

LAKE MOOGERAH REVIEW 2025

INFORMATION RATING



Stocking group: Maroon-Moogerah Fish Management Association

Species stocked: Australian Bass, Golden Perch, Silver Perch

Stocking timeframe: 2014-2023

Fish timeframe: 2016-2025

Fisher timeframe: 2021-2025

DPI link: <https://www.qld.gov.au/recreation/activities/boating-fishing/rec-fishing/dams/stocked-impoundment-permits/locations/moogerah>

Scroll through the dashboard to cover all subjects or for information on a specific subject go to:

LAKE MOOGERAH OVERVIEW

LAKE MOOGERAH LOCATION

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FISH TAGGED

BASS

GOLDEN PERCH

SILVER PERCH

LAKE MOGERAH OVERVIEW

Highlights for 2025

- The tag rate of Bass in Moogerah remains high at 15.0 fish/day and taggers have preferred to fish there rather than other lakes where the catch rates are lower.
- Recaptures are at their highest level at 120 for the year and the recapture rate of 13.3% over the past decade suggesting the increase in activity goes beyond taggers.
- A harvest rate of legal recaptured Bass of 17% by recfishers other than taggers suggests that this is mostly an experiential fishery.

Lake Moogerah is fished all year-round with a peak in Jan and in Sep-Oct. It is mainly an experiential fishery with a low harvest rate of 17% of legal Bass by recapture fishers (ex-taggers) in the last 5 years. Given the high catch rates and feedback from fishers there is a tendency for non-taggers to release tagged fish if they see the tag.

Recaptures occur on an almost 50-50 basis on weekends and weekdays. However, taggers prefer the weekdays with 76% of fish tagged then. Avoiding the busier times on the weekends could be influencing this.

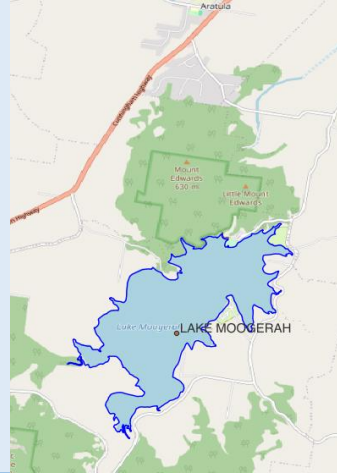
Fishers recapturing fish are a mix of local and visitors mostly living less than 100km from the lake coming from Ipswich, Brisbane, and the Scenic Rim.

The tag rate for Bass has averaged 12.9 fish/day and is 15.0 this year, however that figure has been influenced by some taggers using bait and catching large numbers of fish per day, although there have been big catch days by those using lures as well. The high tag rate has seen an increase in tagging effort while there has been a corresponding decline in tagging effort in Lake Maroon where the catch rate is much lower.

Since the 2022 spill there have been 16 recaptures below the dam. Of these 14 were recaptured in the first few kms below the dam wall while 2 fish have been recaptured in the Bremer River at Ipswich. The dam has spilled again in Dec 2024 through to Apr 2025.

The longest time out for a Bass after tagging is mostly around 12 years however 1 fish was recaptured after 26 years. This was a fish tagged in 1994 and recaptured in 2020 in Tingalpa Creek and is the longest time between tagging and recapture for a freshwater fish anywhere.

LAKE MOOGERAH LOCATION

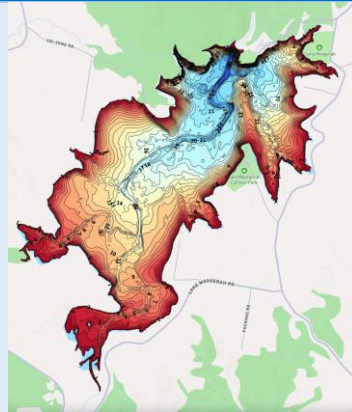


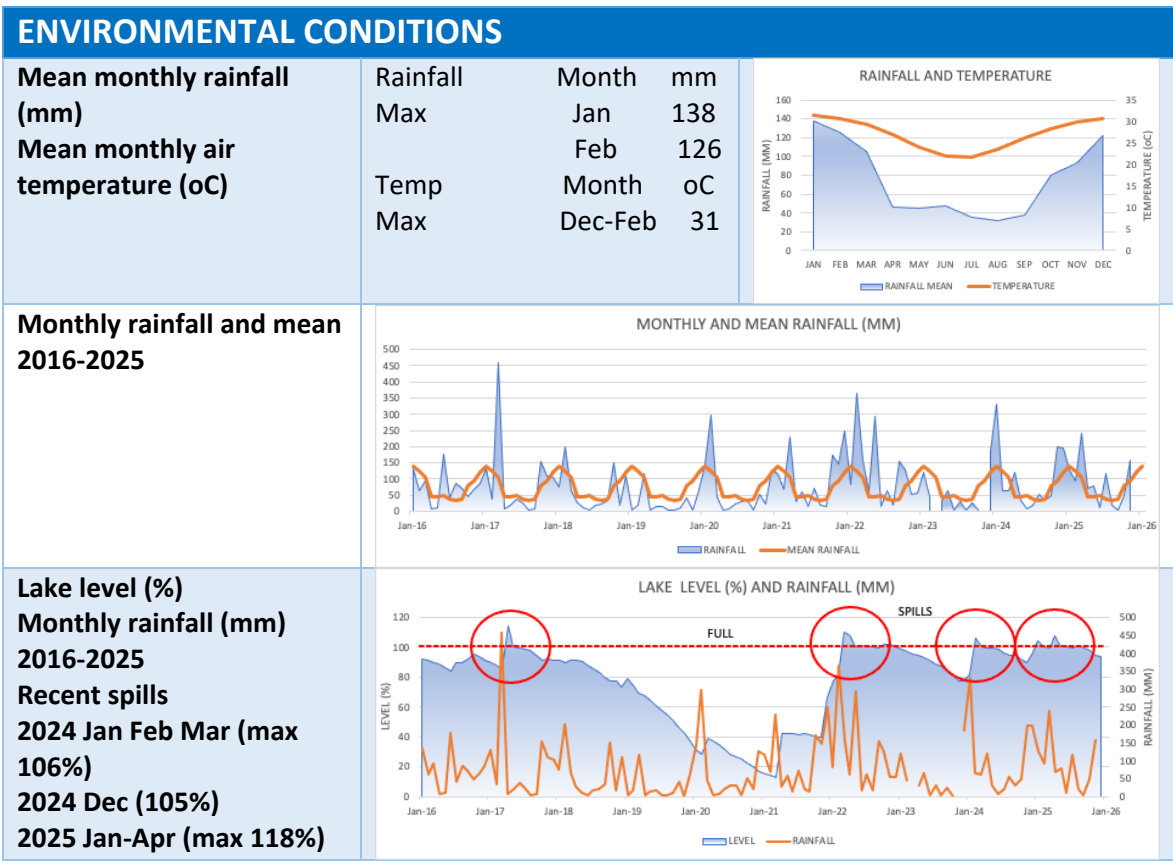
Lake Moogerah
28.05°S
152.54°E



LAKE

Grid map
Lake Moogerah LMH
Surface area
8.3km²
Bathymetry





TYPE OF FISHERY																						
DATA RELIABILITY																						
Sample size (days fished)	<table><tr><td>Reliability level</td><td>LOW</td><td>MODERATE</td><td>MODERATE</td><td>HIGH</td></tr><tr><td>Samples</td><td>10</td><td>41</td><td>68</td><td>271</td></tr><tr><td>Confidence</td><td>80%</td><td>80%</td><td>90%</td><td>95%</td></tr><tr><td>Error</td><td>20%</td><td>10%</td><td>5%</td><td>5%</td></tr></table>		Reliability level	LOW	MODERATE	MODERATE	HIGH	Samples	10	41	68	271	Confidence	80%	80%	90%	95%	Error	20%	10%	5%	5%
Reliability level	LOW	MODERATE	MODERATE	HIGH																		
Samples	10	41	68	271																		
Confidence	80%	80%	90%	95%																		
Error	20%	10%	5%	5%																		
Tag days (blue arrow)																						
Recaptures (orange arrow)																						
Confidence %																						
Error %																						
2021-2025																						
Seasonality	Fisher days	346																				
Mean rainfall (mm)	Months most effort	Jan																				
temperature (oC)		Oct																				
Days fished combined		Sep																				
Taggers																						
Recapture fishers																						
2021-2025																						
Harvest or experiential fishery	Bass legal fish kept rate																					
Release rate of recaptured legal Bass	Legal fish	227																				
2021-2025	Kept	38 (17%)																				
	Released	189 (83%)																				
Local or visitor fishery	Recapture fishers	302																				
Where recapture fishers live	Local	262 (87%)																				
2021-2025	Visitor	40 (13%)																				
Gender of recapture fisher (ex-taggers)	Fishers	234																				
2021-2025	Male	217 (93%)																				
	Female	17 (7%)																				

FISHING SEASONALITY

Month	Rainfall (mm)	Temperature (°C)	Days Fished
JAN	140	25	45
FEB	100	20	35
MAR	40	15	10
APR	60	10	20
MAY	100	10	30
JUN	100	10	30
JUL	60	10	20
AUG	80	15	25
SEP	100	20	35
OCT	120	25	40
NOV	100	20	30
DEC	120	25	25

TYPE OF FISHERY

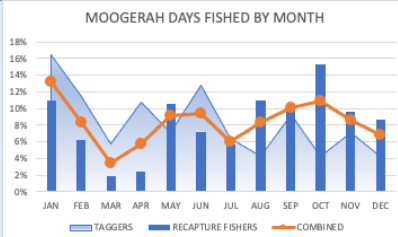
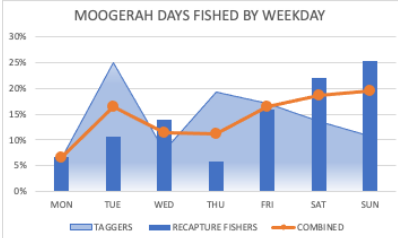
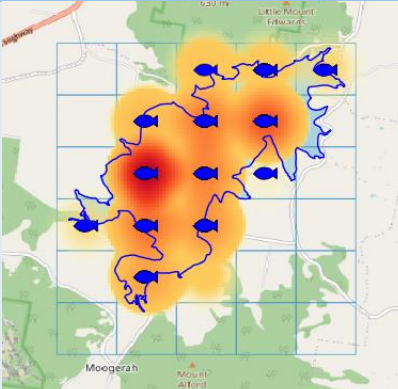
Type of Fishery	Percentage
HARVEST	17%
EXPERIENTIAL	83%

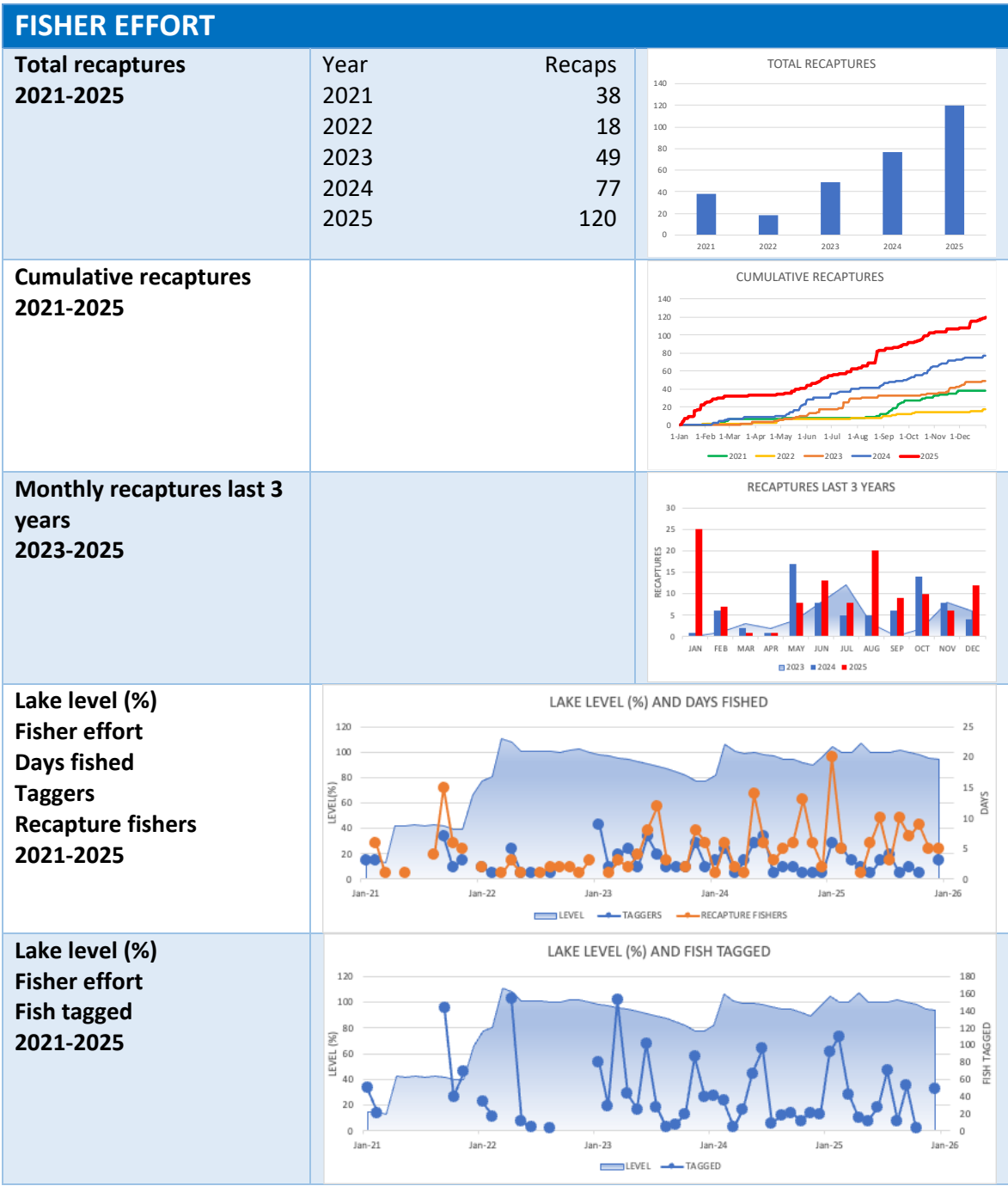
TYPE OF FISHER

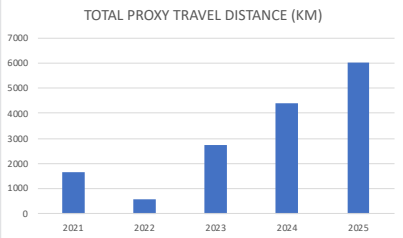
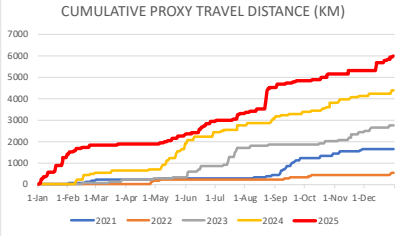
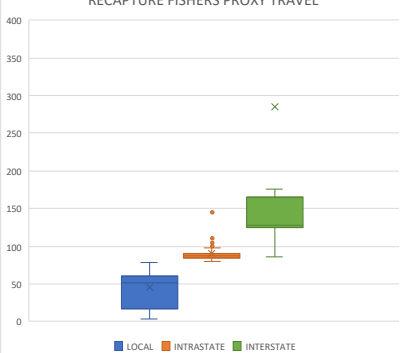
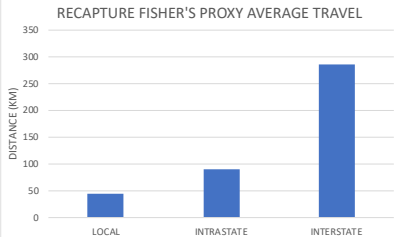
Type of Fisher	Percentage
LOCAL	87%
VISITOR	13%

GENDER OF RECAPTURE FISHERS

Gender of Recapture Fishers	Percentage
MALE	93%
FEMALE	7%

FISHER ACTIVITY			
Monthly activity Days fished combined Taggers (140) Recapture fishers (209) 2021-2025	Combined	Month	%
		Jan	13%
		Oct	11%
		Sep	10%
			
Weekday activity Days fished combined Taggers (140) Recapture fishers (209) 2021-2025	Combined	Day	%
		Weekend	38%
		Weekdays	62%
			
		Location activity Tagged fish (red-orange heat map) Recaptures (blue fish) 2021-2025	Tagged Recaptured
306			
			

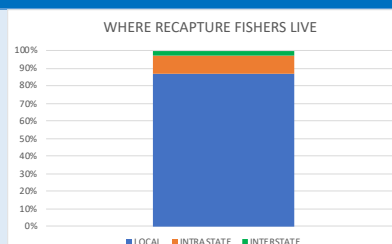


FISHER TRAVEL		
Total distance (km) home to recapture location 2021-2025	Year	Km
	2021	1659
	2022	567
	2023	2755
	2024	4375
	2025	6008
		
Distance (km) home to recapture Local Intrastate 2021-2025	Cumulative distance (km) home to recapture location 2021-2025	
		
Distance (km) home to recapture location Local Intrastate Interstate 2021-2025	Trips	302
	Range (km)	
	Local	4-79
	Intrastate	80-145
	Interstate	86-1388*
	*not shown on graph	
		
Average distance (km) home to recapture location Local Intrastate Interstate 2021-2025	Trips	302
	Average distance (km)	
	Local	45
	Intrastate	90
	Interstate	286
		

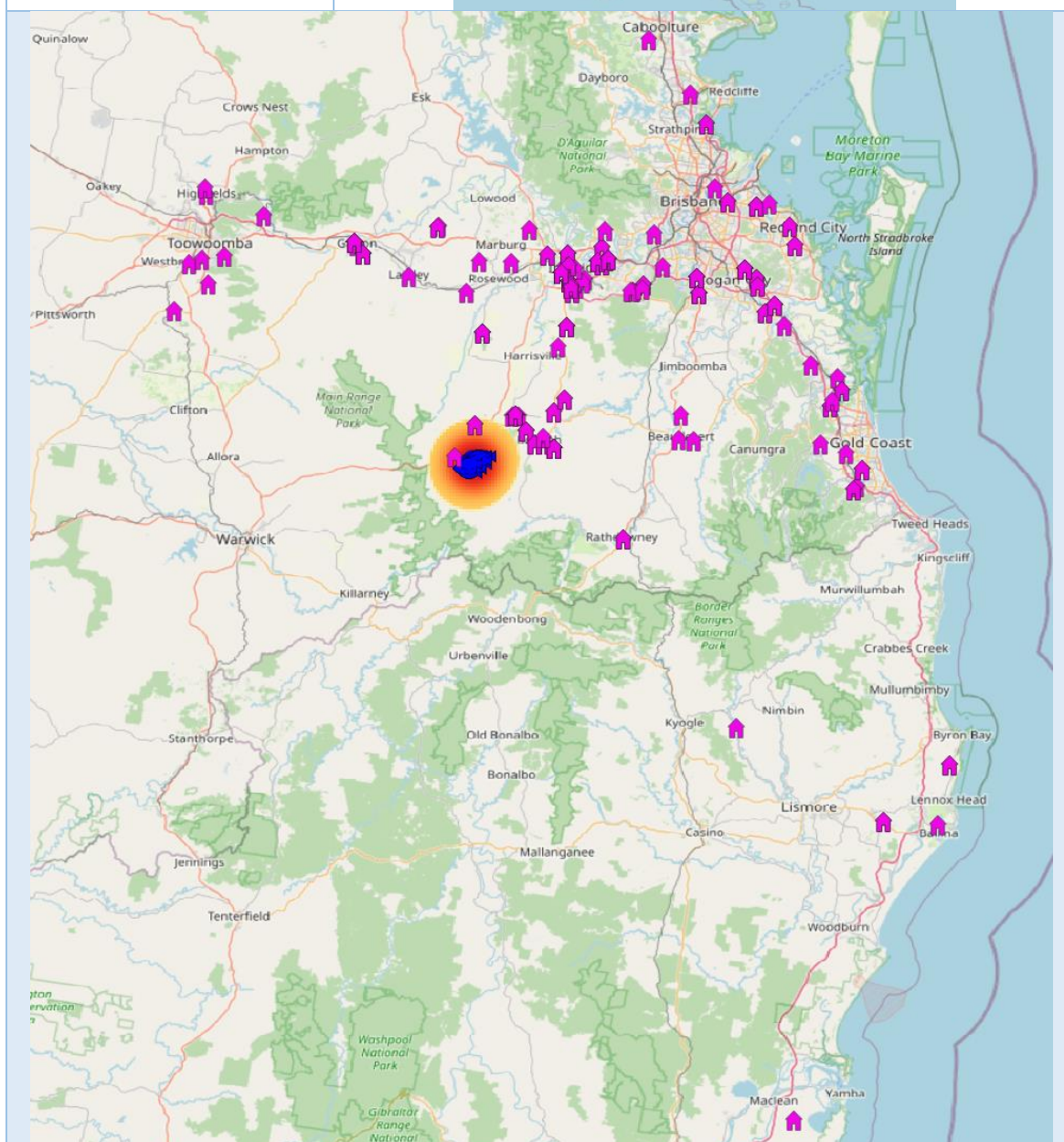
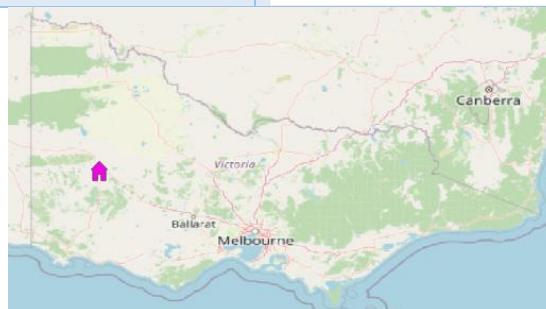
WHERE RECAPTURE FISHERS LIVE




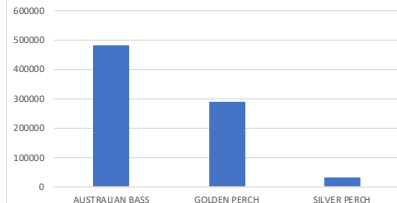
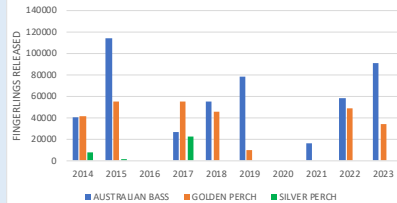
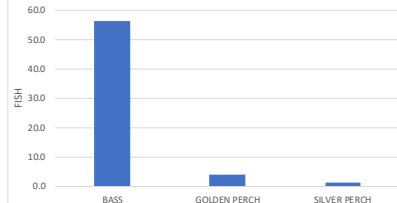
Where recapture fishers live
2021-2025

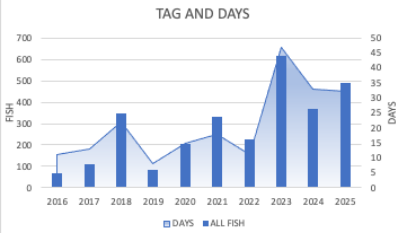
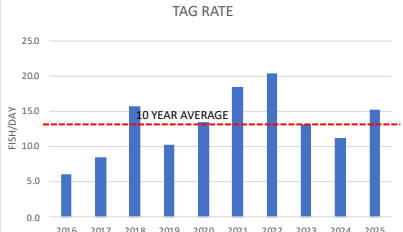
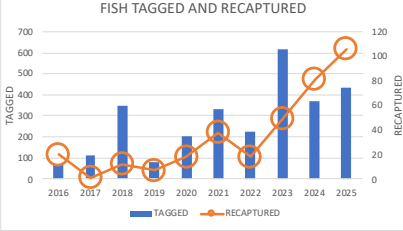
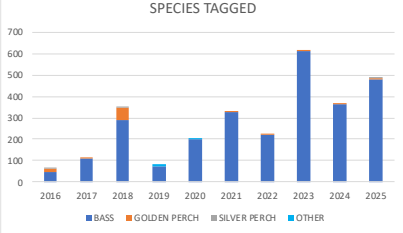
Fishers	302
Local	262 (87%)
Intrastate	32 (11%)
Interstate	8 (3%)



Lake Moogerah
Where fishers recapturing fish live (pink houses)
Local
Intrastate
Interstate
2021-2025



FISH STOCKING																																														
AUSTRALIAN BASS	GOLDEN PERCH	SILVER PERCH																																												
																																														
STOCKING																																														
Fingerlings stocked 2014-2023	<table><tr><td>Bass</td><td>481,687</td></tr><tr><td>Golden Perch</td><td>290,713</td></tr><tr><td>Silver perch</td><td>31,768</td></tr></table>	Bass	481,687	Golden Perch	290,713	Silver perch	31,768	<p>FINGERLINGS STOCKED 2014-2023</p>  <table><tr><th>Species</th><th>Fingerlings Stocked (2014-2023)</th></tr><tr><td>Australian Bass</td><td>481,687</td></tr><tr><td>Golden Perch</td><td>290,713</td></tr><tr><td>Silver Perch</td><td>31,768</td></tr></table>	Species	Fingerlings Stocked (2014-2023)	Australian Bass	481,687	Golden Perch	290,713	Silver Perch	31,768																														
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Fingerlings stocked by year 2014-2023	Able to be tagged from 2016-2025	<p>MOOGERAH STOCKED FISH 2014-2023</p>  <table><tr><th>Year</th><th>Australian Bass</th><th>Golden Perch</th><th>Silver Perch</th></tr><tr><td>2014</td><td>40,000</td><td>40,000</td><td>10,000</td></tr><tr><td>2015</td><td>110,000</td><td>50,000</td><td>10,000</td></tr><tr><td>2016</td><td>0</td><td>0</td><td>0</td></tr><tr><td>2017</td><td>20,000</td><td>50,000</td><td>10,000</td></tr><tr><td>2018</td><td>50,000</td><td>40,000</td><td>10,000</td></tr><tr><td>2019</td><td>70,000</td><td>10,000</td><td>10,000</td></tr><tr><td>2020</td><td>0</td><td>0</td><td>0</td></tr><tr><td>2021</td><td>10,000</td><td>0</td><td>0</td></tr><tr><td>2022</td><td>50,000</td><td>40,000</td><td>10,000</td></tr><tr><td>2023</td><td>90,000</td><td>30,000</td><td>10,000</td></tr></table>	Year	Australian Bass	Golden Perch	Silver Perch	2014	40,000	40,000	10,000	2015	110,000	50,000	10,000	2016	0	0	0	2017	20,000	50,000	10,000	2018	50,000	40,000	10,000	2019	70,000	10,000	10,000	2020	0	0	0	2021	10,000	0	0	2022	50,000	40,000	10,000	2023	90,000	30,000	10,000
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Fish tagged 2016-2025 per 10,000 fish stocked 2014-2023	<table><tr><td>Tagged/10,000 fingerlings</td><td></td></tr><tr><td>Bass</td><td>56</td></tr><tr><td>Golden Perch</td><td>4</td></tr><tr><td>Silver Perch</td><td>1</td></tr></table>	Tagged/10,000 fingerlings		Bass	56	Golden Perch	4	Silver Perch	1	<p>FISH TAGGED PER 10,000 STOCKED</p>  <table><tr><th>Species</th><th>Fish Tagged per 10,000 Stocked</th></tr><tr><td>Bass</td><td>56</td></tr><tr><td>Golden Perch</td><td>4</td></tr><tr><td>Silver Perch</td><td>1</td></tr></table>	Species	Fish Tagged per 10,000 Stocked	Bass	56	Golden Perch	4	Silver Perch	1																												
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FISH TAGGED				
Tagged Days fished 2016-2025	High	Low	Now	
	Tagged			
	2023	2016	2025	
	610	49	489	
Tag rate Fish/day 2016-2025	Days			
	2023	2019	2025	
	47	8	32	
Tagged Recaptured 2016-2025	High	Low	Now	
	Tagged			
	2023	2016	2025	
	610	49	427	
Species tagged 2016-2025	Recaptured			
	2024	2017	2025	
	81	1	120	
	Bass		Tagged	
	Golden Perch		2719	
	Silver Perch		114	
			4	

BASS



DATA RELIABILITY

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

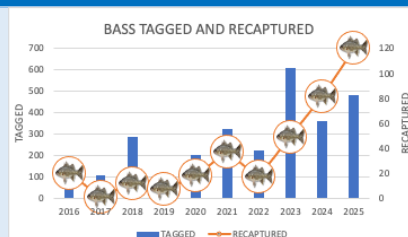
Reliability level	LOW		MODERATE		MODERATE	HIGH	
Samples	10	41	68	271	384	664	
Confidence	80%	80%	90%	90%	95%	99%	
Error	20%	10%	10%	5%	5%	5%	



TAGGED AND TAG RATE

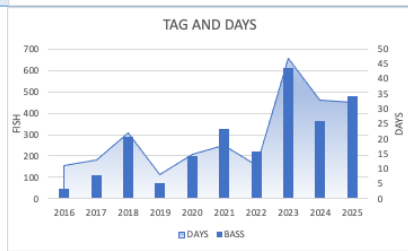
Bass
Tagged
Recaptured
2016-2025

Tagged 2719
Recaptured 362
Recapture rate 13.3%
Tagged 2025 480



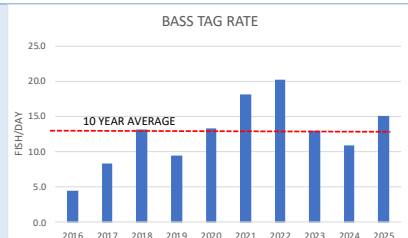
Tag and effort
Taggers
Days fished
Fish tagged
2016-2025

High Low Now
Tag
2023 2016 2025
610 49 480
Effort
2023 2019 2025
47 8 32



Tag rate
Fish/day
2016-2025

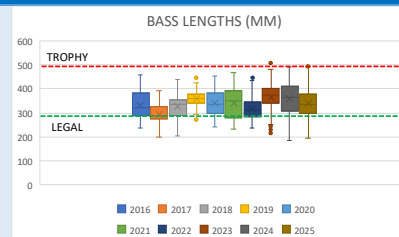
High Low Now
Tag rate
2022 2016 2025
20.2 6.2 15.0
10 year average 12.9



LENGTHS

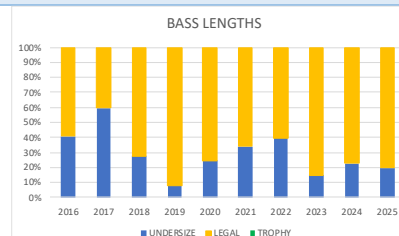
Average length (mm)
Bars show length range
Dots show outliers
2016-2025

High	Low	Now
Average length		
2023	2017	2025
366	292	345
Largest		
2023	2017	2025
510	395	500



Fish length percentage (%)
Undersize <300mm
Legal 300-499mm
Trophy 500+mm
2016-2025

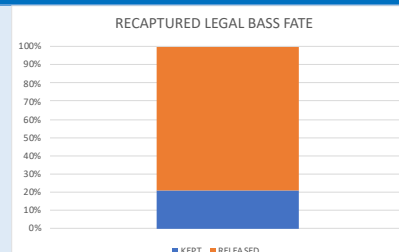
High	Low	Now
Legal		
2019	2017	2025
92%	40%	80%
Trophy		
1 trophy fish only in 2023 and 2025		



FATE

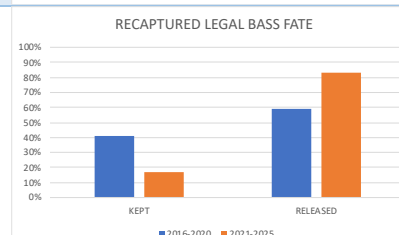
Legal Bass recaptures kept and released by recfishers (ex-taggers)
Legal length 300mm
2016-2025

Recaptures	273
Kept	57 (21%)
Released	216 (79%)



Legal Bass recaptures kept and released by recfishers (ex-taggers)
2016-2020
2021-2025

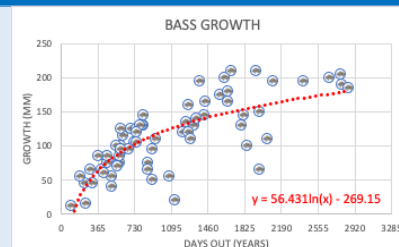
	Released
2016-2020	27 (59%)
2021-2025	189 (83%)



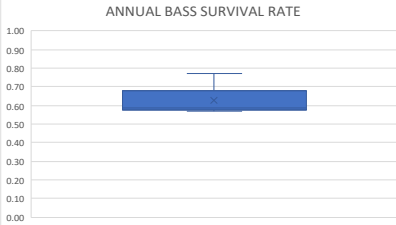
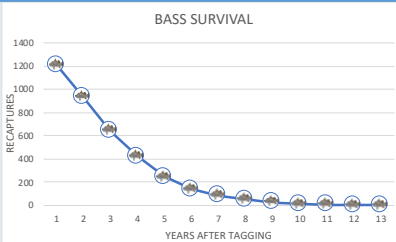
GROWTH

Bass growth
Fish tagged <300mm
Recaptured
2016-2025

Recaptures	69
Annual growth (mm)	
Year 1	64
Year 2	103
Year 3	126
Year 4	142
Year 5	155

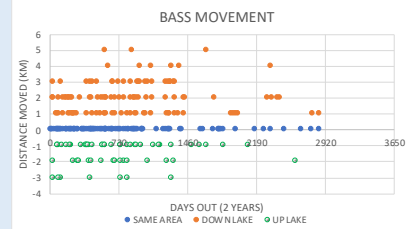


SURVIVAL		
Bass survival based on recaptures by years out after tagging All years	Survival rate by years out	
	Year	Recaptures
	1	1210
	5	242
	10	12
	13	1
	Longest time (years)	
		26
Survival rates each year after tagging All years	Average annual survival	
	Rate	0.61 (61%)
	Range	0.57-0.77



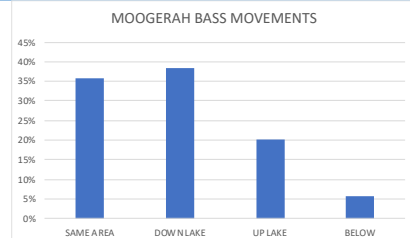
MOVEMENT

**Bass movement
In lake
2016-2025**



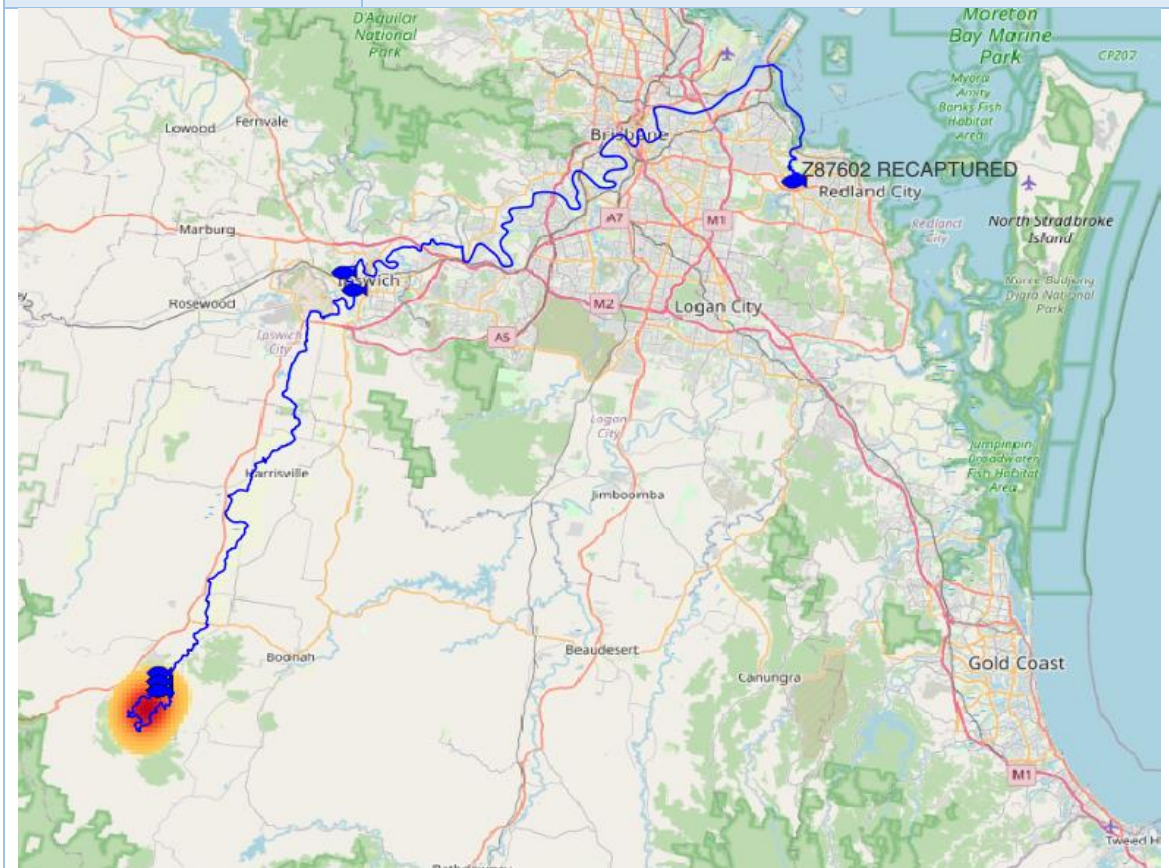
**Bass movement
In lake
Below lake
2016-2025**

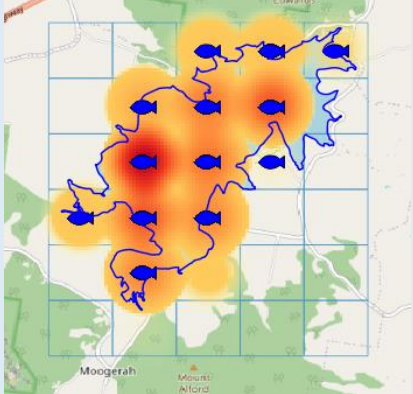
Recaptures 286
Same area 102 (36%)
Down lake 110 (38%)
Up lake 58 (20%)
Below lake 16 (6%)



**Bass recaptured
Below lake 16
Immediately below 13
Bremer River 2
Tingalpa Creek 1
2016-2025**

Longest time out for a tagged Bass Z87602
Tagged 29/1/1994 265mm Lake Moogerah
Recaptured 9/2/2020 390mm Tingalpa Creek
Time at liberty 9,507 days (26 years)
Moved 190km



LOCATIONS			
Bass locations Tagged (red-orange heat map) Recaptures (blue fish) 2016-2025	Tagged	2719	
	Recaptured	362	

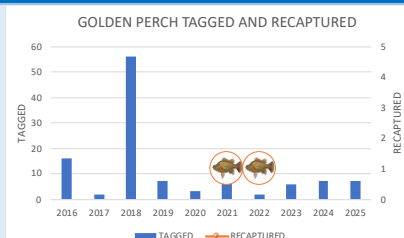
GOLDEN PERCH



TAGGED AND TAG RATE

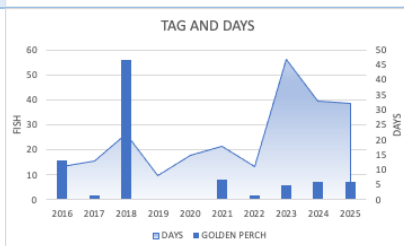
Golden Perch
Tagged
Recaptured
2016-2025

Tagged 114
 Recaptured 2
 Recapture rate 1.8%
 Tagged 2025 7



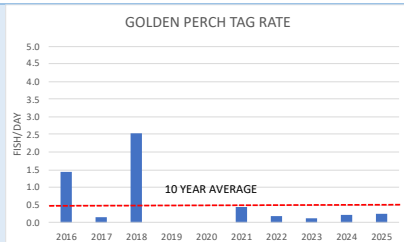
Tag and effort taggers
Fish tagged
Days fished
2016-2025

	High	Low	Now
Tagged			
2018	56	2020	2025
		0	7
Days			
2023	47	2019	2025
		8	32



Catch rate
Fish/day
2016-2025

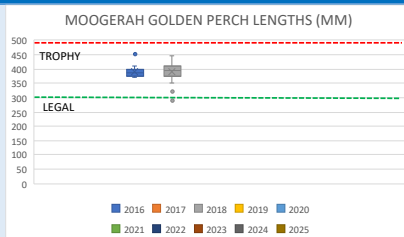
	High	Low	Now
2018	2.5	2020	2025
		0.0	0.3
10 year average			0.8



LENGTHS

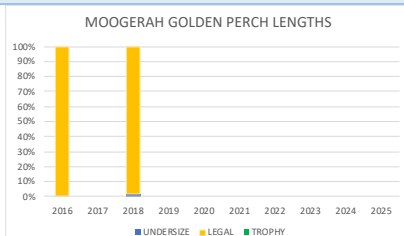
Average length (mm)
Bars show length range
Dots show outliers
2016-2025

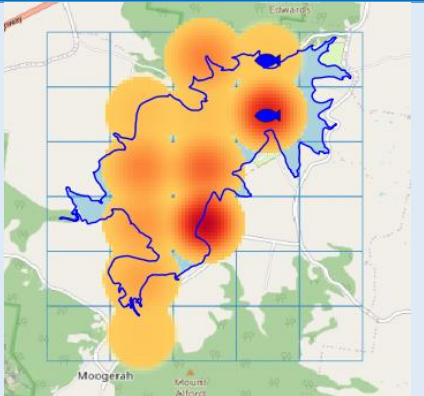
	2016	2018	2025
Average length	390	389	NA
Largest	450	445	NA


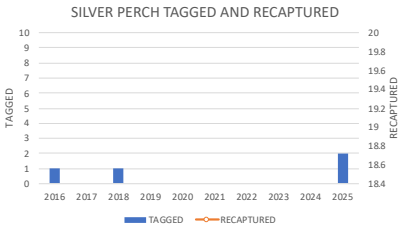


Fish length percentage (%)
Undersize <300mm
Legal 300-499mm
Trophy 500+mm
2016-2025

	High	Low	Now
Legal			
2016	100%	2018	2025
		98%	NA
Trophy			
No trophy fish any year			



LOCATIONS			
Golden Perch locations Tagged (red-orange heat map) Recaptures (blue fish) 2016-2025	Tagged	114	
	Recaptures	1	
	In lake	1	
	Below lake	1	

SILVER PERCH		
		
TAGGED		
Silver Perch Tagged Recaptured 2016-2025	Tagged	4
	Recaptured	0
	Recapture rate	0%
	Tagged 2025	2
		

Data sources

Data used in the Lake Moogerah Crystal Bowl are:

- Tag records and recapture records for the lake at <http://crystalbowl.infofishaustralia.com.au/>.
- Dam level data from SEQwater at <https://www.seqwater.com.au/historic-dam-levels>.
- Stocked fish records from Fisheries Queensland and from <https://www.data.qld.gov.au/dataset/queensland-freshwater-fish-stocking-records/>.
- Bathymetric data from Infofish surveys.
- Rainfall records from Station 040139 Mt Alford and temperature records from Station 040983 Beaudesert Drumley Street from <http://www.bom.gov.au/climate/data>.

Basis for analysis

- Data reliability for fishers based on the sample size over the past 5 years for days fished by taggers and by fishers recapturing fish.
- Data reliability for fish based on average number of fish tagged and recaptured per year over the past 5 years.
- Catch rates calculated as number of fish tagged/day for T20 fishers (taggers) with a minimum of 12 fisher days (at least 1 per month) to provide a reliable catch rate.
- Undersized Bass are <300mm, legal fish are ≥300 and <500mm and trophy fish are ≥500mm.
- Growth calculated using logarithmic curve from recaptures where fish were less than 300mm when tagged, were out for 90 days or more and had positive growth.
- Locations based on Infofish grid map LMH for the impoundment and other grid maps where fish were recaptured outside the impoundment.
- Survival rates are calculated based on a model that uses the reduction in the numbers of recaptures each year after tagging.
- Travel proxy distance is the distance between where the fisher lives (address, suburb, town or postcode) and the recapture location. Local <80km, intrastate Qld elsewhere, interstate other than Qld.