



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



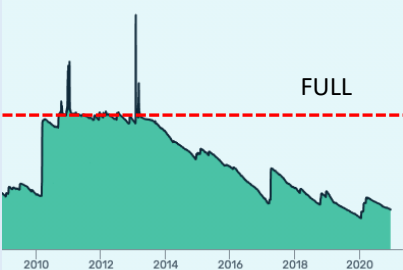
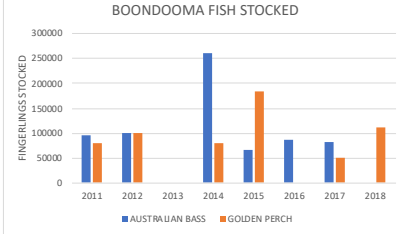
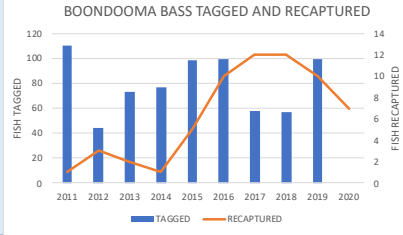
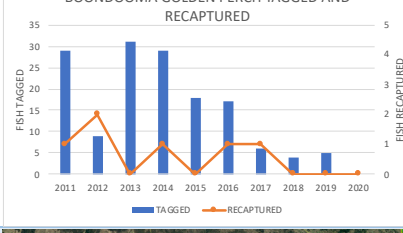
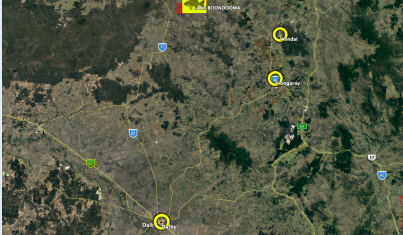
Stocked fish numbers, tagged and recaptured fish, catch rates, fish sizes, growth, survival, locations, movement, recapture fisher postcodes and competitions

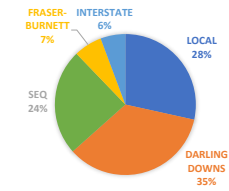



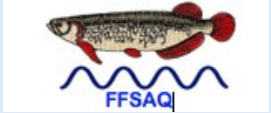
The following dashboard provides a summary of Australian Bass and Golden Perch data from Lake Boondooma covering the past 10 years.

Summary

- Dam level on 31 Dec 2020 was 29%
- From 2011-2018 there were 691.1k Bass and 606.0K Golden Perch fingerlings released
- Over the past 10 years there were 715 Bass tagged for 63 recaptures (8.8%) and 148 Golden Perch tagged for 6 recaptures (4.1%)
- There was no catch data for 2020 while the 10 year average historic catch rate for Bass was 3.8 fish/fisher day and for Golden Perch it was 0.9 fish/fisher day
- The average length for Bass in 2019 was 264mm and ranged from 155-445mm while there were insufficient Golden Perch recorded
- The percentage of legal Bass in 2019 was 25.5% with 0% trophy fish 500mm and over
- Annual growth of Bass calculated from tag recaptures at the end of year 1 is 46mm and at the end of year 5 is 120mm
- Longest time out for a Bass after tagging was around 15 years however 1 fish was recaptured after 18.9 years
- Over the past 10 years most Bass were tagged in LBP map grids E15, F15 and G15 and most Golden Perch were tagged in E18, G15 and F16
- Of the 63 Bass and 6 Golden Perch recaptured over the past 10 years and tagged since 2011 none have been recaptured outside the impoundment
- For Bass tagged prior to 2011 and recaptured since there were 8 fish recaptured downstream below the dam
- There were 2 fish recaptured in Splitters Creek (near Bundaberg) 340km below the dam and after going over 2 dam walls and 4 weirs
- Over the past 10 years most postcodes of fishers recapturing fish were 4610 (Kingaroy), 4405 (Dalby) and 4606 (Wondai)
- There were 5 recaptures by fishers with NSW postcodes and 2 by fishers from VIC
- Catch rates in Fishing Freshwater competitions from 2018-2020 ranged from 1.8 in 2019 to 2.7 fish/fisher day in 2018
- Only legal fish were submitted to the competitions with average lengths ranging from 346mm in 2020 to 351mm in 2019

Infofish Australia
January 2021

LAKE BOONDOOMA	LOCATION	BATHYMETRY																					
																							
MEASURE	ACTUAL	GRAPH or MAP																					
Surface area Lake capacity	Surface area 18.15km ² Level at 31 Dec 2020 29% For latest level https://www.sunwater.com.au/water-data/historical-dam-capacity/																						
Fingerlings stocked 2011-2018	<table border="1"> <thead> <tr> <th>HIGHEST</th> <th>LOWEST</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td colspan="3">BASS</td> </tr> <tr> <td>2014</td> <td>2018</td> <td></td> </tr> <tr> <td>260.0K</td> <td>0</td> <td>691.1K</td> </tr> <tr> <td colspan="3">GOLDEN PERCH</td> </tr> <tr> <td>2015</td> <td>2016</td> <td></td> </tr> <tr> <td>183.4K</td> <td>0</td> <td>606.0K</td> </tr> </tbody> </table>	HIGHEST	LOWEST	TOTAL	BASS			2014	2018		260.0K	0	691.1K	GOLDEN PERCH			2015	2016		183.4K	0	606.0K	
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Bass tagged and recaptured 2011-2020	<table border="1"> <thead> <tr> <th>TAGGED</th> <th>RECAPTURED</th> </tr> </thead> <tbody> <tr> <td>715</td> <td>63</td> </tr> <tr> <td colspan="2">RECAPTURE RATE</td> </tr> <tr> <td colspan="2">8.8%</td> </tr> </tbody> </table>	TAGGED	RECAPTURED	715	63	RECAPTURE RATE		8.8%															
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Golden Perch tagged and recaptured 2011-2020	<table border="1"> <thead> <tr> <th>TAGGED</th> <th>RECAPTURED</th> </tr> </thead> <tbody> <tr> <td>148</td> <td>6</td> </tr> <tr> <td colspan="2">RECAPTURE RATE</td> </tr> <tr> <td colspan="2">4.1%</td> </tr> </tbody> </table>	TAGGED	RECAPTURED	148	6	RECAPTURE RATE		4.1%															
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Postcodes of recapture fishers 2011-2020	<table border="1"> <thead> <tr> <th>Postcodes</th> <th>123</th> </tr> <tr> <th>POSTCODE</th> <th>FISHERS</th> </tr> </thead> <tbody> <tr> <td>4610</td> <td>12</td> </tr> <tr> <td>4405</td> <td>12</td> </tr> <tr> <td>4606</td> <td>11</td> </tr> <tr> <td>NSW</td> <td>5</td> </tr> <tr> <td>VIC</td> <td>2</td> </tr> <tr> <td>No code</td> <td>13</td> </tr> </tbody> </table>	Postcodes	123	POSTCODE	FISHERS	4610	12	4405	12	4606	11	NSW	5	VIC	2	No code	13						
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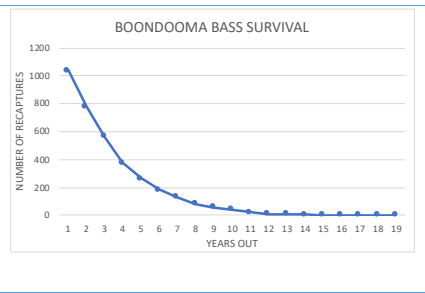
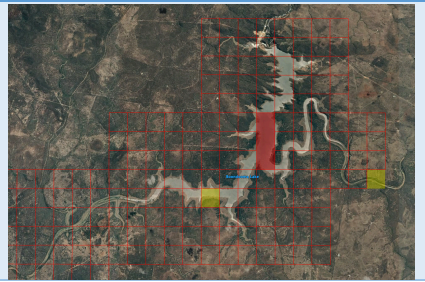
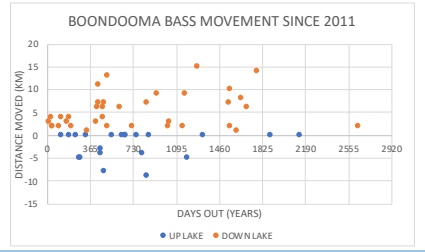
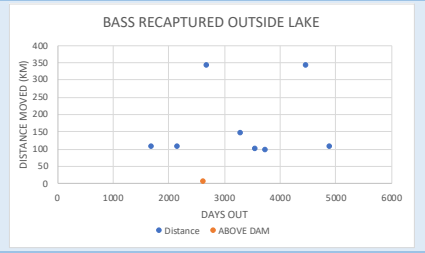
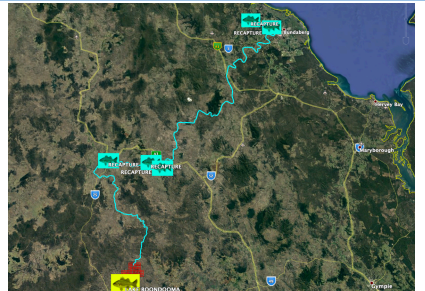
Recapture fishers from region 2011-2020	REGION	FISHERS	BOONDOOMA RECAPTURE FISHER POSTCODES 
	LOCAL	35 (28%)	
	DARLING DOWNS	43 (35%)	
	SEQ	30 (24%)	
	FRASER-BURNETT	8 (7%)	
	INTERSTATE	7 (6%)	
 		 	
Product of Infish Australia		Supported by Suntag and FFSAQ	



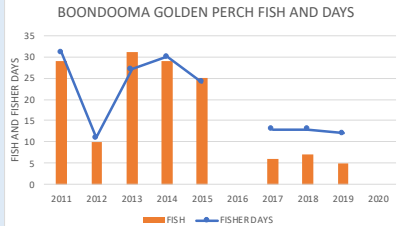
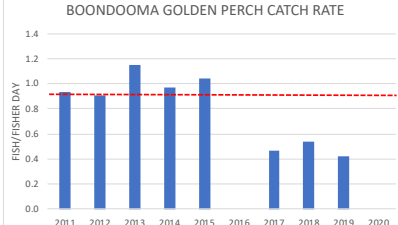
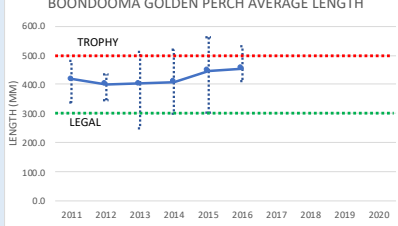
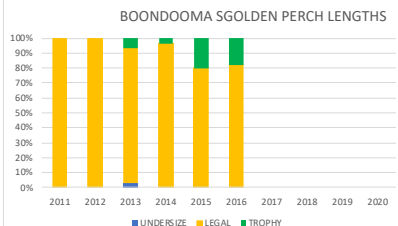

LAKE BOONDOOMA

AUSTRALIAN BASS



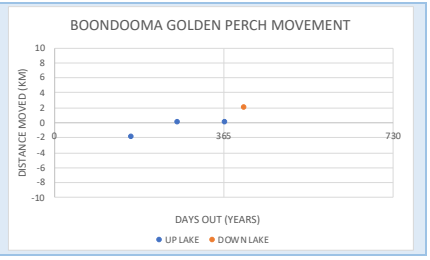
MEASURE	ACTUAL			GRAPH or MAP
Bass catch and effort number of fish fisher days T20 fishers 2011-2020	HIGHEST CATCH	LOWEST	NOW	
	2011	2012	2020	
110 EFFORT	2011	2019	2020	
	32	12	NA	
Bass catch rate Fish/fisher day 2011-2020	HIGHEST	LOWEST	NOW	
2019	2014	2020		
8.3 10 YEAR AVERAGE	2014	2018	2020	
	8.3	2.5	NA	
Average length (mm) Bars show smallest and largest fish 2011-2020	HIGHEST AVERAGE LENGTH	LOWEST	NOW	
2015	2018	2020		
365 LARGEST	2013	2018	2020	4.2 0 NA
	555	410	NA	
Fish lengths percentage Undersize <300mm Legal 300-499mm Trophy 500+mm 2011-2020	HIGHEST LEGAL	LOWEST	NOW	Recaptures 100 ANNUAL GROWTH Year 1 45mm Year 2 78mm Year 3 96mm Year 4 110mm Year 5 120mm
2011	2017	2020		
84.8 TROPHY	2016	2018	2020	4.2 0 NA
	4.2	0	NA	
Bass growth based on all recaptures 2011-2020	Recaptures	100		

Bass survival based on recaptures by years out after tagging	Survival rate by years out Year Recaptures 1 1038 5 263 10 39 15 2 Longest time out (years) 18.9 1	
Grid locations of fish 2011-2020	Grids where most fish tagged GRID FISH E15 77 F15 61 G15 52 H21 46 I12 43	
Bass movements from recaptures since 2011	Recaptures 57 Recaptured same area 14 (24.6%) Down lake Up lake 36 (63.2%) 7 (12.3%) Outside lake 0	
Bass recaptured outside impoundment Tagged before 2011 Recaptured after 2011	Recaptures 9 Above lake Below lake 1 8 Burnett River 8	
Bass recaptured outside impoundment	Max distance (km) Splitters Creek (2 fish) near Bundaberg 340km over 2 dam walls and 4 weirs	

LAKE BOONDOOMA		GOLDEN PERCH																						
																								
MEASURE	ACTUAL	GRAPH or MAP																						
Golden Perch catch and effort number of fish fisher days T20 fishers 2011-2020	<table border="1"> <thead> <tr> <th>HIGHEST</th> <th>LOWEST</th> <th>NOW</th> </tr> </thead> <tbody> <tr> <td>CATCH</td> <td></td> <td></td> </tr> <tr> <td>2013</td> <td>2019</td> <td>2020</td> </tr> <tr> <td>31</td> <td>5</td> <td>NA</td> </tr> <tr> <td>EFFORT</td> <td></td> <td></td> </tr> <tr> <td>2011</td> <td>2012</td> <td>2020</td> </tr> <tr> <td>31</td> <td>11</td> <td>NA</td> </tr> </tbody> </table>	HIGHEST	LOWEST	NOW	CATCH			2013	2019	2020	31	5	NA	EFFORT			2011	2012	2020	31	11	NA		
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Golden Perch growth and survival from recaptures	<p>Recaptures 6 Insufficient recaptures Longest time out (years) 10.3</p>																							
Grid locations of fish 2011-2020	<table border="1"> <thead> <tr> <th>GRID</th> <th>FISH</th> </tr> </thead> <tbody> <tr> <td>E18</td> <td>25</td> </tr> <tr> <td>G15</td> <td>19</td> </tr> <tr> <td>F16</td> <td>11</td> </tr> </tbody> </table>	GRID	FISH	E18	25	G15	19	F16	11															
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F16	11																							

**Golden Perch movements
from recaptures since
2011**

Recaptures	4
Recaptured same area	2
Down lake	Up lake
1	1
Outside lake	
0	



COMPETITIONS	ACTUAL		GRAPH												
Fishers Fishing Freshwater 2018 Fishing Freshwater 2019 Fishing Freshwater 2020	Fishers 90 108 90	Catching fish 43 24 38	<p>FISHING FRESHWATER COMPETITION BOATS</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Total Fishers</th> <th>Catching Fishers</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>90</td> <td>43</td> </tr> <tr> <td>2019</td> <td>108</td> <td>24</td> </tr> <tr> <td>2020</td> <td>90</td> <td>38</td> </tr> </tbody> </table>	Year	Total Fishers	Catching Fishers	2018	90	43	2019	108	24	2020	90	38
Year	Total Fishers	Catching Fishers													
2018	90	43													
2019	108	24													
2020	90	38													
Catch rate Legal fish Fishers catching fish (FCF) T20 fishers (T20)	FCF 2018 2.7 2019 1.8 2020 2.5	T20 5.6 3.9 6.8	<p>FISHING FRESHWATER COMPETITION BASS</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Fishers Catch Rate</th> <th>T20 Catch Rate</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>2.7</td> <td>5.6</td> </tr> <tr> <td>2019</td> <td>1.8</td> <td>3.9</td> </tr> <tr> <td>2020</td> <td>2.5</td> <td>6.8</td> </tr> </tbody> </table>	Year	Fishers Catch Rate	T20 Catch Rate	2018	2.7	5.6	2019	1.8	3.9	2020	2.5	6.8
Year	Fishers Catch Rate	T20 Catch Rate													
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Catch rates T20 Taggers Competition fishers Legal fish	T20 (Tag) 2019 2.8	T20 (comp) 3.9	<p>BOONDOOMA BASS CATCH RATE LEGAL FISH</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Fishing Freshwater</th> <th>Taggers</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>5.5</td> <td>3.0</td> </tr> <tr> <td>2019</td> <td>4.0</td> <td>3.0</td> </tr> <tr> <td>2020</td> <td>6.5</td> <td>0.0</td> </tr> </tbody> </table>	Year	Fishing Freshwater	Taggers	2018	5.5	3.0	2019	4.0	3.0	2020	6.5	0.0
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2019	4.0	3.0													
2020	6.5	0.0													
Competition Bass lengths Average legal (mm)	Highest 2019 351	Lowest 2020 346	<p>COMPETITION BASS LENGTH</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Length (MM)</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>351</td> </tr> <tr> <td>2019</td> <td>351</td> </tr> <tr> <td>2020</td> <td>346</td> </tr> </tbody> </table>	Year	Length (MM)	2018	351	2019	351	2020	346				
Year	Length (MM)														
2018	351														
2019	351														
2020	346														
Fishing heat map 2018															
Fishing heat map 2019															
Fishing heat map 2020															

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/>
- Fishing Freshwater competitions in Lake Boondooma
- Competition dashboard for 2018 at <https://tournaments.trackmy.fish/public/reports/217/ff.golden.lure.2018.html>
- Competition dashboard for 2019 at <https://tournaments.trackmy.fish/public/reports/217/ff.boondooma.open.2019.html>
- Competition dashboard for 2019 at <https://tournaments.trackmy.fish/public/reports/217/ff.festivalofthedams.2020.html>
- Bathymetric data from Infofish Biosonics surveys or other sources

BASIS FOR ANALYSIS

- Catch rates calculated as number of fish tagged/fisher/day for taggers
- Catch rates calculated as number of fish registered through Trackmyfish/fisher/day
- 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 for the impoundment and for other grid maps where fish left the impoundment
- Distance moved calculated using Google Earth as the shortest distance by water between the tag and recapture location