

Tai Timu Tai Pari

Sea change

Hauraki Gulf Marine Spatial Plan

HAURAKI GULF MARINE SPATIAL PLAN

COMMERCIAL AND RECREATIONAL FISHING

New Zealand has a large area of available and potential fishing waters. This resource must be managed as a whole, as all catch is taken from the same fish stock.

Fishing is impacted by other marine activities. For example, other uses of coastal space like aquaculture and marine reserves reduce the amount of area available to fish. Loss of habitat and poor water quality can lessen fish stock levels.

Fishing also has impacts, particularly on the marine environment and animals. These impacts are acknowledged and managed by the Fisheries Act. The Ministry for Primary Industries and Department of Conservation are both involved in managing these impacts.

Quota management

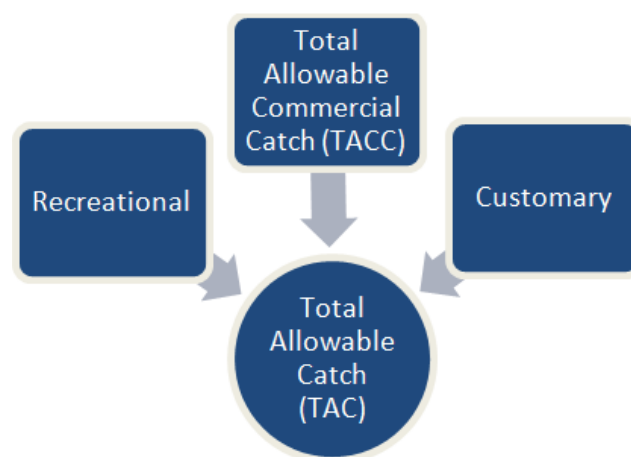
In the early 1980s commercial fishing was in crisis due to long term overfishing. In 1986 the Quota Management System (QMS) changed how fisheries were managed for commercial and recreational fishers and for customary purposes.

Each fish stock is defined by a Quota Management Area. For example, there are separate snapper fish stocks in New Zealand, and in the Hauraki Gulf snapper is part of the SNA1 fish stock.

A sustainable amount of catch is identified for each fish stock and this is called the Total Allowable Catch, or TAC. The Minister responsible for fisheries allocates proportions of the TAC to commercial fishing, recreational fishing and customary fishing. The commercial fishing portion is known as the Total Allowable Commercial Catch (TACC).

www.seachange.org.nz

How fish stocks are allocated



In commercial fishing, quota can be owned. This is known as Individual Transferable Quotas (ITQ). Owning quota gives you the right to take the quantity of fish allowed by your share of quota for that fish stock.

Quota owners can choose not to catch the fish themselves and lease out the right to catch their share of the fish stock for a year. This is called the Annual Catch Entitlement (ACE). It's common for commercial fishers who own their own boats and fish inshore to own some quota and also lease quota (in the form of ACE) off larger fishing companies.



Commercial fishing

The Hauraki Gulf Marine Park makes up a small part of the snapper SNA1 stock area, but it provides one third of New Zealand's total commercial snapper catch. Snapper fishing from the Gulf makes up around 60 per cent of the total commercial landings each year and 85 per cent of the value. If all this catch was exported, the revenue would be approximately \$12.3 million.

Other target species include trevally, kahawai, flatfish, gurnard, John Dory and rig, but none comprises more than 5 per cent of the total catch. The main commercial shellfish species caught within the Gulf are scallops, crayfish and kina.

Figure 1: Hauraki Gulf Marine Park as a part of SNA1 fisheries management area



Table 1: Hauraki Gulf Marine Park commercial fishing landings (tonnes) by main fish species

SPECIES	2012/2013 (tonnes)	PORT PRICE (NZ\$ per kg)
SNAPPER	2306.16	6.23
TREVALLY	86.22	1.90
FLATFISH	161.87	7.26
KAHAWAI	285.84	0.91
JACK MACKEREL	910.48	0.31
GURNARD	137.51	2.61
JOHN DORY	94.29	7.03
CRAYFISH	40.18	70.01
SCALLOPS	366.96	15.90

Source: Ministry for Primary Industries

Commercial fishing methods

The main commercial fishing methods used within the Hauraki Gulf are bottom trawling, bottom long line, set net and Danish seine.

The trawl and Danish seine vessels fish mostly for snapper, but also for trevally, John Dory and gurnard.

The greatest proportion of the catch in the Gulf is harvested by bottom trawling (41 per cent), followed by

bottom longlining (30 per cent). The proportion of the catch harvested by bottom trawling and Danish seining has increased in recent years, with that caught by bottom longlining decreasing. This is because niche markets in Japan have declined, and a premium price is no longer paid for fish caught by long line.

Set net fishers target flatfish, grey mullet, kahawai and rig. Set netters often target relatively small local areas. They focus on harbours, the mid-gulf and Firth of Thames.

Purse seine fishing also occurs on species such as skipjack tuna, mackerels, and pilchards. Catches are variable because the availability of these species is seasonal, the fish are transitory and the main fishing grounds lie outside the Gulf.

There are a range of restrictions on fishing methods in the Hauraki Gulf Marine Park area. Because of these restrictions, Danish seining is carried out in the mid and outer gulf, and bottom trawling is mainly in the Gulf's outer regions.

Selected restrictions in Hauraki Gulf Marine Park

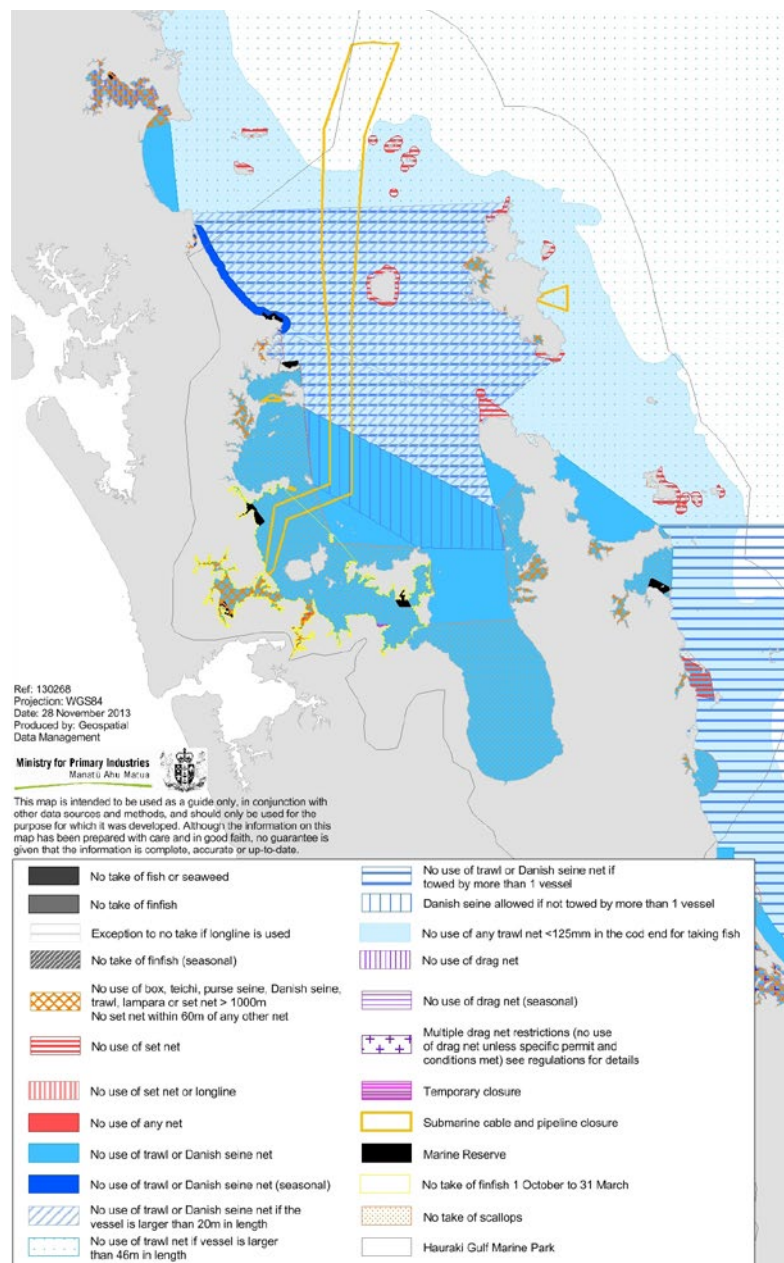
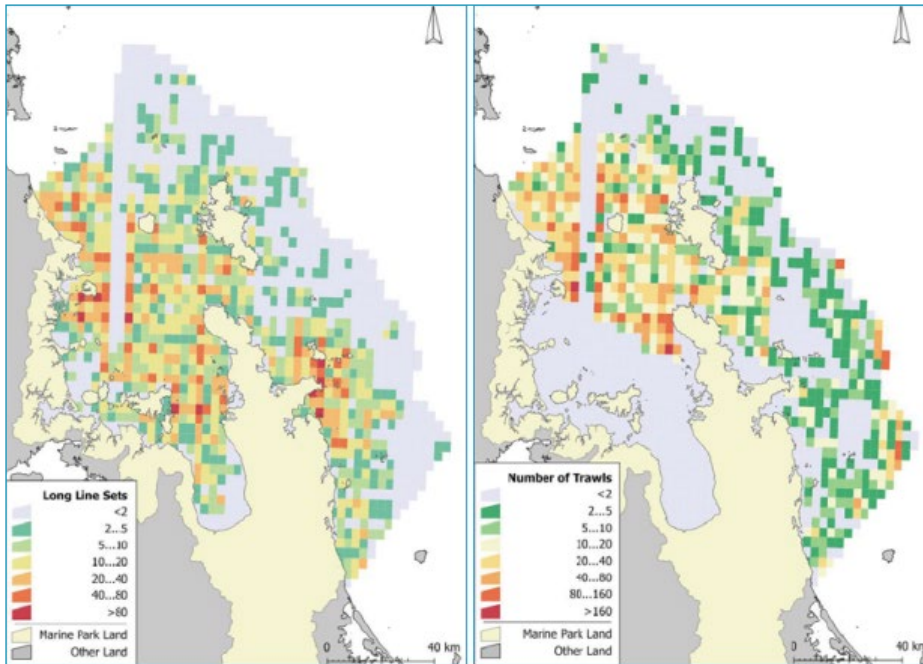


Figure 2: Location of bottom long line and trawl efforts in the Hauraki Gulf Marine Park
Source: Tikapa Moana – State of the Environment Report 2011

Commercial long line effort

Commercial trawl effort



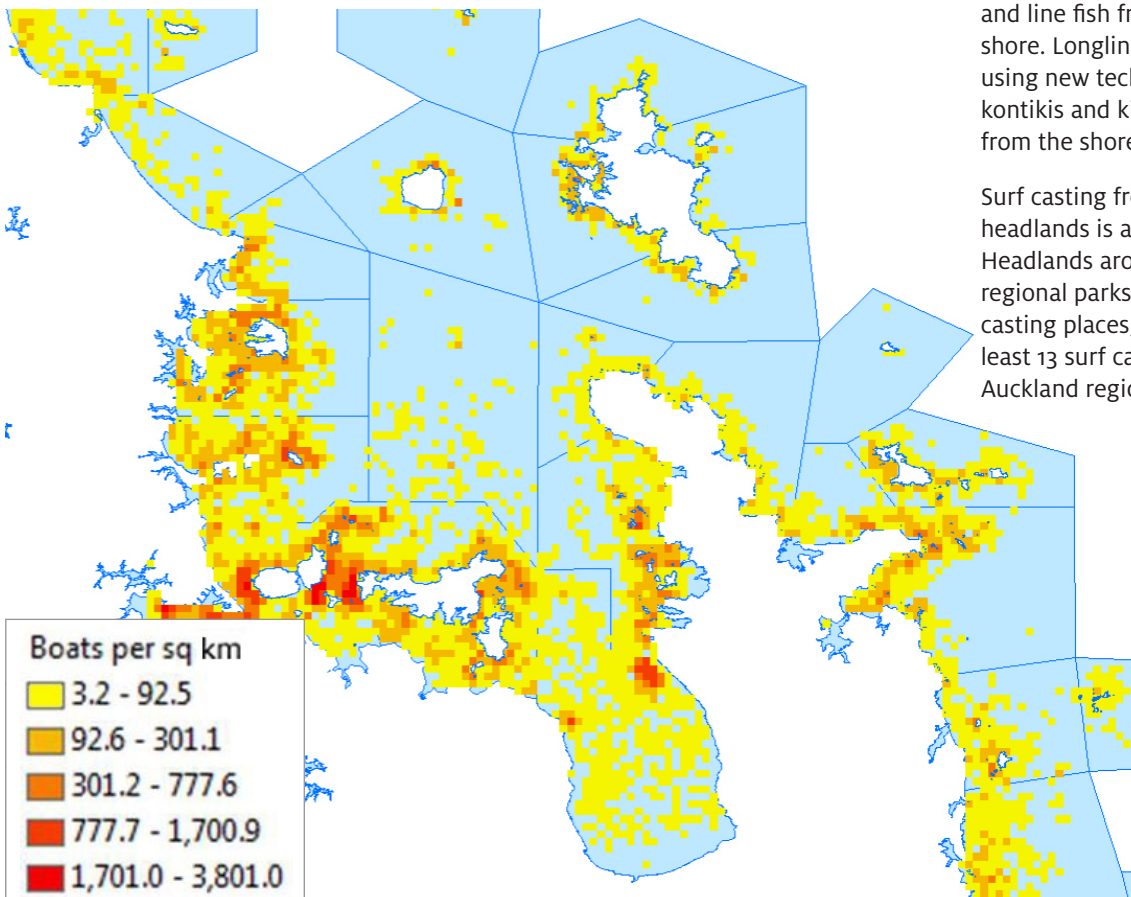
Recreational fishing

Some of New Zealand's most popular recreational fishing grounds are in the Hauraki Gulf.

It's estimated 37 per cent of all recreational fishers are located within the Hauraki Gulf Marine Park and 17 of New Zealand's 55 sport fishing clubs are situated within the Hauraki Gulf Marine Park catchment, although most recreational fishers are unaffiliated to any club. There are many other clubs for specialist fishing interests such as surf casting, kayak fishing and spear fishing. Up to 1000 recreational boats are used for fishing on a typical weekend or holiday during the summer months.

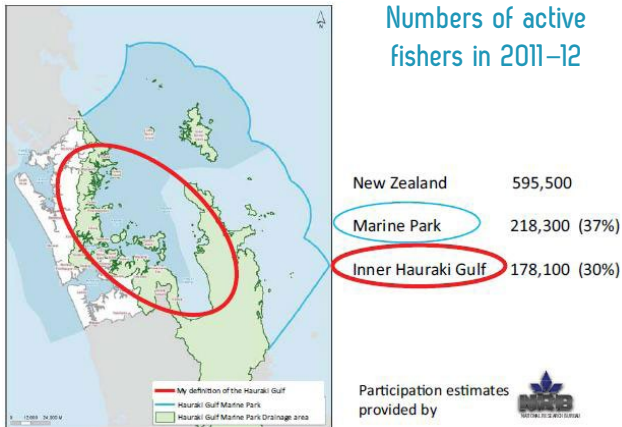
Most information on recreational fishing activity in the Hauraki Gulf Marine Park area is based on estimates of recreational harvest levels. These estimates are taken from aerial counts of vessels observed to be fishing, combined with a survey of recreational fishers returning to key boat ramps. Figure 1 shows the fishing intensity data drawn from the 2011-2012 summer aerial survey.

Figure 3: Recreational fishing effort in the Hauraki Gulf



Recreational fishers mainly rod and line fish from boats and the shore. Longlining, sometimes using new technologies such as kontikis and kites to set longlines from the shore, is also popular.

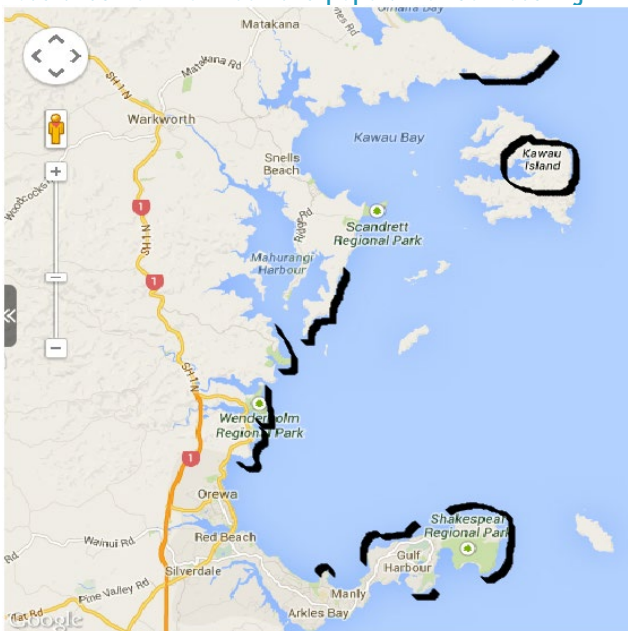
Surf casting from the beach and headlands is another method. Headlands around Auckland's regional parks are popular surf casting places, and there are at least 13 surf casting clubs in the Auckland region.



Other popular spots are the worm beds that extend from the western side of Rangitoto, which are great for snapper, and Tairua and other headlands around the top of the Coromandel Peninsula.

Diving (both snorkelling and scuba) for species such as crayfish, scallops, kina and Greenshell™ mussel is common in some parts of the Gulf. Recreational fishers also target crayfish and scallops using pots and dredges, and spear-fish for kingfish.

Headlands north of Auckland popular for surf casting



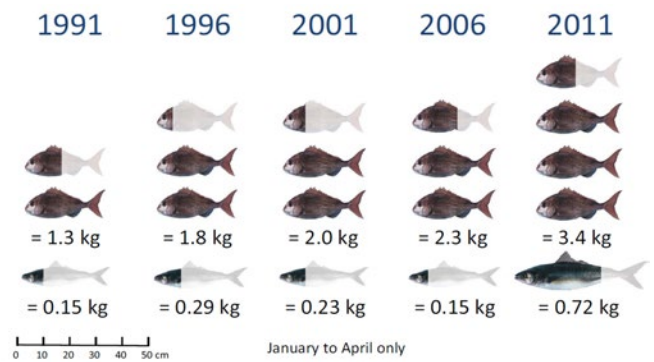
Source: Eugene Harris

Set netting occurs in river mouths and estuarine areas throughout the Gulf. The main species targeted by recreational set netters include flatfish, grey mullet, and bait species. Game fish species such as swordfish, marlin and tuna are also caught occasionally within the Gulf's boundaries by trolling methods.

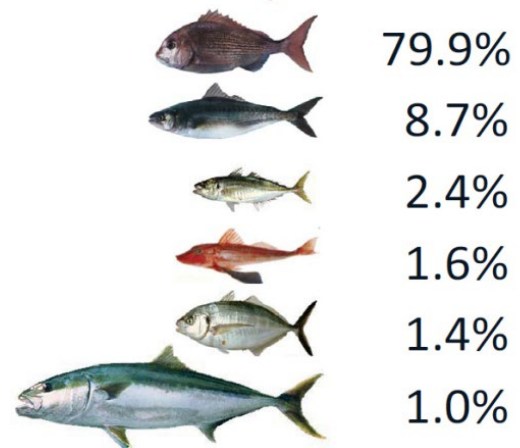
The main finfish species caught are snapper, kahawai, jack mackerels (mostly for bait), gurnard, trevally and kingfish. The landed catch composition by recreational fishers in the Hauraki Gulf Marine Park for 2011/12 is given below.

There are increasing pressures on intertidal shellfish species from hand gathering. Most species found within the Gulf are gathered, with the main targets cockles, pipis and mussels.

Changes in average catch over time



Landed catch composition in 2011-12



At least 25 other finfish species harvested. Substantial numbers of shellfish such as scallops, kina, mussels and cockles are also harvested.

The Ministry for Primary Industries regularly monitors beaches for their cockle levels. Monitoring includes Whangateau, Okoromai, Cheltenham, Eastern Beach, Cockle Bay, Howick, Beachlands, Umupuia, Kawakawa, Whangapoua, and Tairua Harbour (MPI, 2013). Whangateau was the site of major cockle dieback thought to be caused by disease but numbers are now starting to recover.

Umupuia has a temporary closure and Cockle Bay has a seasonal closure. Cheltenham and Eastern Beach are the inner Auckland beaches with long term unsuccessful closures.

Customary fishing

Māori customary fishing is traditionally undertaken for a variety of purposes. These include whānau collecting seafood for the kāinga on a regular basis and on behalf of extended family living inland or elsewhere. Seafood is collected as an exercise of manaakitanga for visitors and to provide seafood for guests to support the mana of the marae. Seafood is also collected for hui and tangi.

We currently have little information on the quantities or location of harvested kaimoana in the Hauraki Gulf area. A number of iwi organisations are attempting to document current harvest levels and locations, along with describing changes which have taken place in these resources in recent decades.

Monitoring of the available information suggest that in some areas the customary harvests of some shellfish species are significant, but that the harvest of finfish is very small compared to that taken by the commercial and recreational sectors.