



## GOFISH-21 AFTER COVID-19 2021 REVIEW

### Impact of COVID-19 on recreational fishing

Recaptures of tagged fish are being used as a random sample of the fishing population to get a sense of the impact of COVID-19 on fisher behaviour in recreational fishing in Queensland. Here is the update for 2021 with comparisons to 2019 and 2020.

There are now 3 aspects of behaviour that are being monitored:

- Fisher effort - a change in the number of recaptures is likely a reflection of fishing effort as recaptures are correlated to fishing effort
- Fisher travel – a change in the distance travelled to go fishing reflects fisher behaviour and that is measured by the distance from the fishers address or postcode to the recapture location as a proxy for travel distance
- Fisher days – a change in what day of the week fishing occurs is also a measure of fisher behaviour and related to opportunity


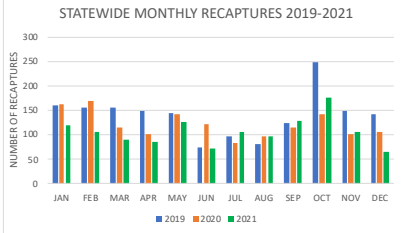
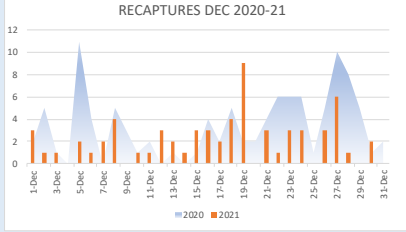
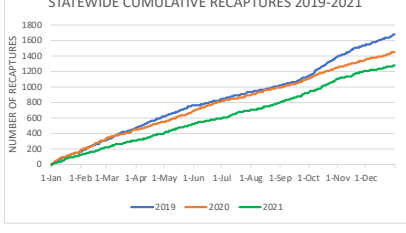
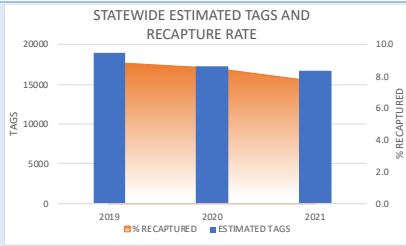
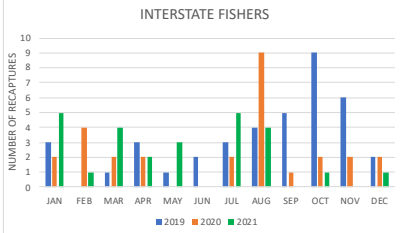
MONITORING LOCATIONS	EFFORT	TRAVEL	WHEN
Statewide (All of Queensland)	✓	✓	✓
South East Queensland estuaries (Sunshine Coast - Gold Coast)	✓	✓	✓
South East Queensland Impoundments (6 Bass impoundments)	✓	✓	✓
Central Queensland impoundment (Lake Cania Bass)	✓	✓	✓
Central Queensland estuaries (Fitzroy River – Curtis Island)	✓	✓	✓
Central Queensland impoundment (Lake Awoonga Barramundi)	✓	✓	✓
North Queensland estuaries (Townsville - Cardwell)	✓	✓	✓

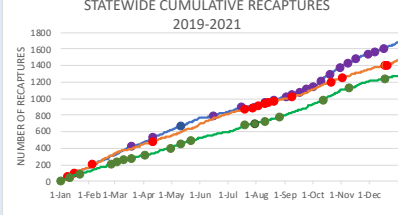
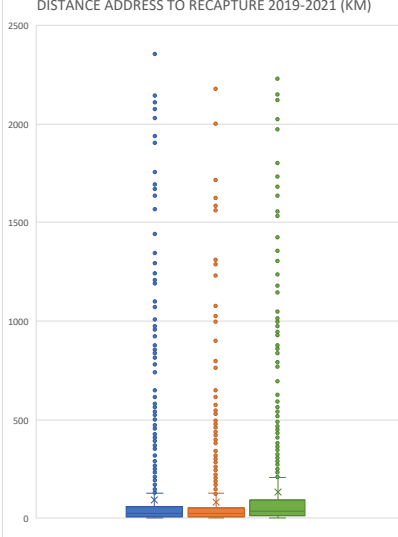
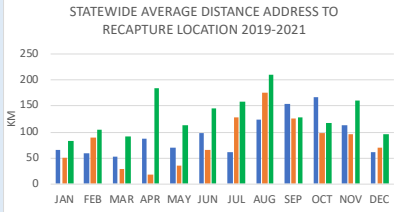
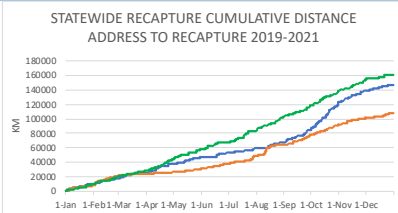
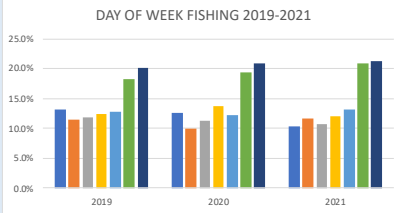
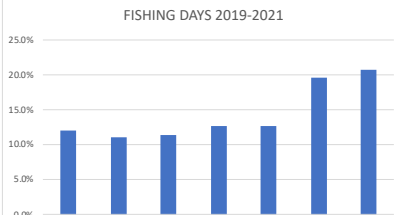
### The Year in review

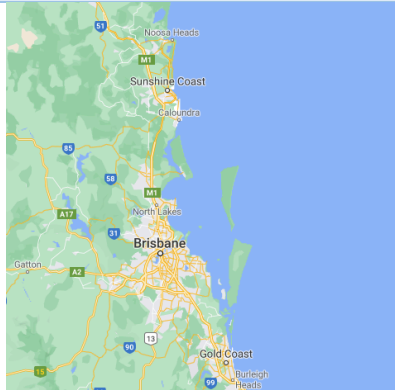
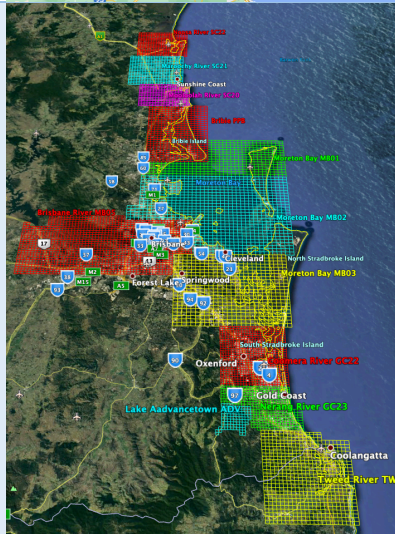
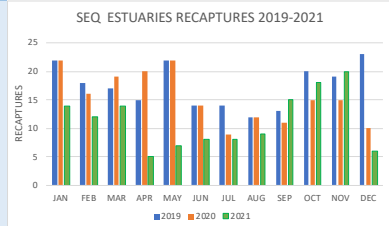
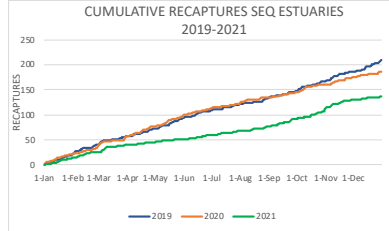
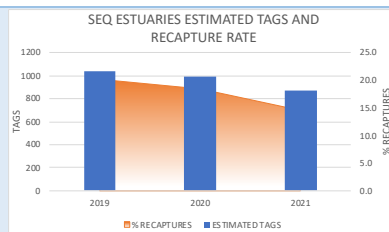
- Overall there appears to have been a slight reduction in fishing effort with reduced effort in SEQ estuaries while effort in SEQ impoundments remained steady, increased in Cania and rebounded in the Fitzroy after falling in 2020 due to Covid-19 restrictions
- Covid-19 appears to have had minimal impact on recreational fishing this year however border closures limited interstate fishers
- The heavy rain and flooding in late Nov and early Dec appear to have had a bigger influence reducing effort
- Despite a reduction of 13% in recaptures compared to last year the cumulative distance between where they lived and where they went fishing was up 47% (over 52,000km) on last year and even up 11% on 2019 so fishers travelled further to go fishing
- This could account for a reduction in recaptures in SEQ estuaries with fishers from that region travelling further afield rather than fishing locally
- As expected fishing on weekends was higher than during the week except in the Fitzroy where staggered work arrangements provide more opportunity to fish during the week

Infofish Australia

January 2022

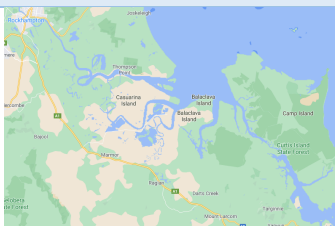
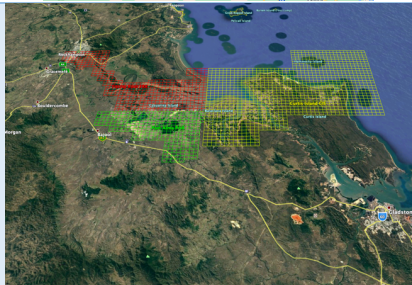
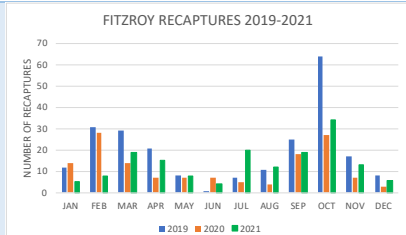
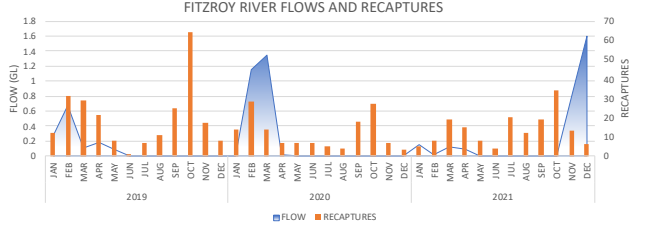
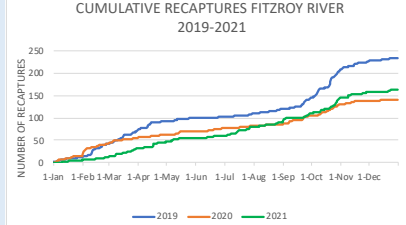
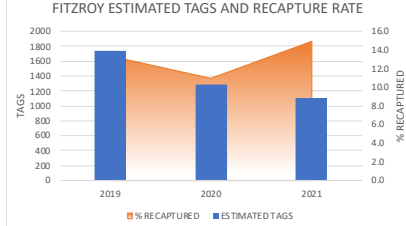
MEASURE	ACTUAL	GRAPH
<b>QUEENSLAND</b>		<b>STATEWIDE PERSPECTIVE</b>
All of Queensland		
<b>Key observations</b>	Refer to the Year in Review	
<b>Number of recaptures 2021-2019</b>	<div>Dec</div> <div>2021 65</div> <div>2020 105</div> <div>2019 141</div> <div>21-20 -38%</div> <div>21-19 -54%</div>	
<b>Daily recaptures Dec 2021-2020</b>	<div>Daily recaptures</div> <div>Most 2021 9</div> <div>Most 2020 11</div>	
<b>Cumulative recaptures 2021-2019</b>	<div>Cum recaps</div> <div>2021 1289</div> <div>2020 1473</div> <div>2019 1684</div> <div>21-20 -12%</div> <div>21-19 -23%</div>	
<b>Modeled estimate of tags at the end of each year and the recapture rate</b> <b>Rate change reflecting effort change</b>	<div>Recapture rate change</div> <div>21-20 -0.4%</div> <div>21-19 -1.2%</div> <div>Suggests a slight drop in fishing effort</div>	
<b>Interstate recaptures 2021-2019</b>	<div>Interstate</div> <div>Dec</div> <div>2021 1</div> <div>2020 2</div> <div>2019 2</div>	

Dots show recaptures by interstate fishers 2021-2019	<div>Interstate</div> <table><tr><td>2021</td><td>26</td></tr><tr><td>2020</td><td>28</td></tr><tr><td>2019</td><td>39</td></tr><tr><td>21-20</td><td>-7%</td></tr><tr><td>21-19</td><td>-33%</td></tr></table>	2021	26	2020	28	2019	39	21-20	-7%	21-19	-33%	<div>STATEWIDE CUMULATIVE RECAPTURES 2019-2021</div> 		
2021	26													
2020	28													
2019	39													
21-20	-7%													
21-19	-33%													
Distance (km) address or postcode to recapture location 2021-2019	<div>Average distance</div> <table><tr><td>2021</td><td>129</td></tr><tr><td>2020</td><td>78</td></tr><tr><td>2019</td><td>97</td></tr><tr><td>21-20</td><td>+65%</td></tr><tr><td>21-19</td><td>+33%</td></tr></table>	2021	129	2020	78	2019	97	21-20	+65%	21-19	+33%	<div>DISTANCE ADDRESS TO RECAPTURE 2019-2021 (KM)</div> 		
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Monthly average distance (km) address or postcode to recapture location 2021-2019	<table><tr><td>Highest</td><td>Av dist</td></tr><tr><td>Aug 2021</td><td>211</td></tr><tr><td>Aug 2020</td><td>175</td></tr><tr><td>Oct 2019</td><td>167</td></tr></table>	Highest	Av dist	Aug 2021	211	Aug 2020	175	Oct 2019	167	<div>STATEWIDE AVERAGE DISTANCE ADDRESS TO RECAPTURE LOCATION 2019-2021</div> 				
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Cumulative distance (km) address or postcode to recapture location 2021-2019	<table><tr><td>2021</td><td>Cum dist</td></tr><tr><td>2020</td><td>162877</td></tr><tr><td>2019</td><td>147130</td></tr><tr><td>21-20</td><td>+47%</td></tr><tr><td>21-19</td><td>+11%</td></tr></table>	2021	Cum dist	2020	162877	2019	147130	21-20	+47%	21-19	+11%	<div>STATEWIDE RECAPTURE CUMULATIVE DISTANCE ADDRESS TO RECAPTURE 2019-2021</div> 		
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Day of the week fishing percentage (%) recapture fishers 2021-2019	<table><tr><td>2021</td><td></td></tr><tr><td>Least</td><td></td></tr><tr><td>Mon</td><td>10.3%</td></tr><tr><td>Most</td><td></td></tr><tr><td>Sat</td><td>20.9%</td></tr><tr><td>Sun</td><td>21.2%</td></tr></table>	2021		Least		Mon	10.3%	Most		Sat	20.9%	Sun	21.2%	<div>DAY OF WEEK FISHING 2019-2021</div> 
2021														
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Day of the week fishing percentage (%) recapture fishers 2021-2019 combined	<table><tr><td>2019-21</td><td></td></tr><tr><td>Least</td><td></td></tr><tr><td>Tue</td><td>11.1%</td></tr><tr><td>Most</td><td></td></tr><tr><td>Sat</td><td>19.5%</td></tr><tr><td>Sun</td><td>20.7%</td></tr></table>	2019-21		Least		Tue	11.1%	Most		Sat	19.5%	Sun	20.7%	<div>FISHING DAYS 2019-2021</div> 
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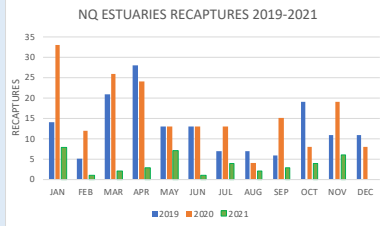
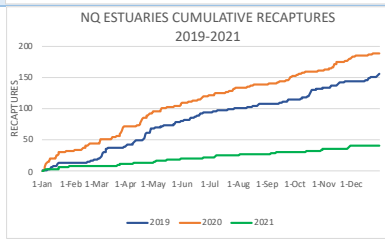
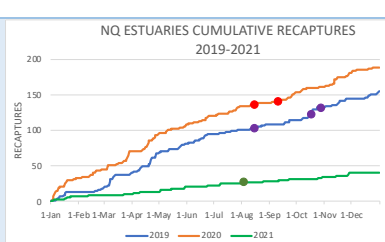
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SOUTH EAST QLD	ESTUARIES	REGIONAL PERSPECTIVE																																																																
South East Queensland estuaries	Sunshine Coast Brisbane Gold Coast																																																																	
SEQ estuaries	Grid maps Noosa River SC22 Maroochy River SC21 Mooloolah River SC20 Bribie PPB Moreton Bay MB01,MB02,MB03 Brisbane River MB05 Coomera River GC22 Nerang River GC23 Tweed River TWR																																																																	
Key observations	Recaptures in second half of the year on par with last year but were down in the first half of the year. Slow down in late Nov-early Dec due to widespread rain and flooding.																																																																	
Number of recaptures 2021-2019	<table><tr><th></th><th>Dec</th></tr><tr><td>2021</td><td>6</td></tr><tr><td>2020</td><td>10</td></tr><tr><td>2019</td><td>23</td></tr><tr><td>21-20</td><td>-40%</td></tr><tr><td>21-19</td><td>-74%</td></tr></table>		Dec	2021	6	2020	10	2019	23	21-20	-40%	21-19	-74%	 <table><caption>SEQ ESTUARIES RECAPTURES 2019-2021</caption><thead><tr><th>Month</th><th>2019</th><th>2020</th><th>2021</th></tr></thead><tbody><tr><td>JAN</td><td>18</td><td>15</td><td>12</td></tr><tr><td>FEB</td><td>15</td><td>12</td><td>10</td></tr><tr><td>MAR</td><td>18</td><td>15</td><td>12</td></tr><tr><td>APR</td><td>20</td><td>18</td><td>15</td></tr><tr><td>MAY</td><td>22</td><td>20</td><td>18</td></tr><tr><td>JUN</td><td>18</td><td>15</td><td>12</td></tr><tr><td>JUL</td><td>15</td><td>12</td><td>10</td></tr><tr><td>AUG</td><td>12</td><td>10</td><td>8</td></tr><tr><td>SEP</td><td>15</td><td>12</td><td>10</td></tr><tr><td>OCT</td><td>18</td><td>15</td><td>12</td></tr><tr><td>NOV</td><td>20</td><td>18</td><td>15</td></tr><tr><td>DEC</td><td>12</td><td>10</td><td>6</td></tr></tbody></table>	Month	2019	2020	2021	JAN	18	15	12	FEB	15	12	10	MAR	18	15	12	APR	20	18	15	MAY	22	20	18	JUN	18	15	12	JUL	15	12	10	AUG	12	10	8	SEP	15	12	10	OCT	18	15	12	NOV	20	18	15	DEC	12	10	6
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Cumulative recaptures 2021-2019	<table><tr><th></th><th>Cum recaps</th></tr><tr><td>2021</td><td>126</td></tr><tr><td>2020</td><td>184</td></tr><tr><td>2019</td><td>209</td></tr><tr><td>21-20</td><td>-32%</td></tr><tr><td>21-19</td><td>-40%</td></tr></table>		Cum recaps	2021	126	2020	184	2019	209	21-20	-32%	21-19	-40%	 <table><caption>CUMULATIVE RECAPTURES SEQ ESTUARIES 2019-2021</caption><thead><tr><th>Date</th><th>2019</th><th>2020</th><th>2021</th></tr></thead><tbody><tr><td>1-Jan</td><td>0</td><td>0</td><td>0</td></tr><tr><td>1-Feb</td><td>18</td><td>15</td><td>12</td></tr><tr><td>1-Mar</td><td>36</td><td>30</td><td>24</td></tr><tr><td>1-Apr</td><td>54</td><td>45</td><td>36</td></tr><tr><td>1-May</td><td>72</td><td>60</td><td>48</td></tr><tr><td>1-Jun</td><td>90</td><td>75</td><td>60</td></tr><tr><td>1-Jul</td><td>108</td><td>90</td><td>72</td></tr><tr><td>1-Aug</td><td>126</td><td>105</td><td>84</td></tr><tr><td>1-Sep</td><td>144</td><td>120</td><td>96</td></tr><tr><td>1-Oct</td><td>162</td><td>135</td><td>108</td></tr><tr><td>1-Nov</td><td>180</td><td>150</td><td>120</td></tr><tr><td>1-Dec</td><td>192</td><td>160</td><td>126</td></tr></tbody></table>	Date	2019	2020	2021	1-Jan	0	0	0	1-Feb	18	15	12	1-Mar	36	30	24	1-Apr	54	45	36	1-May	72	60	48	1-Jun	90	75	60	1-Jul	108	90	72	1-Aug	126	105	84	1-Sep	144	120	96	1-Oct	162	135	108	1-Nov	180	150	120	1-Dec	192	160	126
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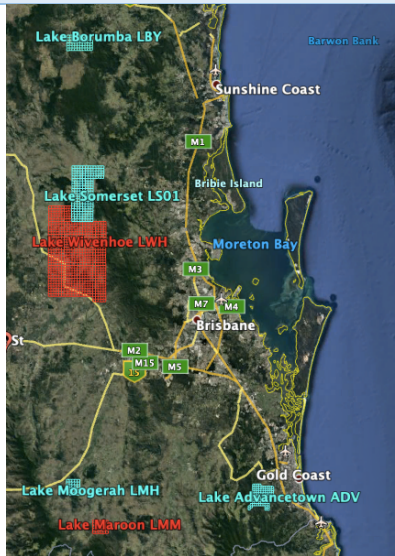
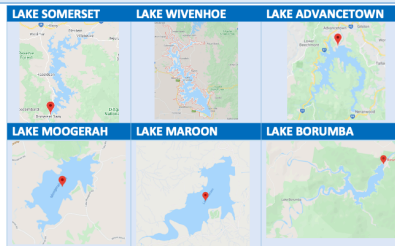
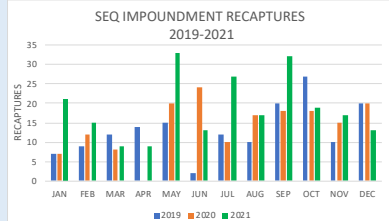
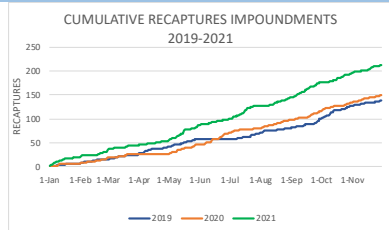
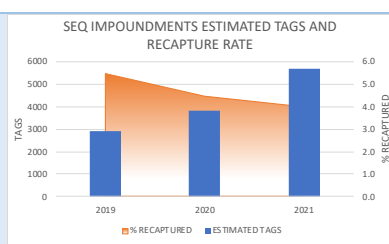
<b>Dots show recaptures by interstate fishers recaptures 2021-2019</b>	<div>Interstate</div> <div> 2021 0  2020 0  2019 2 </div>	
<b>Distance (km) address or postcode to recapture location 2021-2019</b>	<div>Recaptures 530</div> <div>Av dist</div> <div> 2021 17  2020 21  2019 21 </div>	
<b>Monthly average distance (km) address or postcode to recapture location 2021-2019</b>	<div>Highest</div> <div>Av dist</div> <div> Oct 2021 29  Jul 2020 37  Jan 2019 29 </div>	
<b>Cumulative distance (km) address or postcode to recapture location 2021-2019</b>	<div>Cum dist</div> <div> 2021 2056  2020 3501  2019 3565  21-20 -41%  21-19 -42% </div>	
<b>Day of the week fishing from recaptures 2021-2019 combined</b>	<div>Recaps 345</div> <div>Least</div> <div>Mon/Wed/Thu 11.6%</div> <div>Most</div> <div> Sat 21.7%  Sun 18.3% </div>	

MEASURE	ACTUAL	GRAPH																																																																
FITZROY RIVER	ESTUARY	REGIONAL PERSPECTIVE																																																																
Fitzroy River and tidal delta Rockhampton to Curtis Island	Fitzroy River Casuarina Creek Raglan Creek Inkerman Creek Connor Creek Yellow Patch																																																																	
Fitzroy River	Fitzroy River FRR Port Alma PAR Curtis Island CIS																																																																	
Key observations	Start of Barramundi season disrupted by minor river flow from Jan-Mar with fewer recaptures and then again in Nov-Dec with moderate flow reducing recaptures however were up on last year overall. Effort rebounded after drop in 2020 due to Covid-19.																																																																	
Number of recaptures 2021-2019	<table><tr><td>Dec</td><td></td></tr><tr><td>2021</td><td>6</td></tr><tr><td>2020</td><td>3</td></tr><tr><td>2019</td><td>8</td></tr><tr><td>21-20</td><td>+50%</td></tr></table>	Dec		2021	6	2020	3	2019	8	21-20	+50%	 <table><caption>FITZROY RECAPTURES 2019-2021</caption><thead><tr><th>Month</th><th>2019</th><th>2020</th><th>2021</th></tr></thead><tbody><tr><td>JAN</td><td>15</td><td>10</td><td>12</td></tr><tr><td>FEB</td><td>25</td><td>20</td><td>22</td></tr><tr><td>MAR</td><td>30</td><td>25</td><td>28</td></tr><tr><td>APR</td><td>20</td><td>15</td><td>18</td></tr><tr><td>MAY</td><td>10</td><td>8</td><td>10</td></tr><tr><td>JUN</td><td>5</td><td>3</td><td>5</td></tr><tr><td>JUL</td><td>10</td><td>8</td><td>12</td></tr><tr><td>AUG</td><td>15</td><td>12</td><td>18</td></tr><tr><td>SEP</td><td>25</td><td>20</td><td>22</td></tr><tr><td>OCT</td><td>65</td><td>30</td><td>35</td></tr><tr><td>NOV</td><td>15</td><td>10</td><td>12</td></tr><tr><td>DEC</td><td>5</td><td>3</td><td>5</td></tr></tbody></table>	Month	2019	2020	2021	JAN	15	10	12	FEB	25	20	22	MAR	30	25	28	APR	20	15	18	MAY	10	8	10	JUN	5	3	5	JUL	10	8	12	AUG	15	12	18	SEP	25	20	22	OCT	65	30	35	NOV	15	10	12	DEC	5	3	5		
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Dots show recaptures by interstate fishers 2021-2019	<table><tr><th colspan="2">Interstate</th></tr><tr><td>2021</td><td>6</td></tr><tr><td>2020</td><td>2</td></tr><tr><td>2019</td><td>8</td></tr></table>	Interstate		2021	6	2020	2	2019	8																																
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Distance (km) address or postcode to recapture location Local (Loc) Elsewhere (Else) 2021-2019	<table><tr><th></th><th>Loc</th><th>Else</th></tr><tr><th colspan="3">% recaptures</th></tr><tr><td>2021</td><td>66</td><td>34</td></tr><tr><td>2020</td><td>73</td><td>27</td></tr><tr><td>2019</td><td>66</td><td>34</td></tr><tr><th colspan="3">Average distance</th></tr><tr><td>2021</td><td>25</td><td>416</td></tr><tr><td>2020</td><td>24</td><td>322</td></tr><tr><td>2019</td><td>20</td><td>428</td></tr><tr><th colspan="3">Max distance</th></tr><tr><td>2021</td><td>62</td><td>1734</td></tr><tr><td>2020</td><td>62</td><td>1312</td></tr><tr><td>2019</td><td>66</td><td>2147</td></tr></table>		Loc	Else	% recaptures			2021	66	34	2020	73	27	2019	66	34	Average distance			2021	25	416	2020	24	322	2019	20	428	Max distance			2021	62	1734	2020	62	1312	2019	66	2147	
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Day of the week fishing from recaptures 2021-2019 combined	<table><tr><th>Recaps</th><th></th></tr><tr><td>Least</td><td>531</td></tr><tr><td>Wed</td><td>11.9%</td></tr><tr><td>Most</td><td></td></tr><tr><td>Tue</td><td>15.4%</td></tr><tr><td>Sun</td><td>16.9%</td></tr></table>	Recaps		Least	531	Wed	11.9%	Most		Tue	15.4%	Sun	16.9%																												
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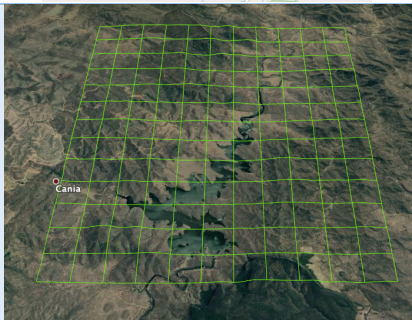
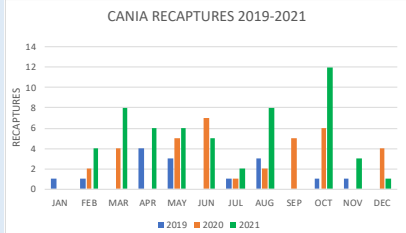
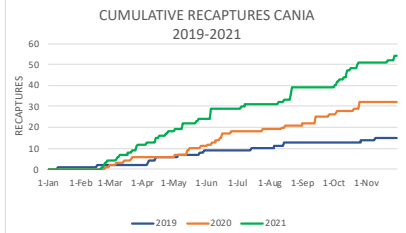
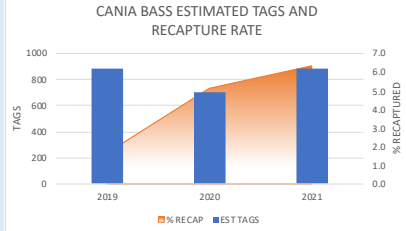
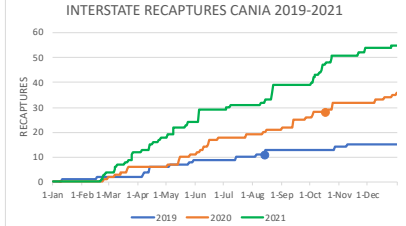
MEASURE	ACTUAL	GRAPH
<b>NORTH QLD</b>	<b>ESTUARIES</b>	<b>REGIONAL PERSPECTIVE</b>
North Queensland Estuaries Townsville to Cardwell	Ross River Bohle River Cattle Creek Herbert River Seymour River Hinchinbrook Channel	
NQ estuaries	Grid maps Cleveland Bay CBT Halifax Bay HBT Rollingstone RST Cattle Creek ICC Ingham ING Hinchinbrook Channel HCC Hinchinbrook Island HIC	
Key observations	Large difference due to significant drop in tagging effort in the Bohle River and a prolonged and above average 2021 wet season. Focus for recaptures has shifted to Hinchinbrook where there is a strong contingent of visiting fishers in the second half of the year. Only 2019 and 2020 comparable.	
Number of recaptures Dec 2021-2019	Dec 2021 0 2020 8 2019 11	 <p>NQ ESTUARIES RECAPTURES 2019-2021</p>
Cumulative recaptures 2021-2019	Recaps 2021 41 2020 188 2019 155 21-20 -78% 21-19 -74%	 <p>NQ ESTUARIES CUMULATIVE RECAPTURES 2019-2021</p>
Dots show recaptures by interstate fishers 2021-2019	Interstate 2021 1 2020 2 2019 3	 <p>NQ ESTUARIES CUMULATIVE RECAPTURES 2019-2021</p>

<b>Average distance (km) address or postcode to recapture location 2021-2019</b>	Recaptures 381 Av dist 2021 314 2020 71 2019 92	<p>NQ ESTUARIES DISTANCE FISHER'S ADDRESS TO RECAPTURE LOCATION (KM)</p>
<b>Distance (km) address or postcode to recapture location 2021-2019 combined</b>	Recaptures 381 Recaps Av dist Local 328 (86%) 9 Elsewhere 53 (14%) 697	<p>NQ ESTUARIES DISTANCE FISHER'S ADDRESS TO RECAPTURE LOCATION (KM) 2019-2021</p>
<b>Cumulative distance (km) address or postcode to recapture location 2021-2019</b>	Cum dist 2021 12000 2020 13365 2019 12111 21-20 -10% 21-19 -1%	<p>NQ ESTUARIES CUMULATIVE DISTANCE 2019-2021</p>
<b>Day of the week fishing from recaptures 2020-2019 (only years comparable)</b>	Recaps 387 Least Tue 6.3% Most Thu 21.6% Mon 19.3%	<p>NTH QLD ESTUARIES DAYS FISHED 2019-2020</p>


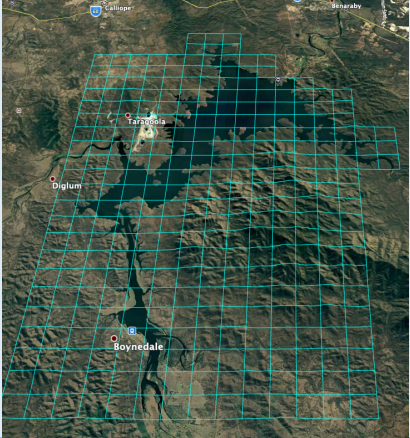
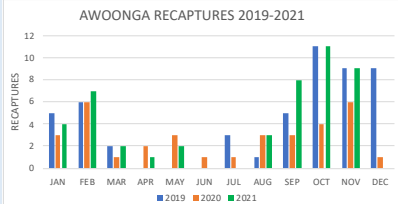
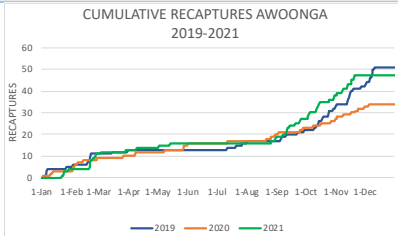
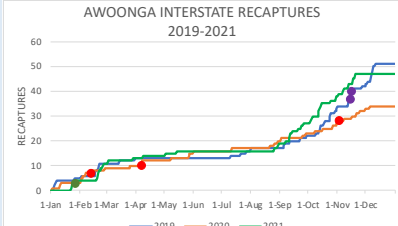
MEASURE	ACTUAL	GRAPH												
<b>SOUTH EAST QLD</b>	<b>FRESHWATER</b>	<b>IMPOUNDMENTS</b>												
SEQ impoundments stocked with Australian Bass Golden Perch														
Key observations	Recaptures continue to exceed previous 2 years however tagging effort is up considerably in some impoundments leading to increased recaptures. Slow down in late Nov-early Dec due to widespread rain and flooding with some impoundments spilling.													
SEQ impoundments	Grid maps Somerset LS01 Wivenhoe LWH Moogerah LMH Maroon LMM Advancetown ADV Borumba LBY													
Number of recaptures 2021-2019	<table><tr><td></td><td>Dec</td></tr><tr><td>2021</td><td>13</td></tr><tr><td>2020</td><td>20</td></tr><tr><td>2019</td><td>20</td></tr><tr><td>21-20</td><td>-35%</td></tr><tr><td>21-19</td><td>-35%</td></tr></table>		Dec	2021	13	2020	20	2019	20	21-20	-35%	21-19	-35%	
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Cumulative recaptures 2021-2019	<table><tr><td></td><td>Cum recaps</td></tr><tr><td>2021</td><td>225</td></tr><tr><td>2020</td><td>169</td></tr><tr><td>2019</td><td>158</td></tr><tr><td>21-20</td><td>+33%</td></tr><tr><td>21-19</td><td>+42%</td></tr></table>		Cum recaps	2021	225	2020	169	2019	158	21-20	+33%	21-19	+42%	
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Recapture rate change														
21-20	-0.9%													
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<b>Dots show recaptures by interstate fishers 2021-2019</b>	<p>Interstate</p> <p>2021 4</p> <p>2020 6</p> <p>2019 3</p>	<p>CUMULATIVE RECAPTURES SEQ IMPOUNDMENTS 2019-2021</p>
<b>Distance (km) address or postcode to recapture location 2021-2019</b>	<p>Recaptures 551</p> <p>Av dist</p> <p>2021 76</p> <p>2020 67</p> <p>2019 72</p> <p>21-20 +13%</p> <p>21-19 +6%</p>	<p>DISTANCE ADDRESS TO RECAPTURE 2019-2020 (KM)</p>
<b>Average distance (km) address or postcode to recapture location 2021-2019</b>	<p>Highest Av dist</p> <p>Jul 2021 202</p> <p>Aug 2020 145</p> <p>Dec 2019 148</p>	<p>AVERAGE DISTANCE ADDRESS TO RECAPTURE 2019-2021</p>
<b>Cumulative distance (km) address or postcode to recapture location 2021-2019</b>	<p>Cumulative dist</p> <p>2021 13799</p> <p>2020 9188</p> <p>2019 7812</p> <p>21-20 +50%</p> <p>21-19 +77%</p>	<p>SEQ IMPOUNDMENTS CUMULATIVE DISTANCE 2019-2021</p>
<b>Day of the week fishing from recaptures 2021-2019 combined</b>	<p>Recaps 550</p> <p>Least</p> <p>Tue 8.4%</p> <p>Most</p> <p>Sat 22.2%</p> <p>Sun 24.5%</p>	<p>SEQ IMPOUNDMENTS DAY OF WEEK RECAPTURED</p>



MEASURE	ACTUAL	GRAPH
<b>CENTRAL QLD</b>	<b>FRESHWATER</b>	<b>IMPOUNDMENT</b>
Lake Cania Impoundment near Monto stocked with Bass and Golden Perch	Lake Cania	
Lake Cania	Grid map Lake Cania LCG	
Key observations	While recaptures are low there has been an increase over the past 2 years with 2020 showing little impact from lockdowns and restrictions. The average distance between address and recapture location suggests that most fishers are not local but also not from interstate.	
Number of recaptures 2021-2019	Dec 2021 1 2020 4 2019 0	
Cumulative recaptures 2021-2019	Cum recaps 2021 56 2020 36 2019 15 21-20 +53% 21-19 +267%	
Modeled estimate of tags at the end of each year and the recapture rate Rate change reflecting effort change	Recapture rate change 21-20 +3.4% 21-19 +4.6% Suggests increase in fishing effort	
Dots show recaptures by interstate fishers 2021-2019	Interstate 2021 0 2020 1 2019 1	

<b>Distance (km) address or postcode to recapture location 2021-2019</b>	<table><tr><td>2021</td><td>269</td></tr><tr><td>2020</td><td>222</td></tr><tr><td>2019</td><td>287</td></tr><tr><td>21-20</td><td>+21%</td></tr><tr><td>21-19</td><td>-6%</td></tr></table>	2021	269	2020	222	2019	287	21-20	+21%	21-19	-6%	<p>DISTANCE ADDRESS TO RECAPTURE 2019-2020 (KM)</p>		
2021	269													
2020	222													
2019	287													
21-20	+21%													
21-19	-6%													
<b>Average monthly distance (km) address or postcode to recapture location 2021-2019</b>	<table><tr><td>Highest</td><td></td></tr><tr><td>Av dist</td><td></td></tr><tr><td>Jul 2021</td><td>387</td></tr><tr><td>Oct 2020</td><td>434</td></tr><tr><td>Aug 2019</td><td>563</td></tr></table>	Highest		Av dist		Jul 2021	387	Oct 2020	434	Aug 2019	563	<p>AVERAGE DISTANCE ADDRESS TO RECAPTURE 2019-2021</p>		
Highest														
Av dist														
Jul 2021	387													
Oct 2020	434													
Aug 2019	563													
<b>Cumulative distance (km) address or postcode to recapture location 2021-2019</b>	<table><tr><td>Cum dist</td><td></td></tr><tr><td>2021</td><td>13977</td></tr><tr><td>2020</td><td>6444</td></tr><tr><td>2019</td><td>3724</td></tr><tr><td>21-20</td><td>+117%</td></tr><tr><td>21-19</td><td>+275%</td></tr></table>	Cum dist		2021	13977	2020	6444	2019	3724	21-20	+117%	21-19	+275%	<p>CANIA CUMULATIVE DISTANCE 2019-2021</p>
Cum dist														
2021	13977													
2020	6444													
2019	3724													
21-20	+117%													
21-19	+275%													
<b>Day of the week fishing from recaptures 2021-2019 combined</b>	<table><tr><td>Recaps</td><td>106</td></tr><tr><td>Least</td><td></td></tr><tr><td>Fri</td><td>5.7%</td></tr><tr><td>Most</td><td></td></tr><tr><td>Sat</td><td>29.2%</td></tr><tr><td>Sun</td><td>30.2%</td></tr></table>	Recaps	106	Least		Fri	5.7%	Most		Sat	29.2%	Sun	30.2%	<p>CANIA DAY OF WEEK RECAPTURES</p>
Recaps	106													
Least														
Fri	5.7%													
Most														
Sat	29.2%													
Sun	30.2%													

MEASURE	ACTUAL	GRAPH
<b>CENTRAL QLD</b>	<b>FRESHWATER</b>	<b>IMPOUNDMENT</b>
Lake Awoonga Impoundment near Gladstone stocked with Barramundi	Lake Awoonga	
Lake Awoonga	Grid map Lake Awoonga GLA	
Key observations	No recaptures recorded during Dec. Recaptures in 2021 similar to 2019 after fall in 2020. Minimal impact from Covid-19.	
Number of recaptures Dec 2021-2019	<div>Dec</div> <div> <div>2021</div> <div>2020</div> <div>2019</div> </div> <div> <div>0</div> <div>1</div> <div>9</div> </div>	
Cumulative recaptures 2021-2019	<div>Recaps</div> <div> <div>2021</div> <div>2020</div> <div>2019</div> <div>21-20</div> </div> <div> <div>48</div> <div>34</div> <div>51</div> <div>+41%</div> </div>	
Cumulative recaptures Dots show recaptures by interstate fishers 2021-2019	<div>Interstate</div> <div> <div>2021</div> <div>2020</div> <div>2019</div> </div> <div> <div>1</div> <div>4</div> <div>2</div> </div>	

<b>Average distance (km) address or postcode to recapture location 2021-2019</b>	Recaptures 123 Av dist 2021 205 2020 238 2019 64 21-20 -14% 21-19 +220%	<p>DISTANCE ADDRESS TO RECAPTURE 2019-2021 (KM)</p>
<b>Distance (km) address or postcode to recapture location 2021-2019 combined</b>	Recaptures 123 Recaps Av dist Local 72 (59%) 23 Elsewhere 51 (41%) 430	<p>AWOONGA DISTANCE FISHER'S ADDRESS TO RECAPTURE LOCATION (KM) 2019-2021</p>
<b>Cumulative distance (km) address or postcode to recapture location 2021-2019</b>	Cum dist 2021 9216 2020 9171 2019 5203 21-20 +0.5% 21-19 +77%	<p>AWOONGA CUMULATIVE DISTANCE 2019-2021</p>
<b>Day of the week fishing from recaptures 2021-2019 combined</b>	Recaps 135 Least Tue 10.4% Most Fri 17.0% Sun 17.8%	<p>AWOONGA DAY OF WEEK RECAPTURED 2019-2021</p>



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Suntag



Initial funding by Fisheries  
Research and Development  
Corporation and Recfishing  
Research

## Data sources

Data used in the GOFISH-21 Crystal Bowl are:

- Tag and recapture records for Queensland from Infofish Suntag database from [http://crystalbowl.infofishaustralia.com.au/infofish/f\\_infofish.htm](http://crystalbowl.infofishaustralia.com.au/infofish/f_infofish.htm)
- Postcodes data from Australia Postcode Location Data at Corra at <https://www.corra.com.au/australian-postcode-location-data/>

## Data analysis

- Modelled estimate of tags at the end of each year based on model outlined in report “Impact of Covid-19 on recreational fishing” available at <https://tacklebox.net.au/surveys/>
- Distance calculated between address and recapture does not represent the actual distance travelled by road and/or by boat, which is likely to be considerably further, but provides a reasonable estimate for comparison purposes
- Distance between address and recapture location is the straight line distance between the recapture location and their residential address, or town or suburb or centroid of their postcode, whichever is provided and calculated using Google Earth