

LAKE MAROON
AUSTRALIAN BASS AND GOLDEN PERCH 2011-2020
2020 REVIEW



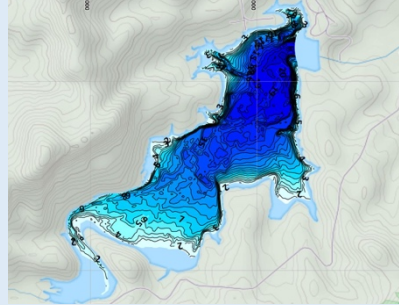
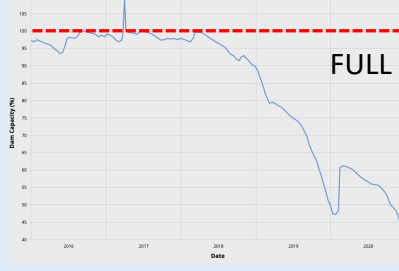
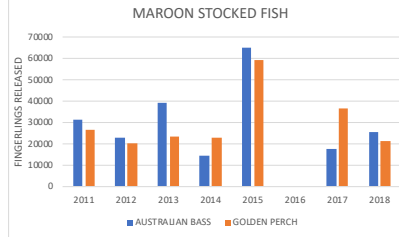
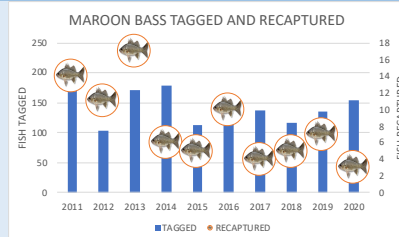
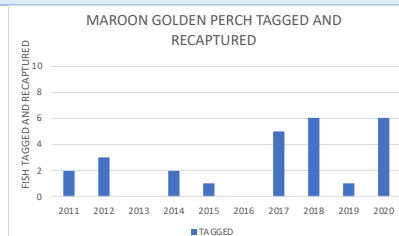
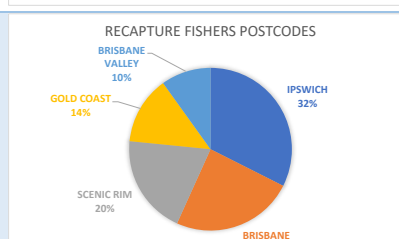
AVAILABLE		AVAILABLE	
Dam capacity	✓	Storage level	✓
Stocked fish numbers	✓	Bathymetry	✓
Tagged fish	✓	Recaptures	✓
Postcodes	✓	Competitions	
Species		Australian Bass	
Catch rates	✓	Fish sizes	✓
Growth	✓	Survival	✓
Tag locations	✓	Fish Movement	✓
Species		Golden Perch	
Catch rates		Fish sizes	
Growth		Survival	
Tag locations		Fish Movement	



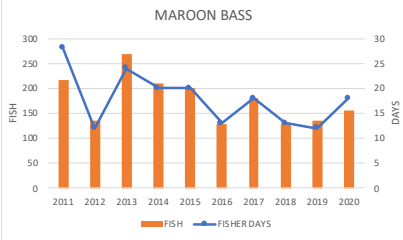
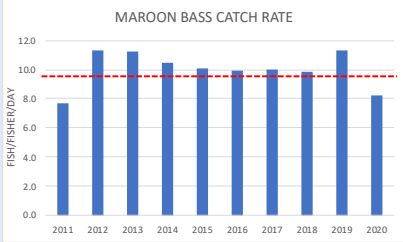
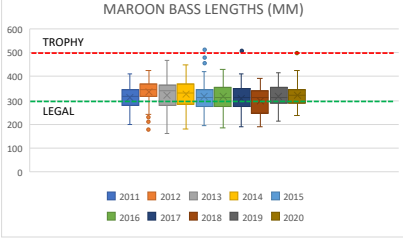
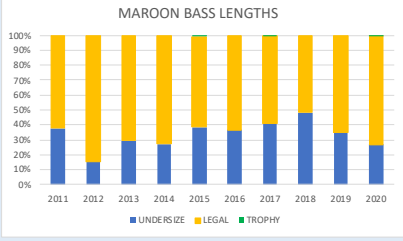
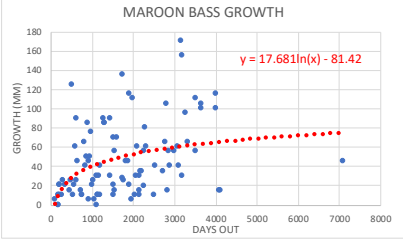
Summary


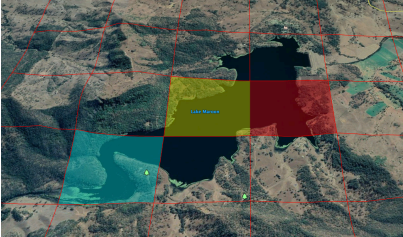
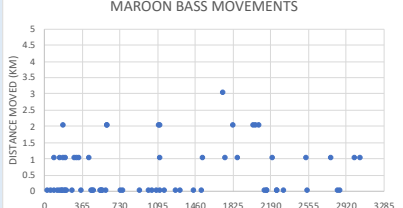
- Dam level at the 31 Dec 2020 was 49.3%
- From 2011-2018 there were 216.7K Bass and 210.1K Golden Perch fingerlings released
- The number of fingerlings released was roughly the same but there were 1,446 Bass tagged for 82 recaptures (5.7%) while there were just 26 Golden Perch tagged for 0 recaptures
- The catch rate for Bass in 2020 was 8.2 fish/fisher day while the 10 year average historic catch rate was 9.8 fish/fisher day
- The average length for Bass in 2020 was 321mm and ranged from 235-500mm
- The percentage of legal Bass in 2020 was 72.4% with 0.6% trophy fish 500mm and over
- Annual growth for Bass calculated from tag recaptures at the end of year 1 was 21mm and at the end of year 5 was 53mm
- Longest time out for a Bass after tagging is mostly around 12 years however 1 fish was recaptured after 19.4 years
- Over the past 10 years most fish have been tagged in LMM map grids D3, C3 and B4
- Of the Bass tagged since 2011 there were 82 fish recaptured over the past 10 years and none have been recaptured outside the impoundment
- Over the past 10 years most postcodes of fishers recapturing fish are from Ipswich (32%), Brisbane (24%), Scenic Rim (local) (20%)
- No fish have been recaptured by fishers with postcodes outside Queensland







Infotish Australia

March 2021

LAKE MAROON	LOCATION	BATHYMETRY																										
																												
MEASURE	ACTUAL	GRAPH																										
Surface area Lake level	Surface area 3.1km ² Level at 31 Dec 2020 49.3% For latest level https://www.seqwater.com.au/historic-dam-levels																											
Fingerlings stocked 2011-2018	<table><tr><th></th><th>HIGHEST</th><th>LOWEST</th><th>TOTAL</th></tr><tr><td>BASS</td><td></td><td></td><td></td></tr><tr><td>2015</td><td>2016</td><td></td><td></td></tr><tr><td>65.3K</td><td>0</td><td>216.7K</td></tr><tr><td>GOLDEN PERCH</td><td></td><td></td><td></td></tr><tr><td>2015</td><td>2016</td><td></td><td></td></tr><tr><td>59.2K</td><td>0</td><td>210.1K</td></tr></table>		HIGHEST	LOWEST	TOTAL	BASS				2015	2016			65.3K	0	216.7K	GOLDEN PERCH				2015	2016			59.2K	0	210.1K	
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Bass tagged and recaptured 2011-2020	<table><tr><th></th><th>TAGGED</th><th>RECAPTURED</th></tr><tr><td>1446</td><td>82</td><td></td></tr><tr><td>RECAPTURE RATE</td><td></td><td>5.7%</td></tr></table>		TAGGED	RECAPTURED	1446	82		RECAPTURE RATE		5.7%																		
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Golden Perch tagged and recaptured 2011-2020	<table><tr><th></th><th>TAGGED</th><th>RECAPTURED</th></tr><tr><td>26</td><td>0</td><td></td></tr><tr><td>RECAPTURE RATE</td><td></td><td>0%</td></tr></table>		TAGGED	RECAPTURED	26	0		RECAPTURE RATE		0%																		
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Postcodes of recapture fishers 2011-2020	<table><tr><th>Recaptures Region</th><th>Fishers</th></tr><tr><td>Ipswich</td><td>32%</td></tr><tr><td>Brisbane</td><td>24%</td></tr><tr><td>Scenic Rim</td><td>20%</td></tr><tr><td>Gold Coast</td><td>14%</td></tr><tr><td>Brisbane Valley</td><td>10%</td></tr></table>	Recaptures Region	Fishers	Ipswich	32%	Brisbane	24%	Scenic Rim	20%	Gold Coast	14%	Brisbane Valley	10%															
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LAKE MAROON			AUSTRALIAN BASS	
				
Catch and effort number of fish fisher days T20 taggers 2011-2020	HIGHEST	LOWEST		
	CATCH			
	2013	2018	2020	
	269	128	156	
	EFFORT			
	2011	2019	2020	
	28	12	19	
Catch rate Fish/fisher day 2011-2020	HIGHEST	LOWEST		
	2019	2011	2020	
	11.3	7.7	8.2	
	10 YEAR AVERAGE		9.8	
Average length (mm) Bars show smallest and largest fish 2011-2020	HIGHEST	LOWEST		
	AVERAGE LENGTH			
	2012	2018	2020	
	337	296	321	
	LARGEST			
	2015	2011	2020	
	520	410	500	
Fish length percentage (%) Undersize <300mm Legal 300-499mm Trophy 500+mm 2011-2020	HIGHEST	LOWEST		
	LEGAL			
	2012	2018	2020	
	84.6	51.6	72.4	
	TROPHY			
	2015	2019	2020	
	1.0	0	0.6	
Bass growth based on recaptures 2011-2020	Recaptures	100		
	ANNUAL GROWTH			
	Year 1	21mm		
	Year 2	35mm		
	Year 3	43mm		
	Year 4	49mm		
	Year 5	53mm		

Bass survival based on recaptures by years out after tagging	Survival rate by years out Year Recaptures 1 167 5 69 10 13 13 1 Longest time out (years) 19.4 1	
Grid locations of tagged fish (map LMM) 2011-2020	Grids where most fish caught GRID FISH D3 354 C3 293 B4 263	
Bass movements 2011-2020	Recaptures 68 Recaptured same area 41 (60.3%) Outside lake 0	

LAKE MAROON		GOLDEN PERCH
		
MEASURE	ACTUAL	GRAPH or MAP
All measures 2011-2020	Insufficient data Fish recorded 26	
  Product of Infotish Australia		  Supported by Suntag and FFSAQ

Data sources

Data used in the Impoundment 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 <https://www.data.qld.gov.au/dataset/queensland-freshwater-fish-stocking-records/>
- Bathymetric data from Infofish surveys or other sources

Basis for analysis

- Catch rates calculated as number of fish tagged/fisher/day for T20 fishers (taggers) with a minimum of 12 fisher days (at least 1 per month) to provide a reliable catch rate
- 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 LMM 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