

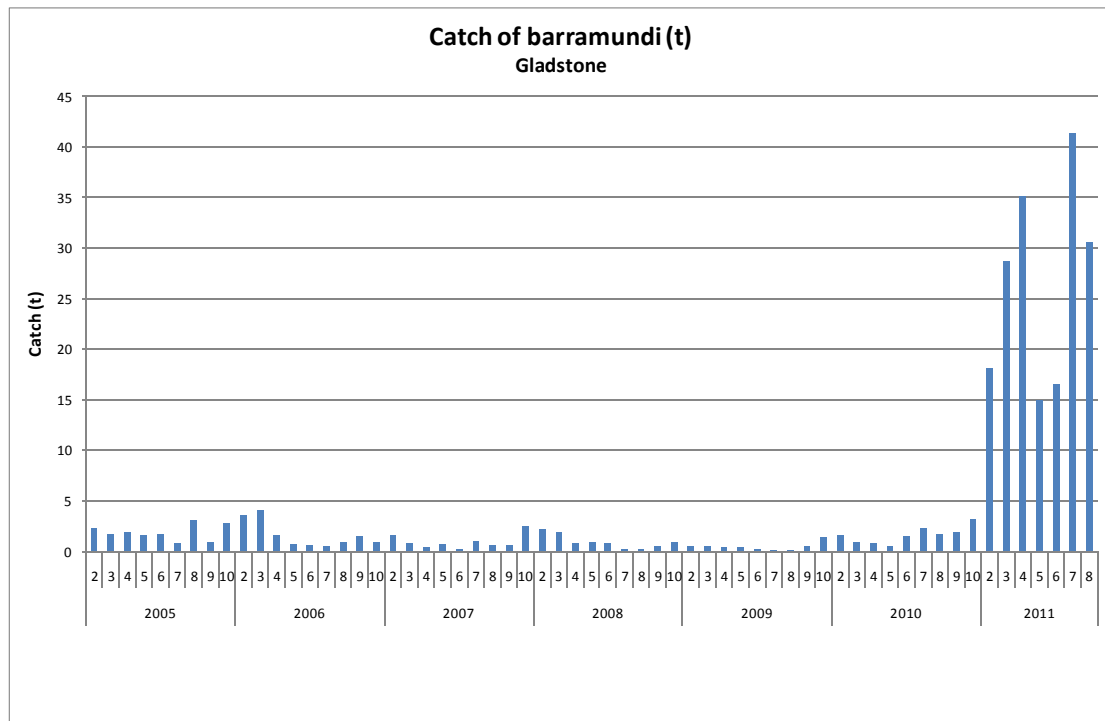
## Where are all the Barramundi which were washed out of Awoonga Dam?

It was estimated that 30,000 large barramundi were washed out of Awoonga Dam into the Boyne River between December 2010 and March 2011, as the result of water flow over the spillway. If the averaged weight of these fish were ten kilograms each, this represents an additional 300 tonnes of barramundi introduced into the Boyne River and Gladstone Harbour.

There are two questions that need to be answered:

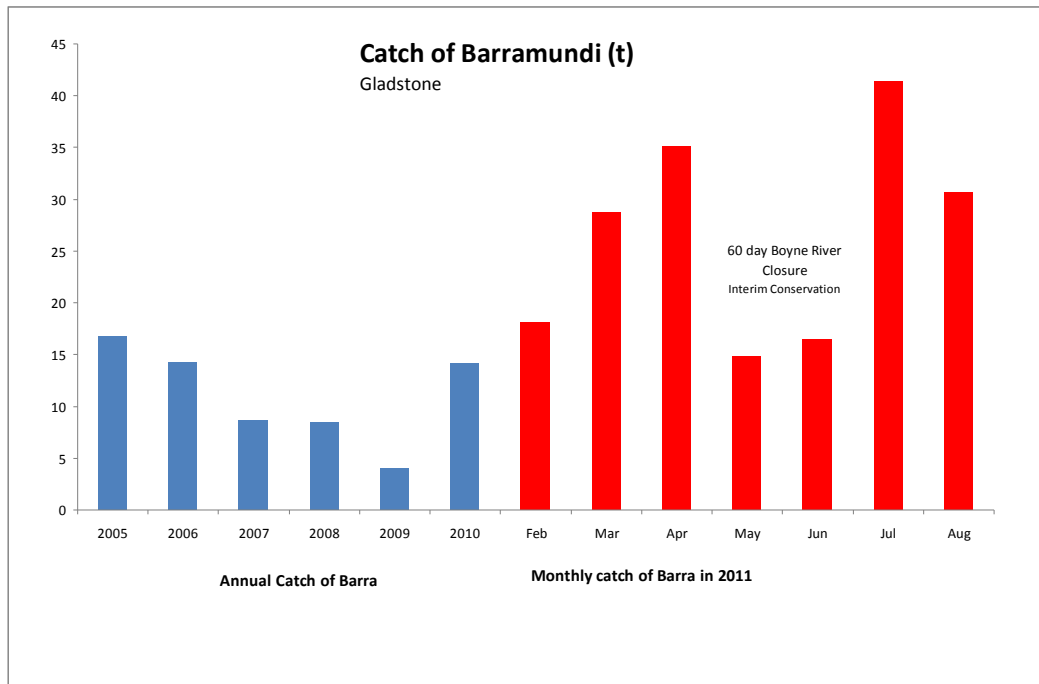
1. Does the introduction of 300 tonnes of barramundi represent a significant increase in the population of barramundi in Gladstone Harbour and surrounding rivers?
2. What has been the fate of these barramundi?

Figure 1 shows the monthly catch of Barramundi in the Gladstone logbook grid (S30) from 2005 until August 2011. It should be recognised that logbooks for July and August are still being received—it is expected that the catch will increase from these figures, especially for August.



**Figure 1.** Monthly catch in tonnes of barramundi in Gladstone 2005–2011. Note the marked increase—in comparison to previous years—in barramundi catch in each month of 2011. There is a seasonal closure for barramundi between November and January.

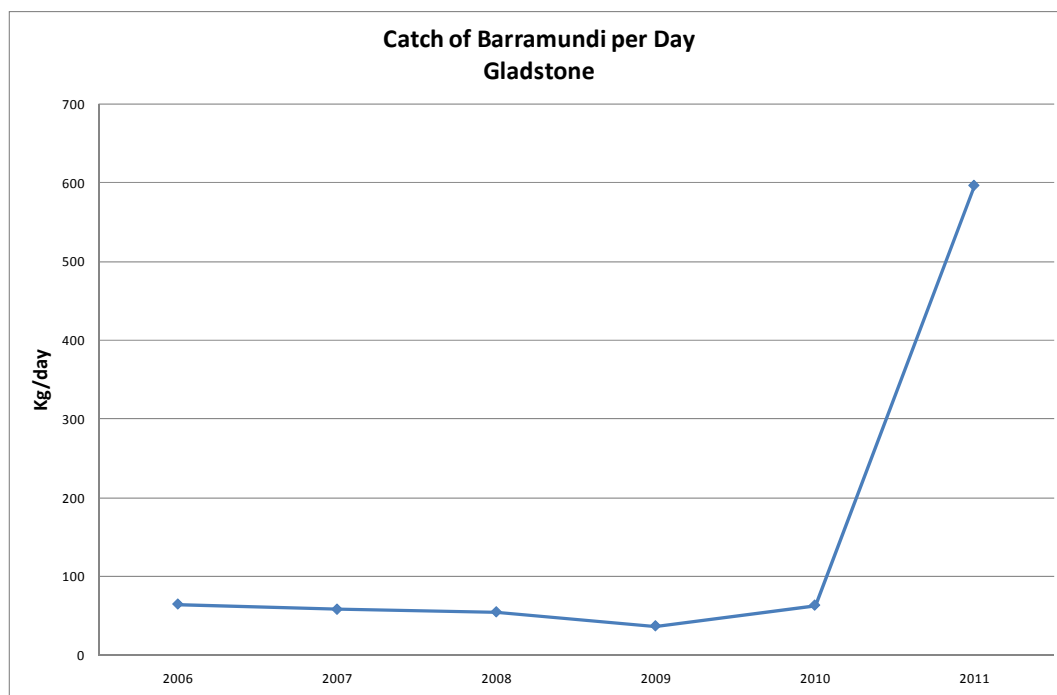
Figure 1 clearly shows that during 2011 significantly more barramundi were caught per month than in previous years. This increase becomes clear in Figure 2 which compares the annual catch of barramundi for the period 2005–2010 with the monthly catch of barramundi for 2011.



**Figure 2.** Yearly catch in tonnes of barramundi in Gladstone 2005–2010 compared to monthly catch in 2011. Note barramundi catch in each month of 2011 was similar or exceeded annual barramundi catch in each of preceding six years.

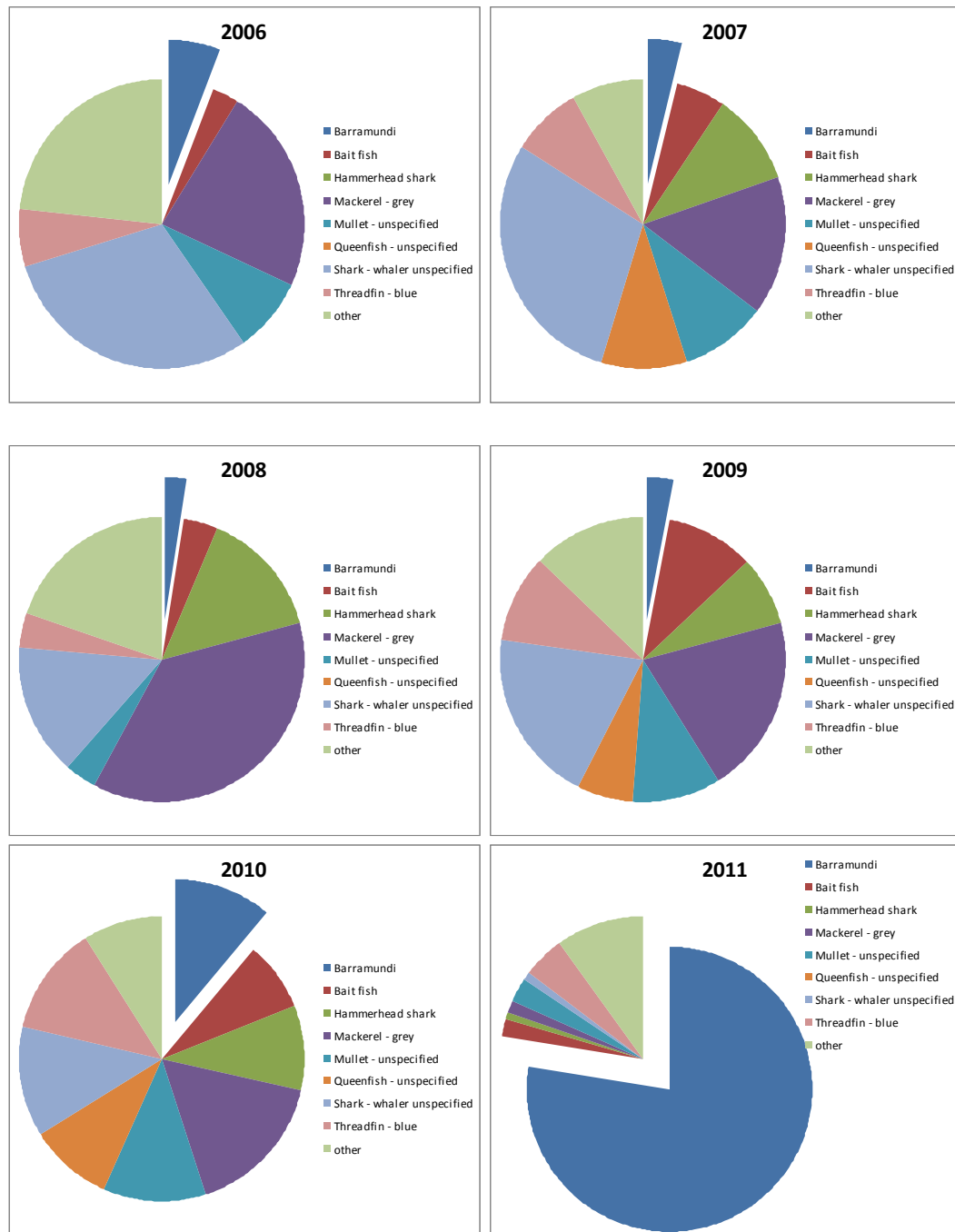
The increase in catch is not the result of more commercial fishers netting in Gladstone Harbour as this number has not significantly changed compared to previous years.

The increase in catch is not the result of more fishers targeting barramundi but represents a significant increase in abundance which can be seen in the daily catch rates of barramundi since 2005 (Figure 3). These catch rates have been confirmed by Fisheries Observers working with commercial fishers. In addition there has not been any major change in the number of commercial fishers involved in netting within the logbook grid S30.



**Figure 3.** Average annual catch of Barramundi per day from Gladstone.

The significance of the increase in the barramundi population within Gladstone Harbour can also be seen when the catch composition of fish taken by commercial net fishers is considered. Figure 4 shows that in 2011 barramundi represented approximately three quarters of the catch compared with less than 15% in previous years.



**Figure 4.** Yearly catch composition of the top species. Note marked increase in the barramundi percentage of catch in 2011 compared to previous years.

## Conclusions

The introduction of 300 tonnes of barramundi did represent a significant change in the species composition in Gladstone Harbour as seen by changes in catch, catch rate and catch composition.

Of the 300 tonnes of barramundi that were introduced into Gladstone harbour, it is estimated that 170 tonnes have been caught and marketed by commercial fishers. This means that there is still more than 100 tonnes of fish within the area. Higher than normal densities are being seen in the Boyne River.