




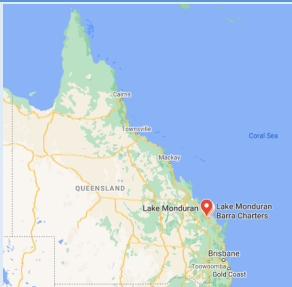
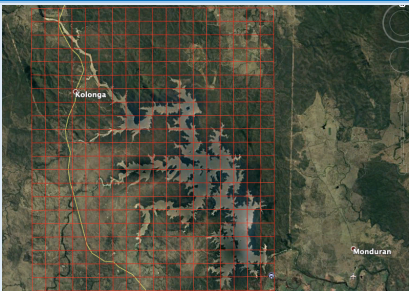
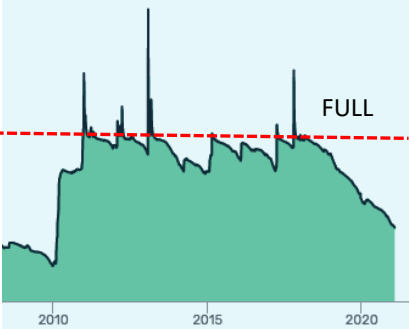
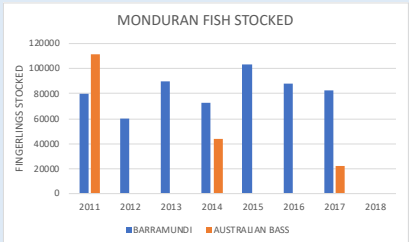
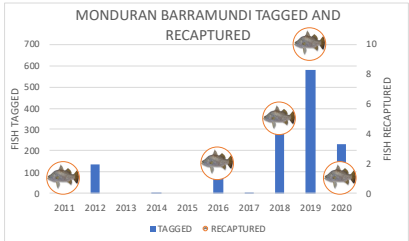
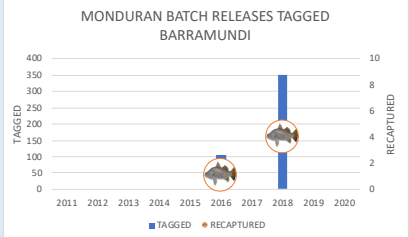
**LAKE MONDURAN**  
**BARRAMUNDI AND AUSTRALIAN BASS 2011-2020**  
**2020 REVIEW**





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



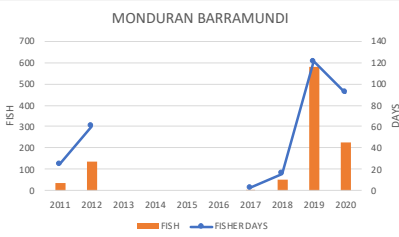
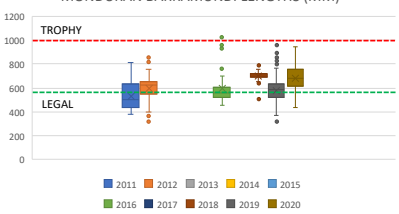
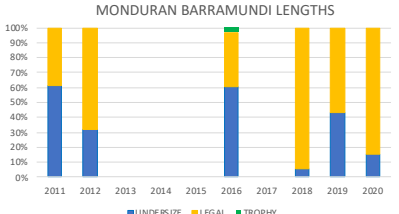
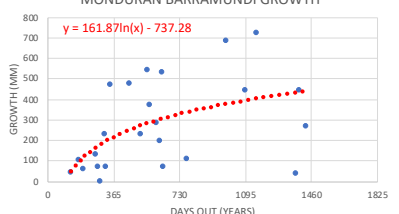
## Summary


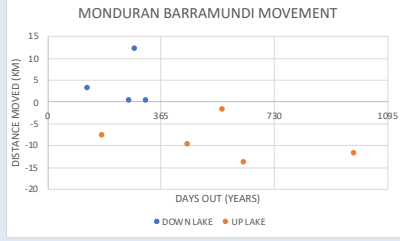
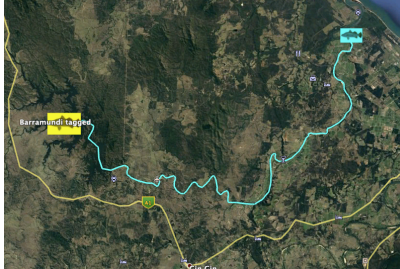
- The limited available data for Lake Monduran means the information provided is indicative only
- Dam level at 31 Dec 2020 was 47%
- From 2011-2018 there were 577.1K Barramundi and 176.6K Australian Bass fingerlings released
- Over the past 10 years there were 1,534 Barramundi tagged for 19 (1.2%) recaptures and 9 Bass tagged for 0 (0.0%) recaptures
- There were insufficient Bass recorded to make any assessment other than the numbers are low compared to the fish stocked however Barramundi are the most targeted
- There were 2 batch releases of tagged Barramundi with 104 in 2016 for 1 (1.0%) recapture and 350 in 2018 for 4 (1.1%) recaptures with fish averaging 180mm in both releases
- The tag rate and fishing effort was not suitable to calculate a tag or catch rate
- The average length of tagged Barramundi was 679mm in 2020 with just one fish of 1030mm over 1m tagged in 2016
- Over the past 10 years most Barramundi were tagged in LMK map grids L9, K10, K11 and H13
- There were insufficient recaptures to calculate a reliable growth rate
- The longest time out for a Barramundi after tagging is 2.7 years however this is a reflection of the limited early tagging effort
- There has been 1 recapture of a fish outside the impoundment with a fish recaptured in the Kolan River 48km from where tagged after going over the dam wall
- There were 16 recaptures where the postcode of the fisher was recorded with most from SE Qld (37%), Bundaberg (12%), Central Qld (13%), South West Qld (13%) and from interstate (25%) indicating fishers are coming from wide afield to fish the lake

Infotish Australia  
 March 2021

LAKE MONDURAN	LOCATION	BATHYMETRY
		
MEASURE	ACTUAL	GRAPH of MAP
Lake Monduran	Grid map Lake Monduran LMK	
Surface area Lake capacity	Surface area 53.4km <sup>2</sup> Level at 31 Dec 2020 47% For latest level <a href="https://www.sunwater.com.au/water-data/historical-dam-capacity/">https://www.sunwater.com.au/water-data/historical-dam-capacity/</a>	
Fingerlings stocked 2011-2018	HIGHEST LOWEST TOTAL BARRAMUNDI 2015 2012 103.7K 60K 577.1K BASS 2011 2016 111.1K 0 176.6K	
Barramundi tagged and recaptured 2011-2020	TAGGED RECAPTURED 1534 19 RECAPTURE RATE 1.2%	
Batch releases of tagged Barramundi 2011-2020	Tagged Recap Av length 2016 104 1(1.0%) 180mm 2018 350 4(1.1%) 180mm	

<b>Bass tagged and recaptured 2011-2020</b>	<div> <div>TAGGED</div> <div>9</div> </div> <div> <div>RECAPTURED</div> <div>0</div> </div> <div> <div>RECAPTURE RATE</div> <div>0%</div> </div>	<p>MONDURAN BASS TAGGED AND RECAPTURED</p>
<b>Recapture fishers from regions 2011-2020</b>	<div> <div>Region</div> <div>South East Qld</div> <div>Fishers</div> <div>37%</div> </div> <div> <div>Bundaberg</div> <div>12%</div> </div> <div> <div>Central Qld</div> <div>13%</div> </div> <div> <div>South West Qld</div> <div>13%</div> </div> <div> <div>Other States</div> <div>25%</div> </div>	<p>MONDURAN RECAPTURE FISHER POSTCODES</p>
<div>   </div> <div>Product of Infofish Australia</div>		<div>   </div> <div>Supported by Suntag and FFSAQ</div>

LAKE MONDURAN		BARRAMUNDI																					
																							
MEASURE	ACTUAL	GRAPH																					
<b>Tag and effort</b> <b>number of fish</b> <b>Fisher tag days</b> <b>T20 fishers</b> <b>2011-2020</b>	<table> <tr> <th>HIGHEST</th><th>LOWEST</th><th>NOW</th></tr> <tr> <td>CATCH</td><td></td><td></td></tr> <tr> <td>2019</td><td>2017</td><td>2020</td></tr> <tr> <td>579</td><td>0</td><td>227</td></tr> <tr> <td>EFFORT</td><td></td><td></td></tr> <tr> <td colspan="3">Data not suitable to determine effort</td></tr> </table>	HIGHEST	LOWEST	NOW	CATCH			2019	2017	2020	579	0	227	EFFORT			Data not suitable to determine effort						
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<b>Tag rate</b> <b>Fish/fisher day</b> <b>2011-2020</b>	Data not suitable to calculate catch rates																						
<b>Average length (mm)</b> <b>Bars show smallest and largest fish</b> <b>Dots show outliers</b> <b>2011-2020</b>	<table> <tr> <th>HIGHEST</th><th>LOWEST</th><th>NOW</th></tr> <tr> <td>AVERAGE LENGTH</td><td></td><td></td></tr> <tr> <td>2018</td><td>2011</td><td>2020</td></tr> <tr> <td>695</td><td>531</td><td>679</td></tr> <tr> <td>LARGEST</td><td></td><td></td></tr> <tr> <td>2016</td><td>2018</td><td>2020</td></tr> <tr> <td>1030</td><td>800</td><td>950</td></tr> </table>	HIGHEST	LOWEST	NOW	AVERAGE LENGTH			2018	2011	2020	695	531	679	LARGEST			2016	2018	2020	1030	800	950	
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<b>Fish lengths percentage</b> <b>Undersize &lt;580mm</b> <b>Legal 580-999mm</b> <b>Trophy 1000+mm</b> <b>2011-2020</b>	<table> <tr> <th>HIGHEST</th><th>LOWEST</th><th>NOW</th></tr> <tr> <td>LEGAL</td><td></td><td></td></tr> <tr> <td>2018</td><td>2011</td><td>2020</td></tr> <tr> <td>94.1</td><td>36.4</td><td>84.6</td></tr> <tr> <td>TROPHY</td><td></td><td></td></tr> <tr> <td>2016</td><td>2019</td><td>2020</td></tr> <tr> <td>3.0</td><td>0</td><td>0</td></tr> </table>	HIGHEST	LOWEST	NOW	LEGAL			2018	2011	2020	94.1	36.4	84.6	TROPHY			2016	2019	2020	3.0	0	0	
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<b>Barramundi growth at the end of each year</b> <b>based on recaptures all years</b>	Recaptures 24 Insufficient data for reliable growth estimate Longest time out (years) 2.7																						

<b>Grid locations of tagged fish (map LMK)</b> <b>2011-2020</b>	<div>Grids where most fish caught</div> <table><tr><td>GRID</td><td>FISH</td></tr><tr><td>L9</td><td>154</td></tr><tr><td>K10</td><td>74</td></tr><tr><td>K11</td><td>52</td></tr><tr><td>H13</td><td>52</td></tr></table>	GRID	FISH	L9	154	K10	74	K11	52	H13	52	
GRID	FISH											
L9	154											
K10	74											
K11	52											
H13	52											
<b>Barramundi movements in lake (km)</b> <b>2011-2020</b>	<div>Recaptures 9</div> <div>Recaptured same area 2 (22%)</div> <table><tr><td>Up lake</td><td>Down lake</td></tr><tr><td>5</td><td>2</td></tr></table>	Up lake	Down lake	5	2	<div>MONDURAN BARRAMUNDI MOVEMENT</div> 						
Up lake	Down lake											
5	2											
<b>Barramundi recaptured outside impoundment</b>	<div>Recaptures below lake 1</div> <div>Over dam wall down Kolan river 48km</div>											

## 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 Sunwater <https://www.sunwater.com.au/water-data/historical-dam-capacity/>
- Stocked fish records from <https://www.data.qld.gov.au/dataset/queensland-freshwater-fish-stocking-records/>

## 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 Barramundi are <580mm, legal fish are >=580 and <1000mm and trophy fish are >=1000mm
- Growth calculated using logarithmic curve from recaptures where fish were out for 90 days or more and had positive growth
- Locations based on Infotish grid map LMK for the impoundment and other grid maps where fish were recaptured outside the impoundment
- Distance moved was the shortest distance by water between the tag and recapture location measured in Google Earth