

LAKE BAROON REVIEW JUNE 2025

INFORMATION RATING



Stocking group: Ewen Maddock Fish Management Inc

Species: Australian Bass, Mary River Cod, Eeltail Catfish (not stocked)

Stocking timeframe: 2014-2022

Fish timeframe: 2016-2025 Jan-Jun

Fisher timeframe: 2021-2025 Jan-Jun

DPI link: <https://www.daf.qld.gov.au/rsa/sips-dams-and-weirs/profile?dam=baroon-pocket-dam>

Ewen Maddock Fish Management Inc: <https://www.facebook.com/p/Ewen-Maddock-Fish-Management-Inc-100064402463065/>

Lake Baroon has been regularly stocked with Australian Bass and Mary River Cod. From 2014-2022 there were 133,120 Bass and 13,450 Mary River Cod stocked. There have been 133 Bass tagged for each 10,000 fingerlings stocked.

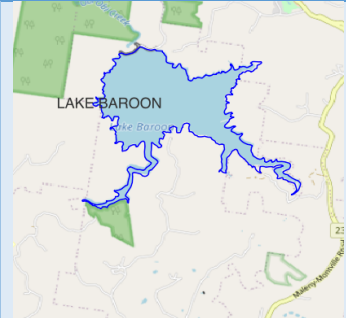

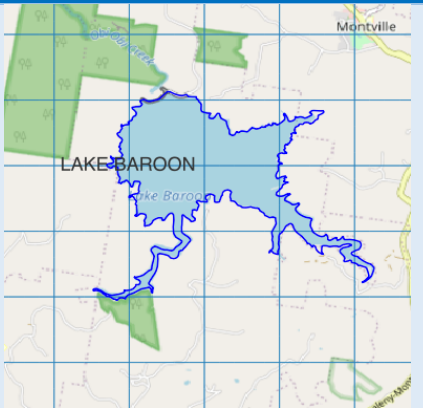
Fishing in the lake is limited to use of electric motors however due to the small size of the lake this does not limit the areas of the lake fished. Fishing in the lake occurs year-round however there was more activity in the first half by taggers and those recapturing fish.

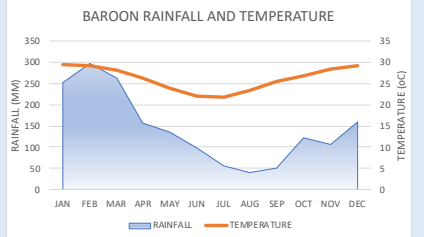
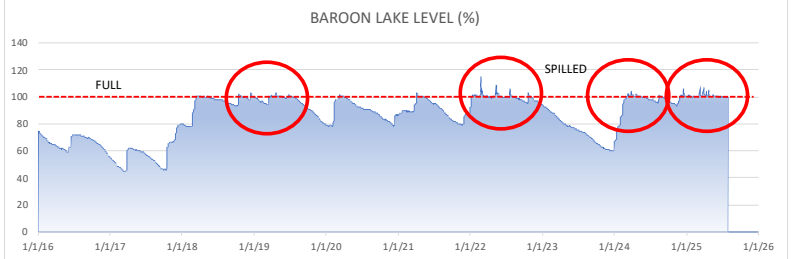
The fishery is mostly experiential with a low harvest rate of 6% for legal Bass being kept by those recapturing fish (ex-taggers) and is mostly a local fishery with fishers from the Sunshine Coast and Brisbane. Fishing effort was boosted last year with the lake being included in the Fish 'n' SIPS competition with one of the competition fish being caught by a young local fisher.

There were insufficient days fished by taggers to provide an annual tag rate from 2016-2019. The overall tag rate from 2015-2024 was 10.8 fish/day however that is influenced by some taggers using bait fishing resulting in large numbers of fish (over 20/day) being tagged. That also contributed to a tag rate of 12.1 fish/day this year.

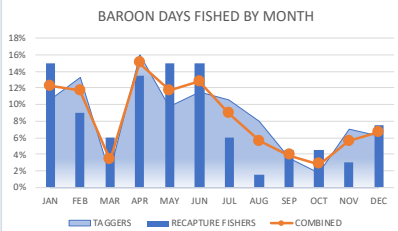
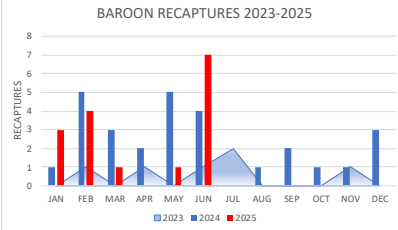
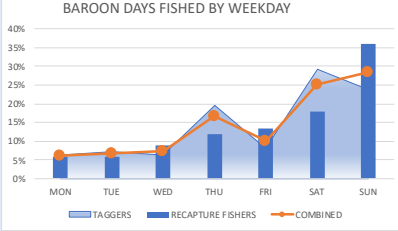
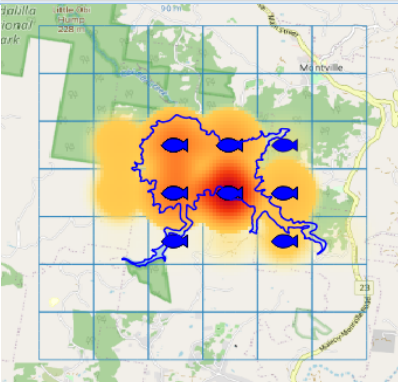
The lake spilled on several occasions during 2022 making fishing conditions difficult which restricted tagging. The spilling resulted in fish leaving the lake and along with the fishing conditions this resulted in a reduction in recaptures. Last year the lake was closed to boating and fishing for around a month from mid-Mar to mid-Apr due to spilling. However, fishing conditions remained good with increased tagging activity and recaptures. The lake spilled again in Dec last year and from Jan-May this year.

Since the spilling of the lake in 2022 fish have been 19 recaptured all the way down the Mary River as far as Maryborough and even in Tinana Creek with the furthest movement being 272km. Fish leaving the lake were mostly larger over 400mm and this has resulted in fewer fish over 400mm being tagged in the lake since then.

LAKE BAROON		LOCATION
	Lake Baroon 26.71°S 152.87°E	
LAKE		
Grid map Lake Baroon LBN	Surface area 4km ²	

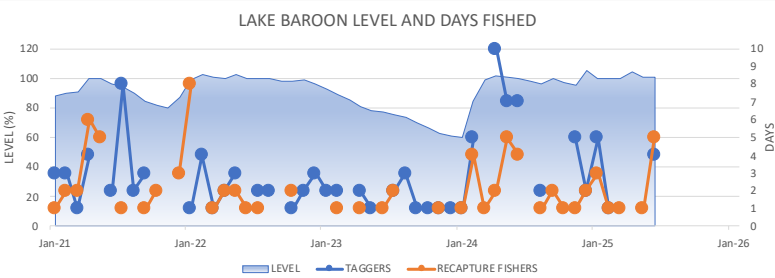
ENVIRONMENTAL				
Mean monthly rainfall (mm)	Rainfall	Month	mm	<div>BAROON RAINFALL AND TEMPERATURE</div> 
	Max	Feb	295	
Mean monthly air temperature (oC)		Mar	263	
	Temp	Month	oC	
	Max	Dec-Feb	29	
Surface area	<div>BAROON LAKE LEVEL (%)</div> 			
Lake level				
2016-2025				
Spilled				
2019				
2020				
2021				
2022				
2024				
2025 Jan-May Mar (109%)				

FISHERS																													
DATA RELIABILITY																													
Sample size (days fished)	<table><tr><td>Reliability level</td><td>LOW</td><td>MODERATE</td><td>MODERATE</td><td></td><td>HIGH</td></tr><tr><td>Samples</td><td>10</td><td>41</td><td>68</td><td>271</td><td>384</td><td>664</td></tr><tr><td>Confidence</td><td>80%</td><td>80%</td><td>90%</td><td>90%</td><td>95%</td><td>99%</td></tr><tr><td>Error</td><td>20%</td><td>10%</td><td>10%</td><td>5%</td><td>5%</td><td>5%</td></tr></table>		Reliability level	LOW	MODERATE	MODERATE		HIGH	Samples	10	41	68	271	384	664	Confidence	80%	80%	90%	90%	95%	99%	Error	20%	10%	10%	5%	5%	5%
Reliability level	LOW	MODERATE	MODERATE		HIGH																								
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Tag days (blue arrow)																													
Recaptures (orange arrow)																													
Confidence %																													
Error %																													
2021-2025																													
TYPE OF FISHERY																													
Seasonality	Days	180																											
Mean rainfall (mm) and temperature (oC)	Months most effort																												
Days fished combined	Fishers combined	Apr																											
Taggers		Jun																											
Recapture fishers		Jan																											
2021-2025	Note: Lake was closed in																												
2025 Jan-Jun	Mar-Apr 2024																												
Harvest or experiential fishery	Bass legal fish kept rate																												
Release rate of recaptured legal Bass	Legal fish	78																											
2021-2025	Kept	5 (6%)																											
2025 Jan-Jun	Released	73 (94%)																											
Local or visitor fishery	Recapture fishers	90																											
Where recapture fishers live	Local	69 (77%)																											
2021-2025	Visitor	21 (23%)																											
2025 Jan-Jun																													
Recapture fishers	Recaptures	84																											
Gender (ex-taggers)	Male	77 (92%)																											
2021-2025	Female	7 (8%)																											
2025 Jan-Jun																													

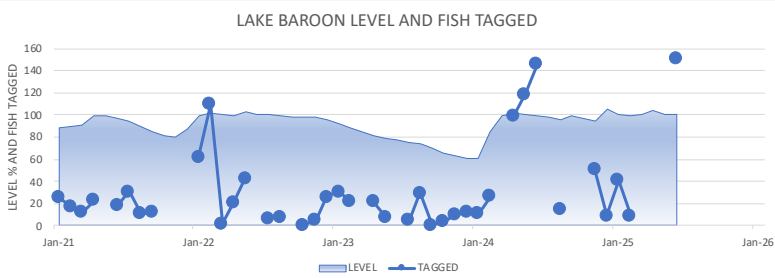
ACTIVITY			
Monthly activity Taggers (113) Recapture fishers (67) Days fished 2021-2025 2025 Jan-Jun	Taggers	Month	%
		Apr	16%
		Feb	13%
	Recaps	Jan	15%
		May	15%
		Jun	15%
			
Monthly activity Recaptures 2023-2025 2025 Jan-Jun	Baroon was closed from 18/3/2024-16/4/2024 No recaptures		
Weekday activity Days fished Taggers (113) Recapture fishers (67) 2021-2025 2025 Jan-Jun	Taggers	Day	%
		Weekend	53%
		Weekdays	47%
	Recaps	Weekend	54%
		Weekdays	46%
			
Location activity Tagged (red-orange heatmap) Recaptured (blue fish) 2021-2025 2025 Jan-Jun	Tagged	1265	
	Recaptured	90	
			

EFFORT

**Lake level (%) and days
fished taggers and
recapture fishers
2021-2025
2025 Jan-Jun**

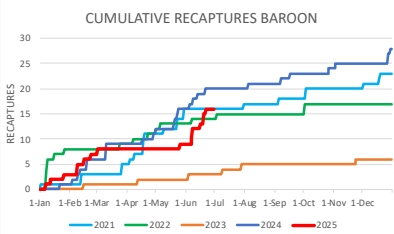


**Lake level (%)
Fish tagged
2016-2025
2025 Jan-Jun**

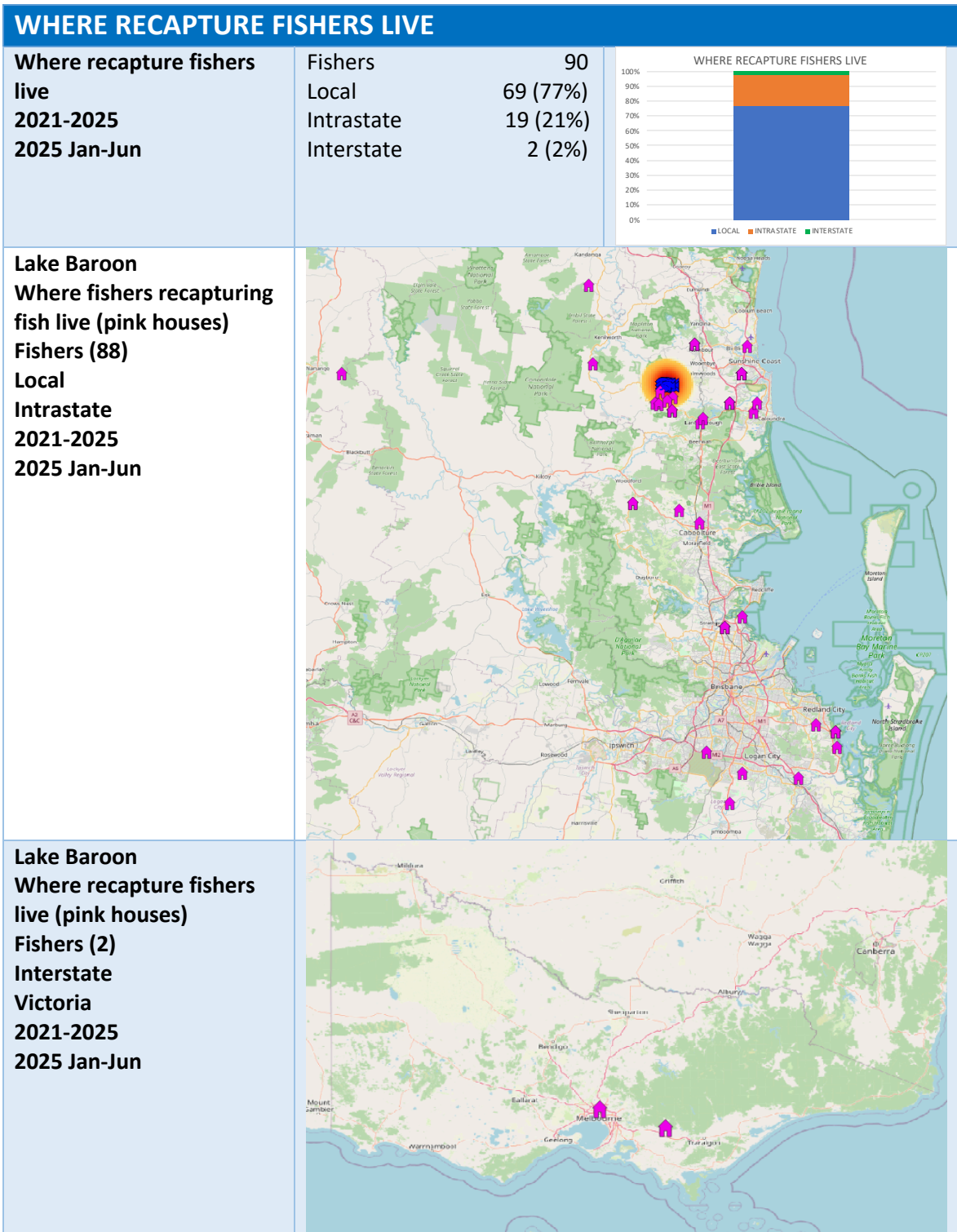





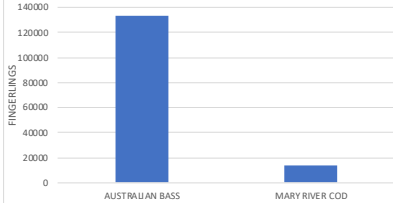
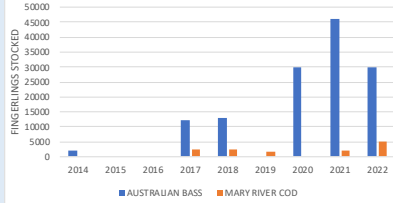
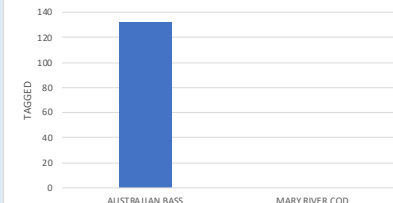
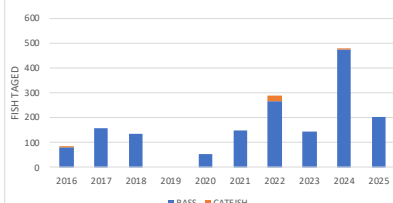
**Cumulative recaptures
2021-2025
2025 Jan-Jun**

Year	Recaps
2021	23
2022	17
2023	6
2024	28
2025 Jan-Jun	16



TRAVEL			
Cumulative distance (km) home to recapture location Local Intrastate 2021-2025 2025 Jan-Jun	Year	Km	
	2021	793	
	2022	615	
	2023	198	
	2024	772	
	2025 Jan-Jun		
Distance (km) home to recapture location by year Local Intrastate 2021-2025 2025 Jan-Jun			
Distance (km) home to recapture location Local Intrastate Interstate 2021-2025 2025 Jan-Jun	Trips	90	
	Range (km)		
	Local	2-33	
	Intrastate	68-114	
	Interstate	1412-1431	
Average distance (km) home to recapture location Local Intrastate 2021-2025 2025 Jan-Jun	Trips	82	
	Average distance (km)		
	Local	16	
	Intrastate	82	
	Interstate	1422	



FISH		
AUSTRALIAN BASS	MARY RIVER COD	EELTAIL CATFISH
		
STOCKING		
Fingerlings stocked 2013-2023	<div><div>Bass133,120</div><div>Mary River Cod13,450</div><div>Eeltail Catfish native not stocked</div></div>	<div><div>FISH STOCKED 2014-2022</div></div>
Fingerlings stocked each year 2014-2022		<div><div>BAROON STOCKED FISH</div></div>
SPECIES TAGGED		
Fish tagged 2016-2025 per 10,000 fish stocked 2014-2022	<div><div>Australian Bass133</div><div>Mary River Cod0</div><div>(not able to be tagged)</div></div>	<div><div>FISH TAGGED PER 10,000 FISH STOCKED</div></div>
Species tagged 2016-2025 2025 Jan-Jun	<div><div>Australian Bass1664</div><div>Eeltail Catfish26</div></div>	<div><div>BAROON SPECIES TAGGED</div></div>

AUSTRALIAN BASS



DATA RELIABILITY

Sample size (fish/year)
Tag days (blue arrow)
Recaptures (orange arrow)
Confidence %
Error %
2021-2025

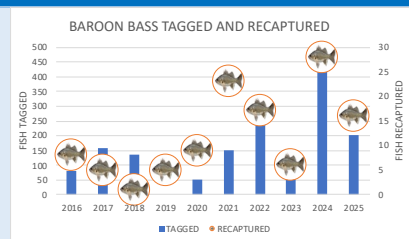
Reliability level	LOW		MODERATE		MODERATE	HIGH	
Samples	10	41	68	271	384	664	
Confidence	80%		80%		90%	95%	99%
Error	20%		10%		5%	5%	5%



TAGGED AND TAG RATE

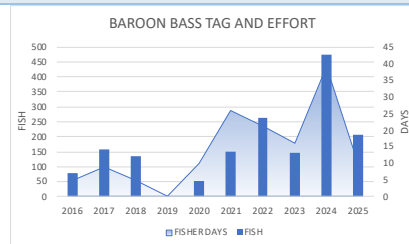
Bass
Tagged
Recaptured
2016-2025
2025 Jan-Jun

Tagged 1664
Recaptured 118
Recapture rate 7.1%
Tagged 2025 Jan-Jun 206



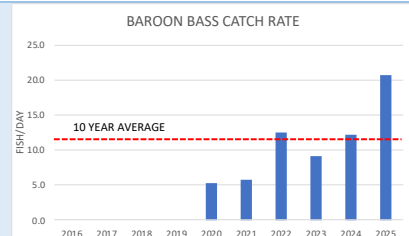
Tag and effort taggers
Tagged fish
Days fished
2016-2025
2025 Jan-Jun

High Low Now
Tagged
2015 2019 2025
306 0 206
Days
2015 2019 2025
32 0 10



Tag rate
Fish/day
2016-2025
2025 Jan-Jun

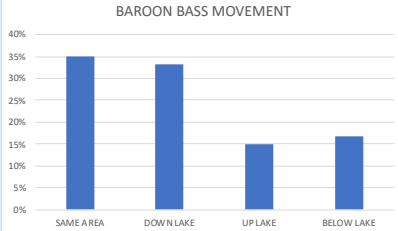
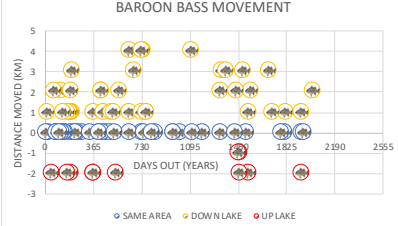
Insufficient days fished
2016-2019
Tag rate
2025 Jan-Jun 20.6
10 year catch rate 11.8

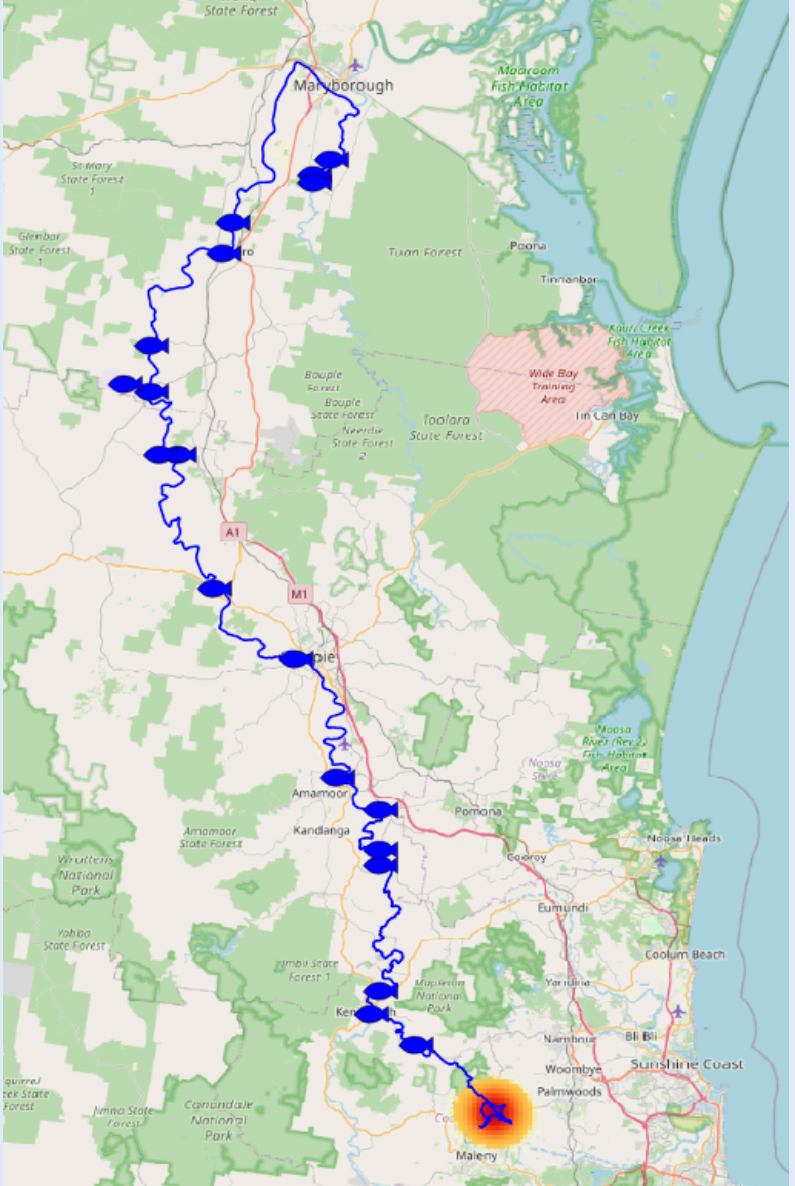


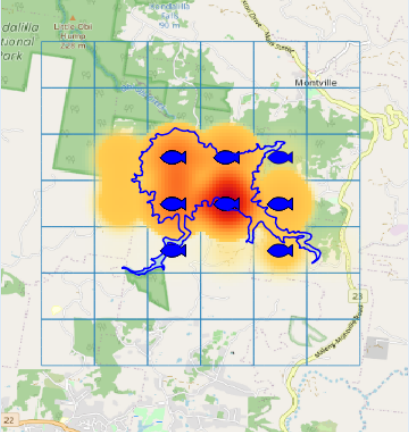
LENGTHS				
Average length (mm) Bars show length range Dots show outliers 2016-2025 2025 Jan-Jun	High	Low	Now	
	Average length			
	2017	2023	2025	
	389	314	319	
	Largest			
Fish length percentage (%) Undersize <300mm Legal 300-499mm Trophy 500+mm 2016-2025 2025 Jan-Jun	High	Low	Now	
	Legal			
	2016	2017	2025	
	99%	65%	78%	
	Trophy			
Length of fish recaptured in lake and below dam 2022-2024	2015	2023	2025	
	5%	0%	0%	
	Recaptures	Lake	Below	
	Average	22	18	
	Min	398	422	
	Max	320	370	
		470	470	


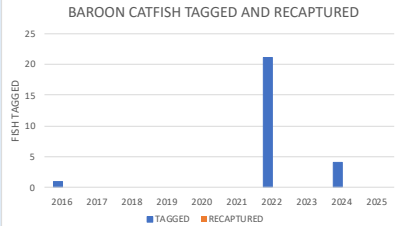
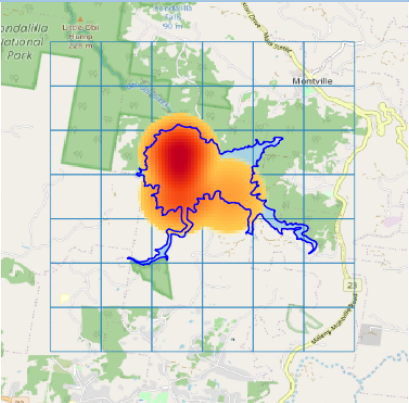
FATE				
Legal Bass recaptures kept and released by recfishers (ex-taggers) Legal length 300mm 2016-2025 2025 Jan-Jun	Recaptures	103		
	Kept	11 (11%)		
	Released	92 (89%)		


GROWTH				
Bass growth at the end of each year based on recaptures of tagged fish <300mm 2016-2025 2025 Jan-Jun	Recaptures	28		
	Annual growth (mm)			
	Year 1	70		
	Year 2	113		
	Year 3	138		
	Year 4	156		
	Year 5	181		

MOVEMENT		
Movement of tagged fish Recaptured 2016-2025 2025 Jan-Jun	Recaptures	114
	Same area	40 (35%)
	Down lake	38 (33%)
	Up lake	17 (15%)
	Below lake	19 (17%)
Movement of tagged fish in lake Recaptured 2016-2025 2025 Jan-Jun		
		

RECAPTURES BELOW DAM	
Recaptures below dam Mary River Tinana Creek After 2022 spill (blue fish) Bass 18 Furthest distance 272km	

TAG LOCATIONS		
Bass Tagged fish (red-orange heat map) Recaptures (blue fish) 2021-2025 2025 Jan-Jun	Tagged Recaptures	1664 118
		

EELTAIL CATFISH		
		
TAGGED		
Fish tagged 2016-2025 2025 Jan-Jun	Tagged 26 Recaptured 0	
Location of tagged fish 2016-2025 2025 Jan-Jun	Tagged 26	

MARY RIVER COD		
		
CAUGHT		
All measures 2016-2025 2025 Jan-Jun	Fish recorded 0 Mary River Cod are not able to be tagged in Lake Baroon	

Data sources

Data used in the Lake Baroon Crystal Bowl are:

- Tag records and recapture records for the impoundment at <http://crystalbowl.infofishaustralia.com.au/>.
- Dam level data from SEQwater at <https://www.seqwater.com.au/historic-dam-levels>.
- Stocked fish records from Ewen Maddock Fish Management Inc.
- Rainfall and temperature records for Station 040695 Palmwoods from <http://www.bom.gov.au/climate/data>.

Basis for analysis

- Data reliability based on the sample size over the past 5 years for days fished by taggers, by fishers recapturing fish and fish tagged and recaptured.
- Catch rates calculated as number of fish tagged/day for taggers with a minimum of 12 fisher days to provide a reliable catch rate.
- For Bass undersized fish are <300mm, legal fish are ≥300 and <500mm and trophy fish are ≥500mm.
- Growth calculated using logarithmic curve from recaptures where fish were out for 90 days or more and had positive growth.
- Locations based on Infofish grid map LBN for the impoundment and other grid maps where fish were recaptured outside the impoundment.
- Travel proxy distance is the distance between where the fisher lives (address, suburb, town or postcode) and the recapture location. Local <60km, intrastate Qld elsewhere, interstate other than Qld.