$298 million in export revenue.⁴

Based on 2011 production figures (see tables 1 and 2), and the estimated export revenue, the harvest from the Hauraki Gulf is worth around:

- \$52 million for mussels (if all exported)
- \$7.3 million for oysters (if all exported).

Other estimations of the value of aquaculture to the Waikato and Auckland regions have been made. These estimations include the impact of farming activities (including harvesting), processing, employment and flow on impacts to goods and services providers.

The contribution of aquaculture to Auckland's GDP in 2008 was \$28.2 million of value added. Most of this comes from the processing aspects of aquaculture rather than from direct farming. Employment estimates were 507 full time equivalents (FTEs) from direct farming, processing and those employed in supporting goods and services.⁵

In the Waikato, the contribution of Coromandel aquaculture in 2010 was estimated to be \$31.4 million (Sapere, 2011). The impact on employment, both directly and indirectly, was estimated to be 423 FTEs.⁶

⁴ Aquaculture New Zealand, 2011

⁵ ARC, 2010

⁶ Sapere, 2011

New Zealand aquaculture statistics

Production and revenue metrics for 2011

	Mussels	Salmon	Oysters
Harvested product (greenweight tonnage)	101,311	14,037	1,804
Export revenue NZ\$ (millions)	218.1	63.4	16.6
Domestic revenue NZ\$ (millions) (estimated)	35.0	65.0	8.0

Source: Aquaculture New Zealand

Recreational fishing opportunities

Mussel farms are popular with recreational fishers as fish come in to feed on baby mussels and the algae that grow on the mussels and growing ropes. Fishers are allowed to enter and pass through the farm sites so long as they behave responsibly and avoid damaging the farm equipment and stock.

Māori aquaculture settlements

Iwi of a region receive (via the Takutai Trust) the equivalent of 20 per cent of all aquaculture space newly created after 1 January 2005. These will be delivered through negotiated agreements between the Crown and Māori.

Takutai Trust was established under the Māori Commercial Aquaculture Claims Settlement Act 2004 and is responsible for receiving and allocating aquaculture settlements to iwi.

Mussel farm

Photo: Aquaculture New Zealand



Locations of marine farms in the Hauraki Gulf

