

A photograph showing two people wading in the water of Moreton Bay. The person in the foreground is wearing a yellow and blue vest and a white cap, holding a fishing rod. The person in the background is wearing a dark jacket and a white cap, holding a fishing net. The water is calm, and the sky is blue with some clouds.

MORETON BAY MARINE PARK AND TAGGING



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Report

This report has been prepared by Infofish Australia for Australian National Sportfishing Association Qld (ANSAQ).

June 2014

Background

During the development of the Moreton Bay Marine Park plan Suntag provided information on tagging activities in the marine park area, to assist with the development of the plan as shown in *figure 1*. The Moreton Bay Marine Park was established in 2008 and the Moreton Bay Marine Park Zoning Plan came into effect on 1 March 2009 as shown in *figure 2*.

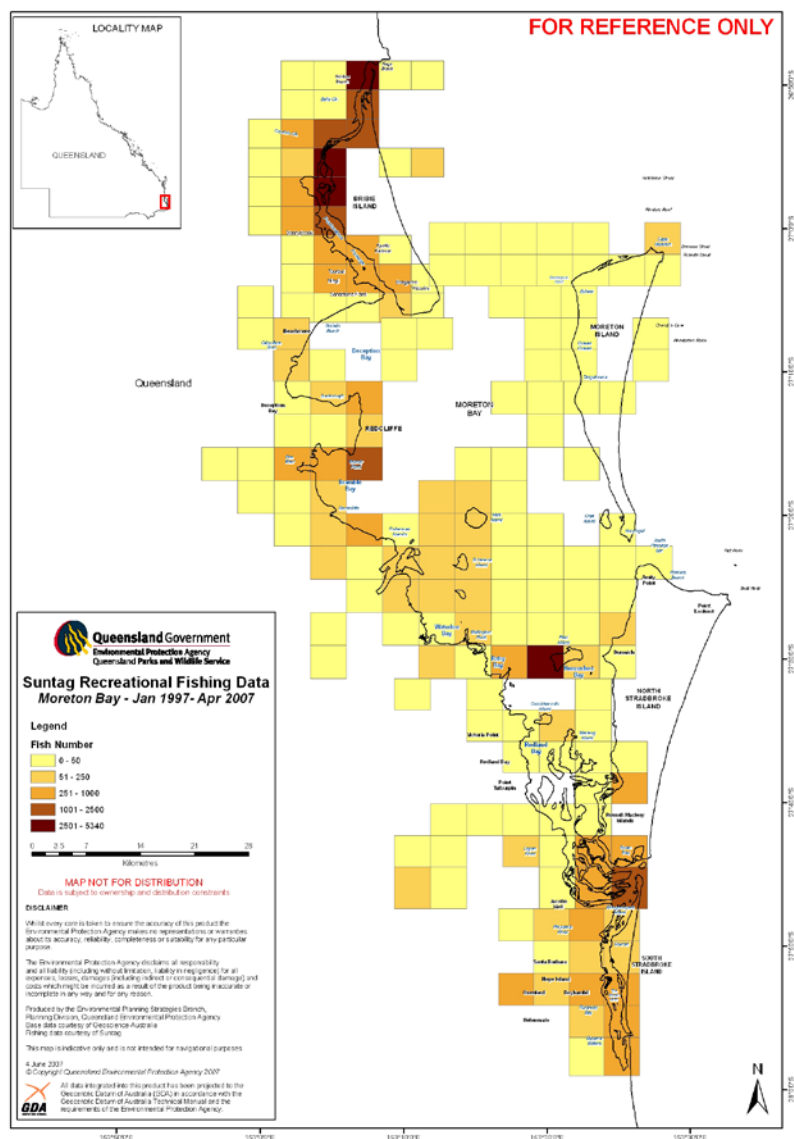


Figure 1: Suntag Recreational Fish Data (tagging) Jan 1997- Apr 2007

Scope

The report assesses the affect of green zones on tagging in the Moreton Bay Marine Park through:

- ✦ A summary of tagging in the Moreton Bay Marine Park from Jan 1985-Feb 2009 and after the declaration of the park from 1 Mar 2009-Feb 2014
- ✦ An assessment of tagging in grids that were included in green zones after the zoning plan came into effect.

Data source

Tagging and recapture records from 1985-2014 are contained in the Suntag database at <http://qld.info-fish/Infofish>. Access to database is limited to authorised users. Only records where the map and grid were identified were included in the assessment.

Moreton Bay Marine Park map from www.nprsr.qld.gov.au/parks/moreton-bay/zoning.

Suntag Grid Maps covering Moreton Bay Marine Park

The area of the Moreton Bay Marine Park is covered by the following Suntag grid maps and shown in *figure 3*: Locations where fish were tagged are recorded based on the grids with the approximate dimensions for each map.

- ✦ Caloundra Wide CAW (1.4km x 1.4km)
- ✦ Pumicestone Passage PPB (0.8km x 0.8km)
- ✦ Moreton Bay (north) MB01 (1.4km x 1.4km)
- ✦ Moreton Bay (central) MB02 (1.4km x 1.4km)
- ✦ Moreton Bay (south) MB03 (1.4km x 1.4km)
- ✦ Moreton Offshore MOF (1.4km x 1.4km)
- ✦ Gold Coast Coomera GC22 (0.8km x 0.8km)

For grids that intersect the marine park boundary these grids have been included as being in the marine park. For grids that intersect a green zone boundary it is not possible to determine if fish were tagged inside or outside the green zone and these grids have been identified separately. Tagging of fish in grids partially affected by the zoning was in the area remaining open to fishing.

There were a total of 883 grids where fish were tagged from Jan 1985-Feb 2014 within the Moreton Bay Marine Park as shown in *figure 4*. Of these 793 (89.8%) remained open to fishing after the zoning plan came into effect. There were 22 (2.5%) grids that were totally included within the no fishing green zones. There were a further 68 (7.7%) grids where part of the area within the grid was included within a green zone.

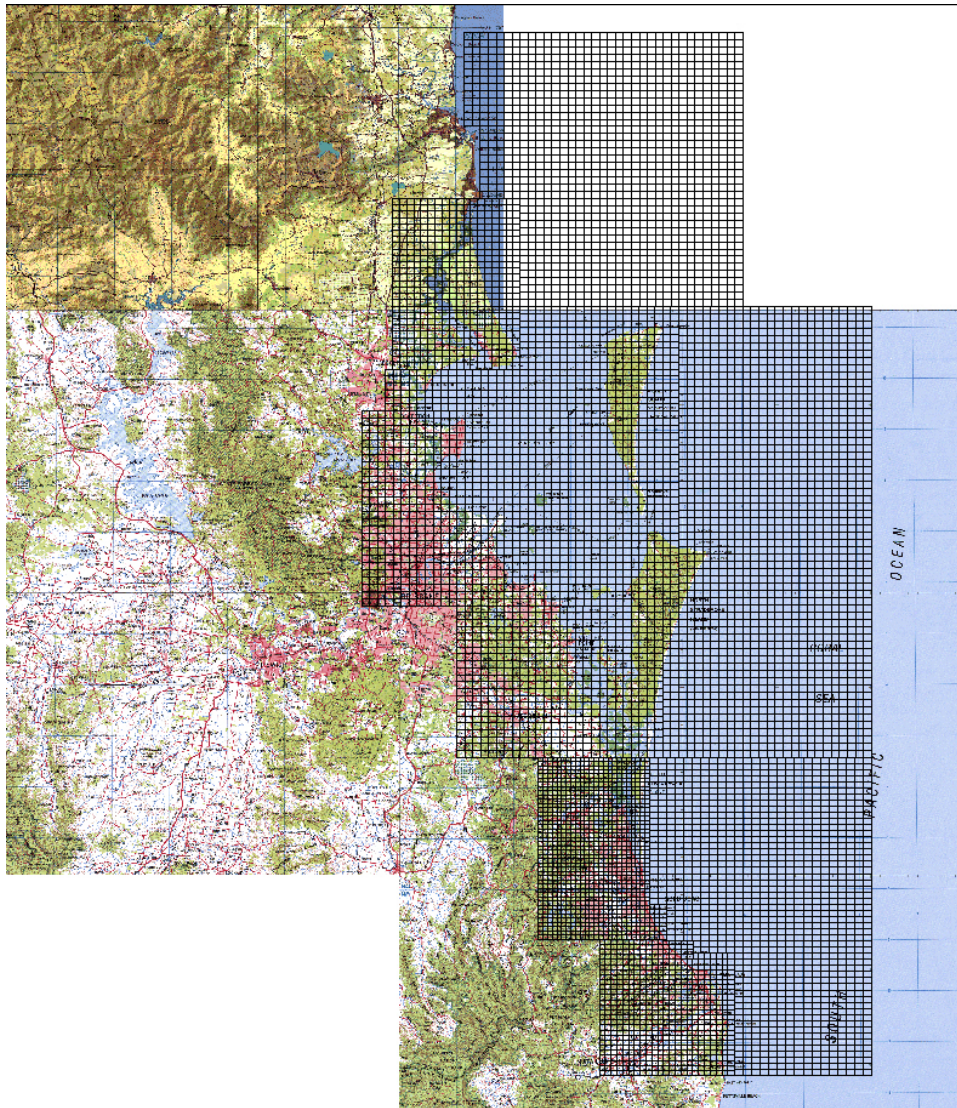


Figure 3: Suntag Grid Maps covering Moreton Bay Marine Park

Some Observations

Based on the data collected the following observations are made:

- ✦ Tagging in 89.8% of grids was not affected by the Marine Park plan.
- ✦ Tagging in 2.5% of grids ceased due to these grids being completely within green zones.
- ✦ Tagging in 7.7% of grids may have been affected due to these grids being partially within green zones.
- ✦ There were 2 grids where over 1,000 fish were tagged and 4 grids where over 100 fish were tagged that were completely included in green zones. These were at Scotts Point at Redcliffe and at Tripcony Bight in Pumicestone Passage.
- ✦ There were 4 grids around Peel Island where over 100 fish were tagged that were partially included within green zones.
- ✦ There were another 11 grids where over 100 fish were tagged that were partially included in green zones.

- ✦ After the zoning plan came into effect fish were tagged in a further 18 grids that were partly included within green zones although total numbers tagged were generally low at less than 20 fish for most grids.

Tagging in the Moreton Bay Marine Park

Tag data were aggregated on a 5 year basis from 1985-2014 with 2005-Feb 2009 and Mar 2009-Feb 2014 being used to separate data before and after the zoning plan came into effect.

Figure 4 shows the number of fish tagged in each grid from 1985-2014. The Google Earth map can be viewed interactively at www.info-fish.net/suntag.¹ There were 16 grids where over 1,000 fish (purple) were tagged and 175 where over 100 fish tagged (red).

Figure 5 shows the number of grids where fish were tagged based on their zoning in the Moreton Bay Marine Park plan each 5 years from 1985-2014. Figure 6 shows the number of fish tagged based on the grid zoning.

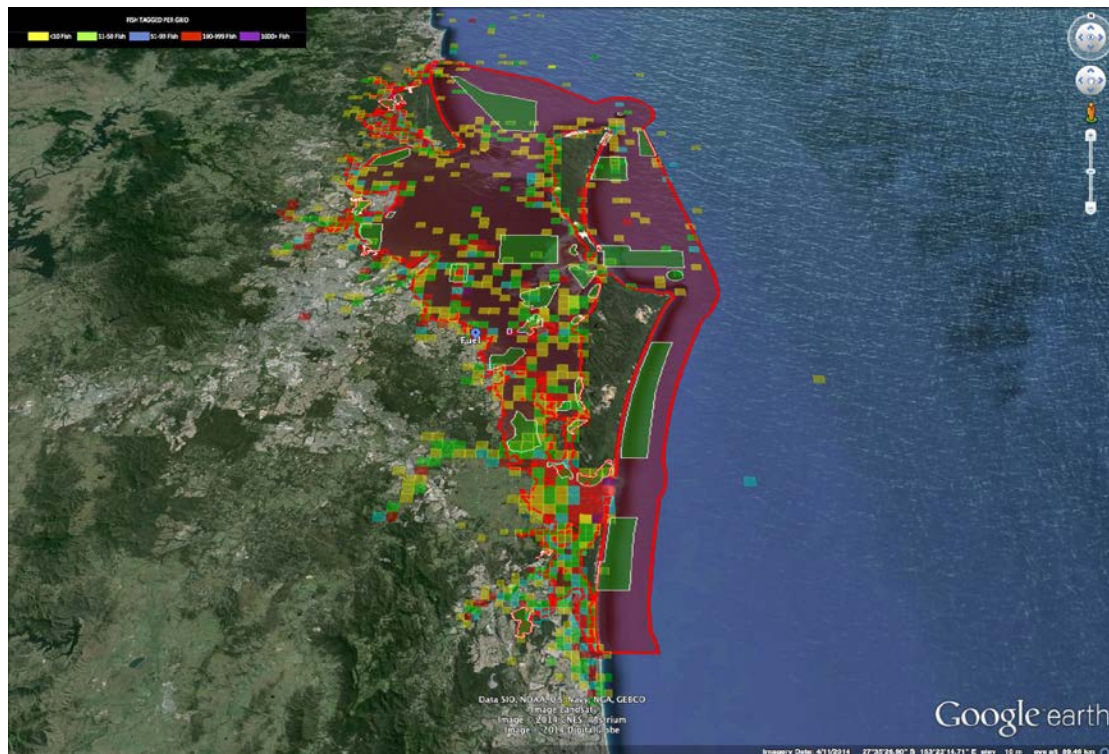


Figure 4: Fish tagged in Suntag grid Maps within the Moreton Bay Marine Park from 1985-2014

¹ Available at www.info-fish.net/suntag/

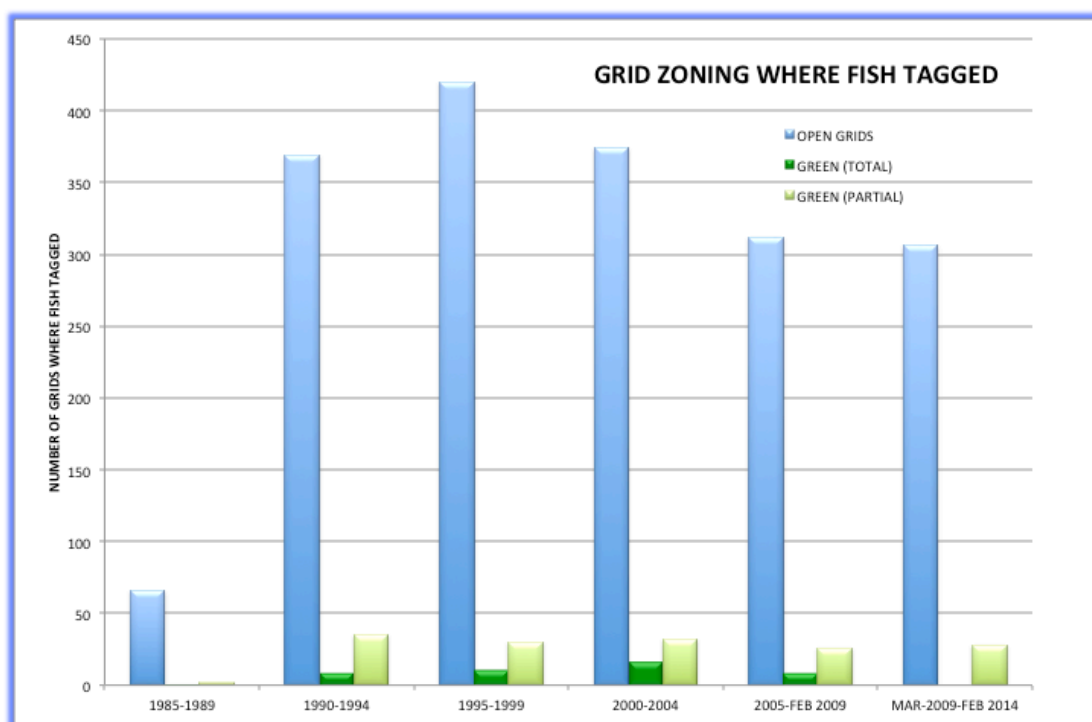


Figure 5: Number of grids where fish were tagged based on zoning of Moreton Bay Marine Park 1985-2014

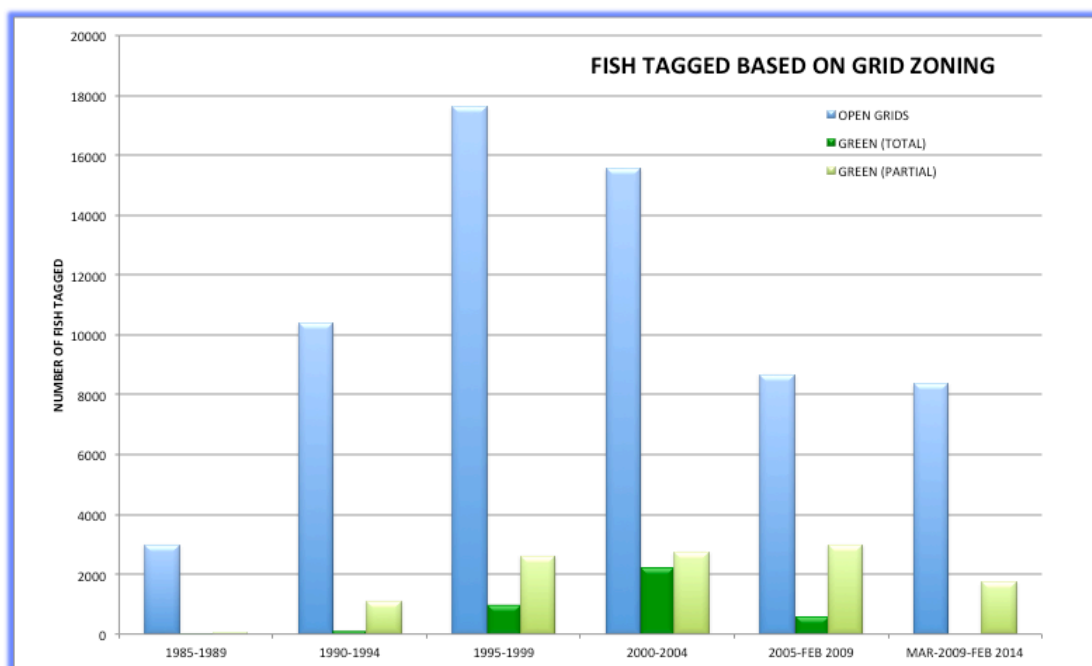


Figure 6: Number of fish tagged based on grid zoning of Moreton Bay Marine Park 1985-2014

Table 1 shows the numbers of fish tagged in grids based on their zoning in the Marine Park plan. From Jan 1985-Mar 2009 there were 68,545 fish tagged with 80.6% tagged in grids open to fishing, 5.6% in grids completely in green zones and 13.8% in grids partly in green zones. Following the zoning plan coming into effect from Mar 2009-Feb 2014 there were

10,087 fish tagged with 82.8% tagged in grids open to fishing, no fish tagged in grids completely in green zones and 17.2% in partly in green zones.

PERIOD	1985-2009	2009-2014
OPEN GRIDS	55219	8354
GREEN (TOTAL)	3869	0
GREEN (PARTIAL)	9457	1733
TOTAL	68545	10087

Table 1: Fish tagged in Marine Park zones from 1985-2014

Tagging in Grids now in Green Zones

Figure 7 shows the 22 grids where fish were tagged that were completely within green zones after the zoning plan came into effect. Of those there were 2 grids where over 1,000 fish were tagged. These were MB02-G7 (Scotts Point at Redcliffe) and PPB-i12 (Long Island in Pumicestone Passage). There were a further 4 grids where over 100 fish were tagged. These grids were all adjacent to the Tripcony Bight-Long Island green zone in Pumicestone Passage. The grids were PPB-G13, PPB-G14, PPB-H14 and PPB-H15. There were low numbers of fish tagged in the remaining grids. No fish have been tagged in these grids since the zoning plan came into effect.

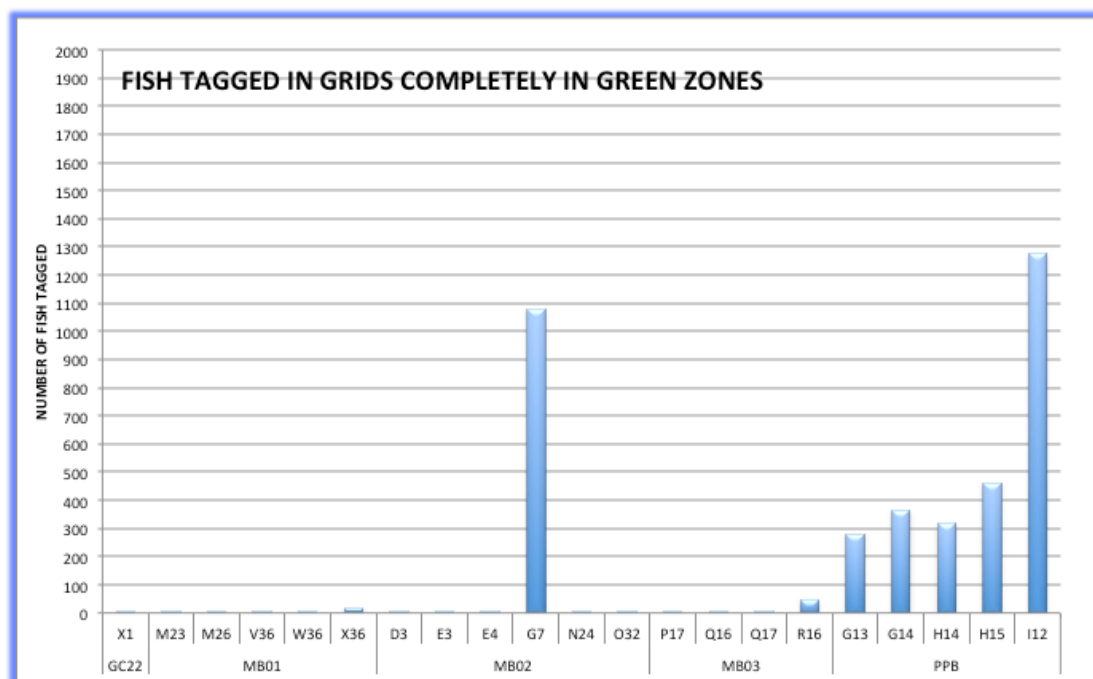


Figure 7: Fish tagged in grids now totally green

