

MORETON ESTUARIES REVIEW JUNE 2025

INFORMATION RATING



Key species: Dusky Flathead, Yellowfin Bream, King Threadfin, Snapper, Mulloway, Australian Bass

Fish timeframe: 2016-2025 Jan-Jun

Fisher timeframe: 2021-2025 Jan-Jun

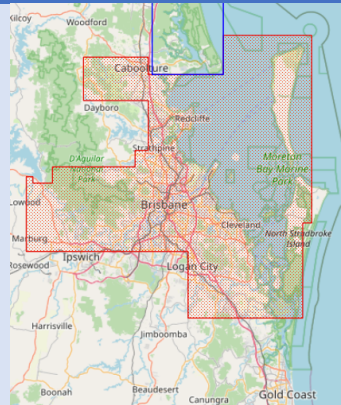
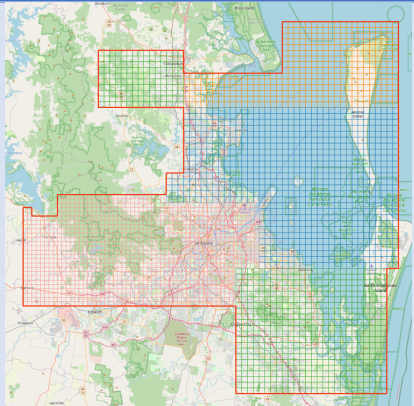
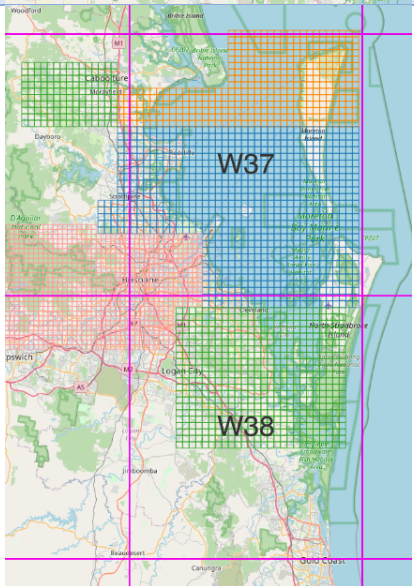
Moreton estuaries and bay are fished year-round and are mostly a local fishery with 96% of recapture fishers being local (living within 60km of recapture location) with most of the remainder coming from just outside that limit. No recaptures were recorded by interstate fishers. With the upsurge in Bass fishing there has been an increase in fishers from west of Ipswich as far out as Toowoomba. Fishing is focused on weekends with 48% of effort by taggers and 42% by recapture fishers occurring then.

Flathead and Bream are key target species throughout and Snapper are a key target in the bay while Threadfin and Mulloway are targeted in the rivers by high end fishers that do not readily share their knowledge. Bass are a secondary target except after flooding when fish spill from impoundments as occurred in 2022. The fishery is mostly a harvest fishery for Bream, Snapper and Mulloway while for Flathead and Threadfin it is a mix of harvest and experiential and for Bass it is mostly experiential with few legal fish being kept.

The recapture rate for King Threadfin of 28% with 41% kept is a concern given that there is likely to be significant under reporting of recaptures, particularly by commercial fishers that do not report the recapture of tagged fish that are caught in the bay. The recapture rate and the significant decline in the commercial catch over the past decade suggests that the stock is heavily exploited and may be at risk of being over exploited.

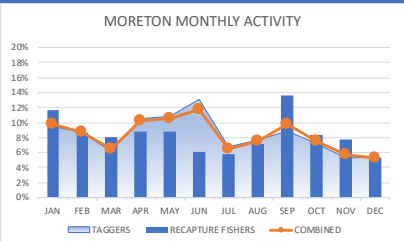
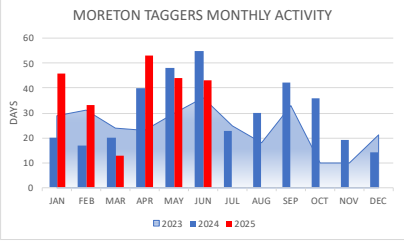
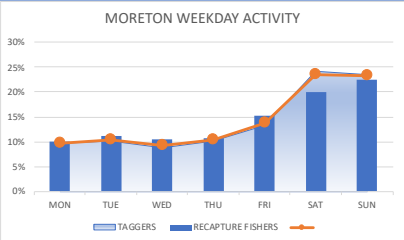
Both Mulloway and Threadfin are mobile based on movements. Mulloway have been recaptured outside the Moreton Bay area while all Threadfin have been recaptured within the rivers or in the bay. Flathead, Bream, and Snapper (mostly juveniles) are mostly recaptured in the same area as tagged.

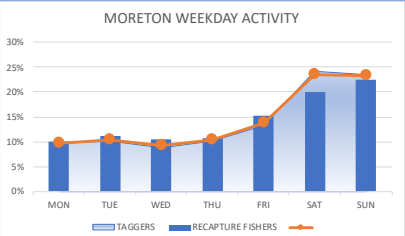
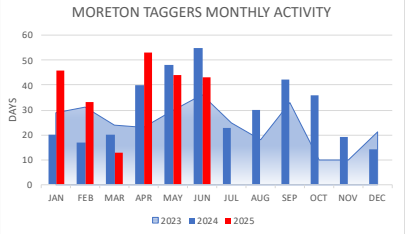
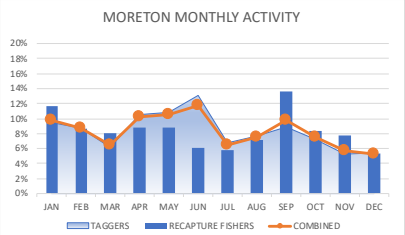
Bass fishing was at low levels from 2016-2021. Following flooding in 2022 there was an upsurge in effort when dams spilled stocked Bass. This resulted in a shift in effort in the second half of the year from the lakes to the rivers by a contingent of fishers that target Bass. This is reflected in the upsurge in recaptures and there was a boost in land based and kayak fishers targeting Bass. Bass from impoundments were recaptured in all Moreton Bay rivers (see dashboards for those impoundments). The targeting of spilled Bass declined through 2024 with a slight resurgence following further spilling of dams in Dec 2024 and early 2025.

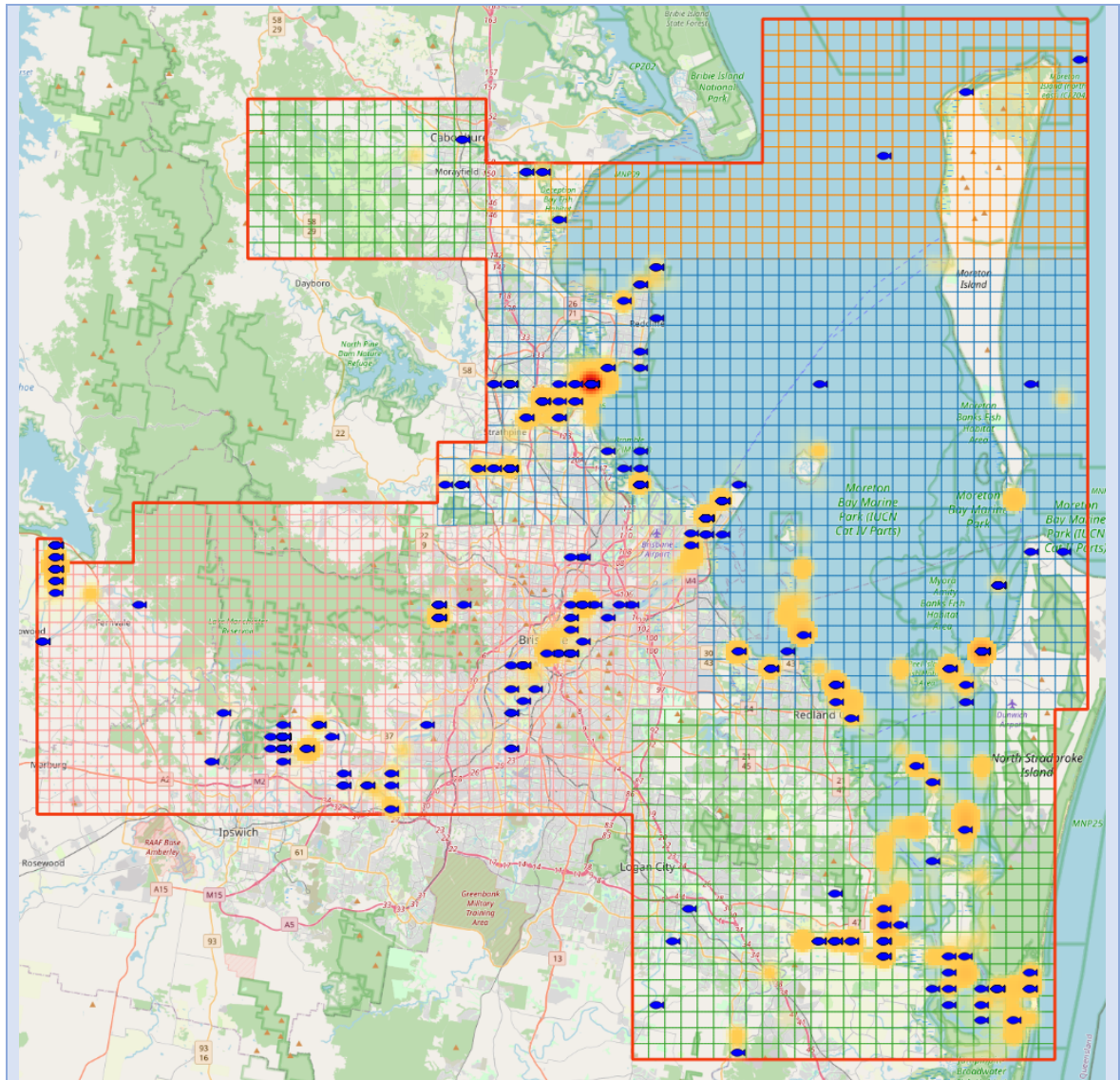
MORETON BAY		LOCATION
	Moreton Bay 27.3°S 153.3°E	
WATERWAYS	ACTUAL	GRAPH or MAP
Moreton Bay Grid maps Caboolture River (CAB) Moreton Bay (MB01) Moreton Bay (MB02) Moreton Bay (MB03) Brisbane River (MB05)	Caboolture River Pine River Brisbane River Logan River Albert River Moreton Bay Moreton Island North Stradbroke Island	
Commercial QFISH Grids	Grids W37 W38	

ENVIRONMENTAL	ACTUAL	GRAPH or MAP															
Mean monthly rainfall (mm) and temperature (oC) Brisbane	<table> <tr> <td>Rainfall</td><td>Month</td><td>mm</td></tr> <tr> <td>Max</td><td>Feb</td><td>182</td></tr> <tr> <td></td><td>Jan</td><td>141</td></tr> <tr> <td>Temp</td><td>Month</td><td>oC</td></tr> <tr> <td>Max</td><td>Dec-Feb</td><td>30</td></tr> </table>	Rainfall	Month	mm	Max	Feb	182		Jan	141	Temp	Month	oC	Max	Dec-Feb	30	BRISBANE RAINFALL AND TEMPERATURE The graph displays monthly rainfall (mm) on the left y-axis (0 to 200) and monthly temperature (oC) on the right y-axis (0 to 35). Rainfall peaks in February at 182 mm. Temperature peaks in December/January at 30 oC.
Rainfall	Month	mm															
Max	Feb	182															
	Jan	141															
Temp	Month	oC															
Max	Dec-Feb	30															
Caboolture River flows and mean flows (ML) 2021-2025 2025 Jan-Jun		CABOOLTURE RIVER FLOWS (ML) The graph shows daily flow (ML) on the y-axis (0 to 60,000) and time on the x-axis (1/1/21 to 1/1/26). Significant peaks in flow are visible in early 2022 and early 2025.															
Pine River flows and mean flows (ML) 2021-2025 2025 Jan-Jun		PINE RIVER FLOWS (ML) The graph shows daily flow (ML) on the y-axis (0 to 160,000) and time on the x-axis (1/1/21 to 1/1/26). Major flow peaks occur in early 2022 and early 2025.															
Brisbane River flows and mean flows (ML) 2021-2025 2025 Jan-Jun		BRISBANE RIVER FLOWS (ML) The graph shows daily flow (ML) on the y-axis (0 to 1,800,000) and time on the x-axis (1/1/21 to 1/1/26). Large flow peaks are observed in early 2022 and early 2025.															
Logan River flows and mean flows (ML) 2021-2025 2025 Jan-Jun		LOGAN RIVER FLOWS (ML) The graph shows daily flow (ML) on the y-axis (0 to 600,000) and time on the x-axis (1/01/21 to 1/01/26). Flow peaks are visible in early 2022 and early 2025.															

FISHERS ACTIVITY	ACTUAL	GRAPH or MAP																												
Sample size (days fished) Tag days (blue arrow) Recaptures (orange arrow) Confidence % Error % 2021-2025	<table><tr><td>Reliability level</td><td>LOW</td><td colspan="2">MODERATE</td><td>MODERATE</td><td colspan="2">HIGH</td></tr><tr><td>Samples</td><td>10</td><td>41</td><td>68</td><td>271</td><td>384</td><td>664</td></tr><tr><td>Confidence</td><td>80%</td><td>80%</td><td>90%</td><td>90%</td><td>95%</td><td>99%</td></tr><tr><td>Error</td><td>20%</td><td>10%</td><td>10%</td><td>5%</td><td>5%</td><td>5%</td></tr></table>	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%	
Reliability level	LOW	MODERATE		MODERATE	HIGH																									
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Error	20%	10%	10%	5%	5%	5%																								
TYPE OF FISHERY																														
Seasonality Mean monthly rainfall (mm) Days fished combined Taggers Recapture fishers 2021-2025 2025 Jan-Jun	Months most effort Most days Jun May	MORETON FISHERY SEASONALITY																												
Harvest or experiential fishery Release rate of recaptured legal key species fish (ex-taggers and ex-Bass) 2021-2025 2025 Jan-Jun	Legal fish kept rate Legal fish 137 Kept 74 (54%) Released 63 (46%)	TYPE OF FISHERY																												
Local or visitor fishery Where recapture fishers live 2021-2025 2025 Jan-Jun	Recapture fishers 358 Local 344 (96%) Visitor 14 (4%)	TYPE OF FISHER																												
Gender of recapture fishers (ex-taggers) 2021-2025 2025 Jan-Jun	Recaptures 299 Male 287 (96%) Female 12 (4%)	GENDER OF RECAPTURE FISHERS																												

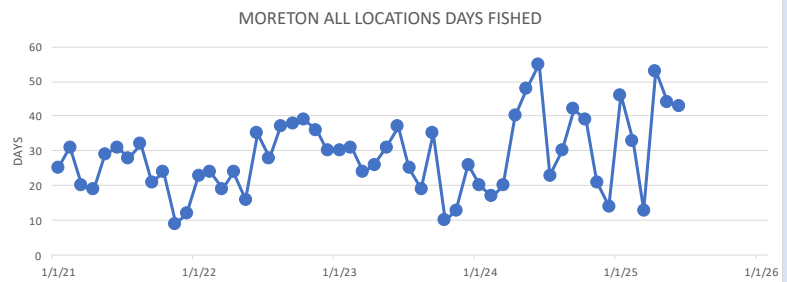
ACTIVITY			
Monthly activity Days fished Taggers (1551) Recapture fishers (361) 2021-2025 2025 Jan-Jun	Taggers Recaps	Month	%
		Jun	13%
		May	11%
		Sep	14%
		Jan	12%
			
Monthly activity Days fished Taggers Recapture fishers 2021-2025 2025 Jan-Jun	Year 2023 2024 2025 Jan-Jun	Days	
		290	
		364	
		232	
			
Weekday activity Days fished Taggers (1551) Recapture fishers (361) 2021-2025 2025 Jan-Jun	Taggers Recaps	Day	%
		Weekend	48%
		Weekdays	52%
		Weekend	42%
		Weekdays	58%
			
Location activity Taggers (red-orange heat map) Recapture fishers (blue fish) 2021-2025 2025 Jan-Jun	Tagged fish 7007 Recaptures 381		



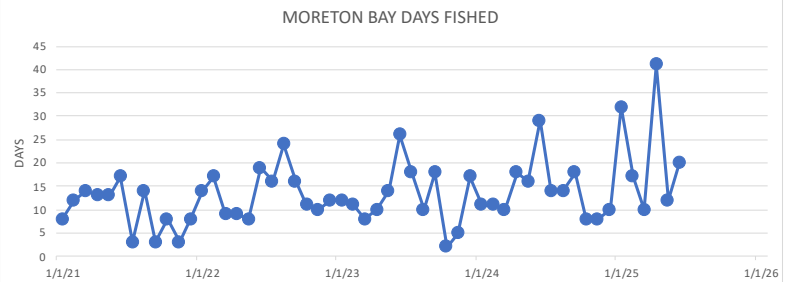


EFFORT

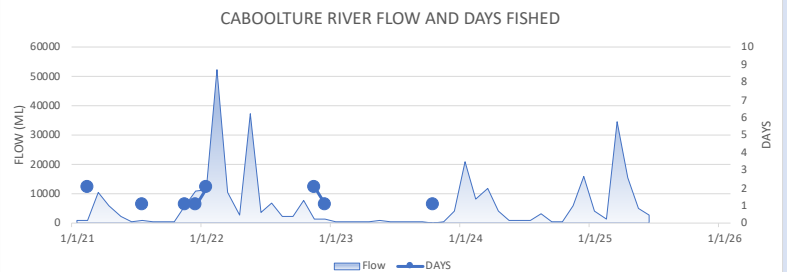
Fisher effort
Moreton (all locations)
Days fished
Taggers
2021-2025
2025 Jan-Jun



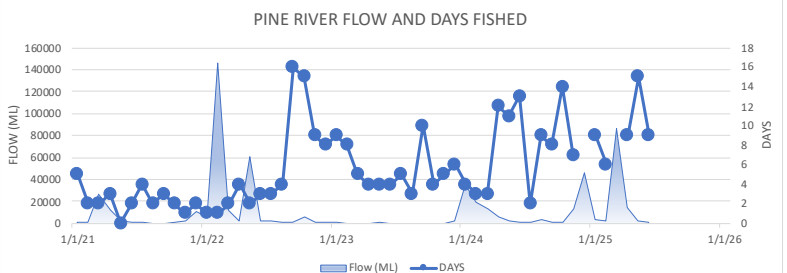
Fisher effort
Moreton Bay
Days fished
2021-2025
2025 Jan-Jun



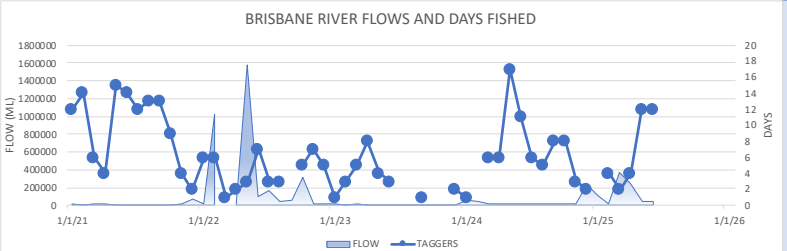
Fisher effort
Caboolture River flow (ML)
Days fished
Taggers
2021-2025
2025 Jan-Jun



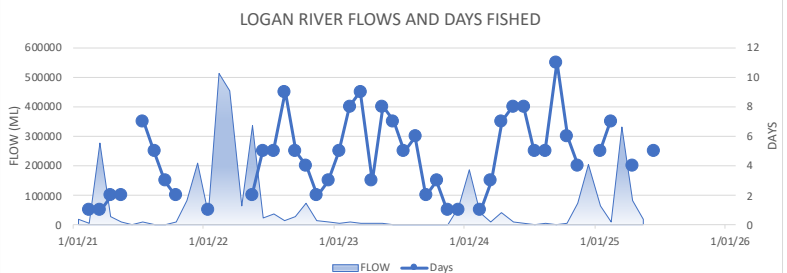
Fisher effort
Pine River flow (ML)
Days fished
Taggers
2021-2025
2025 Jan-Jun

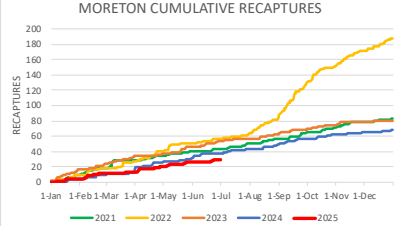


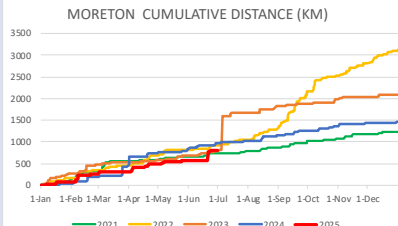
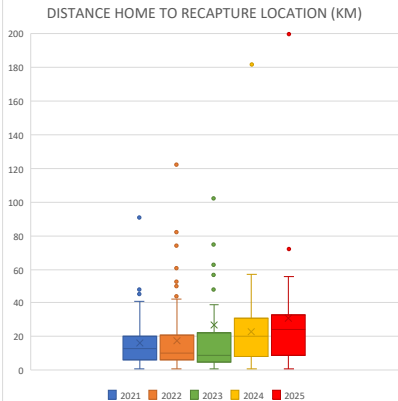
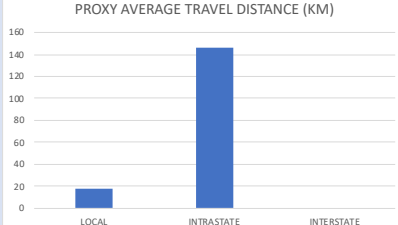
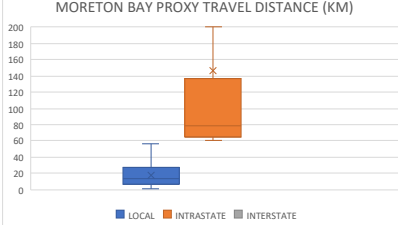
Fisher effort
Brisbane River flow (ML)
Tidal area only
Days fished
Taggers
2021-2025
2025 Jan-Jun



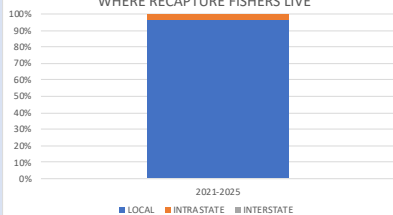
Fisher effort
Logan River flow (ML)
Albert River
Days fished
Taggers
2021-2025
2025 Jan-Jun

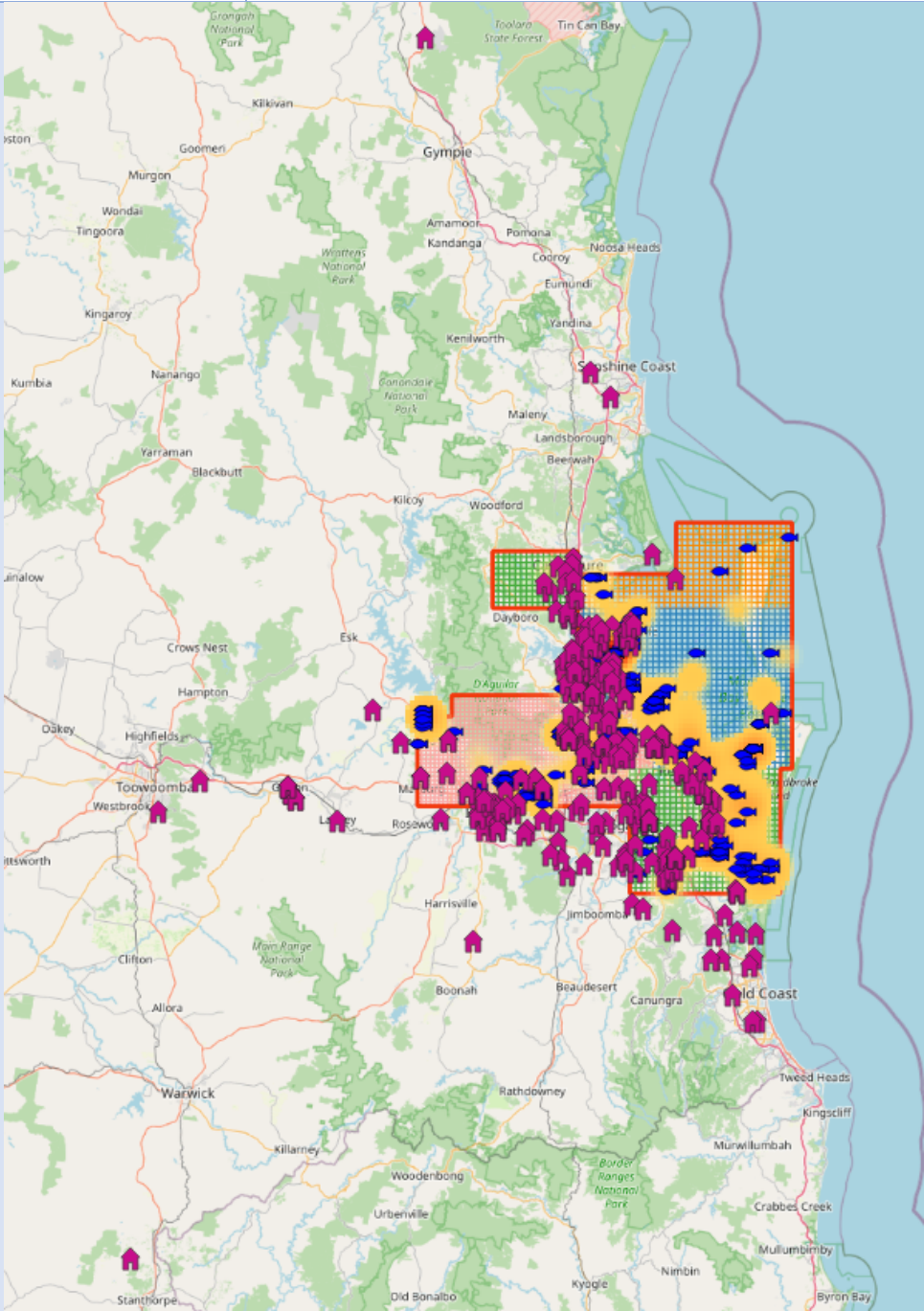


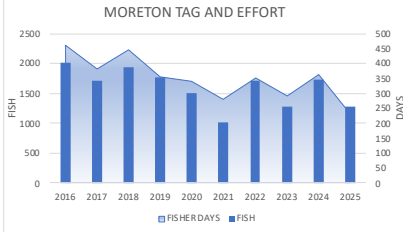
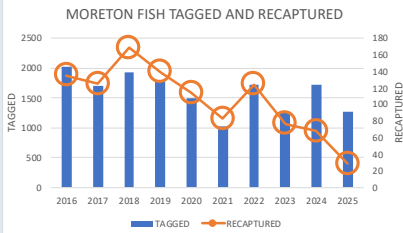
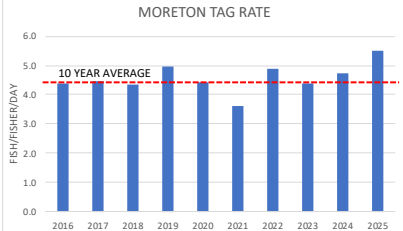
Cumulative recaptures 2021-2025 2025 Jan-Jun	Year	Recaptures	
	2021	83	
	2022	188	
	2023	80	
	2024	68	
	2025 Jan-Jun	29	

TRAVEL		
Cumulative distance (km) address to recapture location 2021-2025 2025 Jan-Jun	Year	Km
	2021	1241
	2022	3114
	2023	2090
	2024	1466
	2025 Jan-Jun	802
		
Cumulative distance (km) address to recapture location 2021-2025 2025 Jan-Jun		
		
Average distance (km) from home to recapture location 2021-2025 2025 Jan-Jun	Av distance (km)	
	Local	18
	Intrastate	146
	Interstate	NA
		
Distance (km) home to recapture location Bars show distance range Dots show outliers 2021-2025 2025 Jan-Jun	Range (km)	
	Local	1-57
	Intrastate	61-795
	Interstate	NA
		

WHERE RECAPTURE FSIHERS LIVE

Where recapture fishers live 2021-2025 2025 Jan-Jun	Recaptures	358	
	Local	344 (96%)	
	Intrastate	14 (4%)	
	Interstate	0 (0%)	
Where recapture fishers live (purple houses) Local Intrastate 2021-2025 2025 Jan-Jun	Recapture fishers (381)		
	Not shown		
	Mackay (1)		

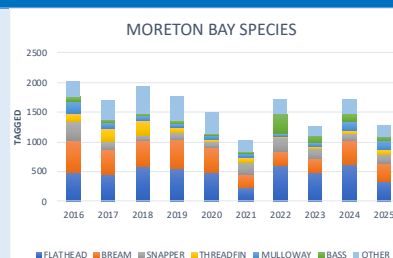


FISH	ACTUAL			GRAPH or MAP
DUSKY FLATHEAD	YELLOWFIN BREAM			KING THREADFIN
				
SNAPPER	MULLOWAY			AUSTRLIAN BASS
				
TAGGED AND TAG RATE				
Catch and effort Taggers Fish tagged Days fished 2016-2025 2025 Jan-Jun	High Tagged fish 2016 2015 Days 2016 461	Low 2021 1018 2021 282	Now 2025 1277 2025 232	
Fish tagged Recaptured 2016-2025 2025 Jan-Jun	Tagged 15933	Recaptured 1062 (6.7%)		
Tag rate All tagged fish Fish/day 2016-2025 2025 Jan-Jun	High Tag rate 2019 4.9 10 year average	Low 2021 3.6	Now 2025 5.5 4.6	

SPECIES

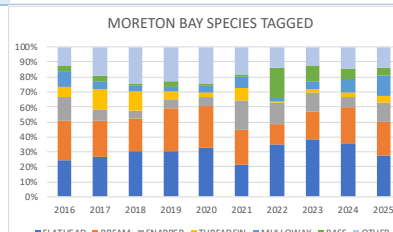
Species composition
Numbers tagged
2016-2025
2025 Jan-Jun

Dusky Flathead	4854
Yellowfin Bream	3689
Snapper	1622
King Threadfin	988
Mulloway	1021
Australian Bass	927



Species composition
Percentage tagged
2016-2025
2025 Jan-Jun

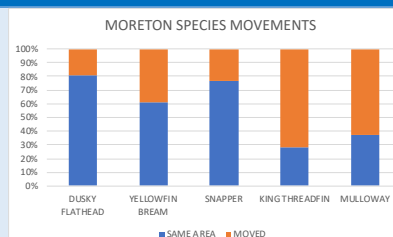
Dusky Flathead	30%
Yellowfin Bream	23%
Snapper	10%
King Threadfin	6%
Mulloway	6%
Australian Bass	6%



MOVEMENT

Movement of key species
tagging to recapture
2016-2025
2025 Jan-Jun

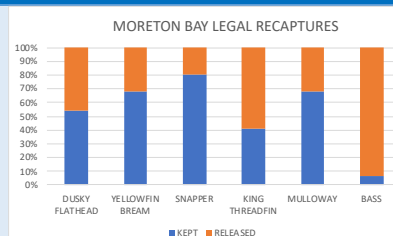
	Recaps	Moved
Flathead	255	49(19%)
Bream	44	17(39%)
Snapper	38	9(24%)
Threadfin	183	131(72%)
Mulloway	65	41(63%)



FATE

Recaptured legal fish kept
or released by recfishers
(ex-taggers)
2016-2025
2025 Jan-Jun

Recaptures	Legal	Kept
Flathead	217	117(54%)
Bream	47	32(68%)
Snapper	26	21(81%)
Threadfin	198	81(41%)
Mulloway	38	26(68%)
Bass	105	7(7%)



LOCATIONS

All fish

Tagged (red-orange
heatmap)

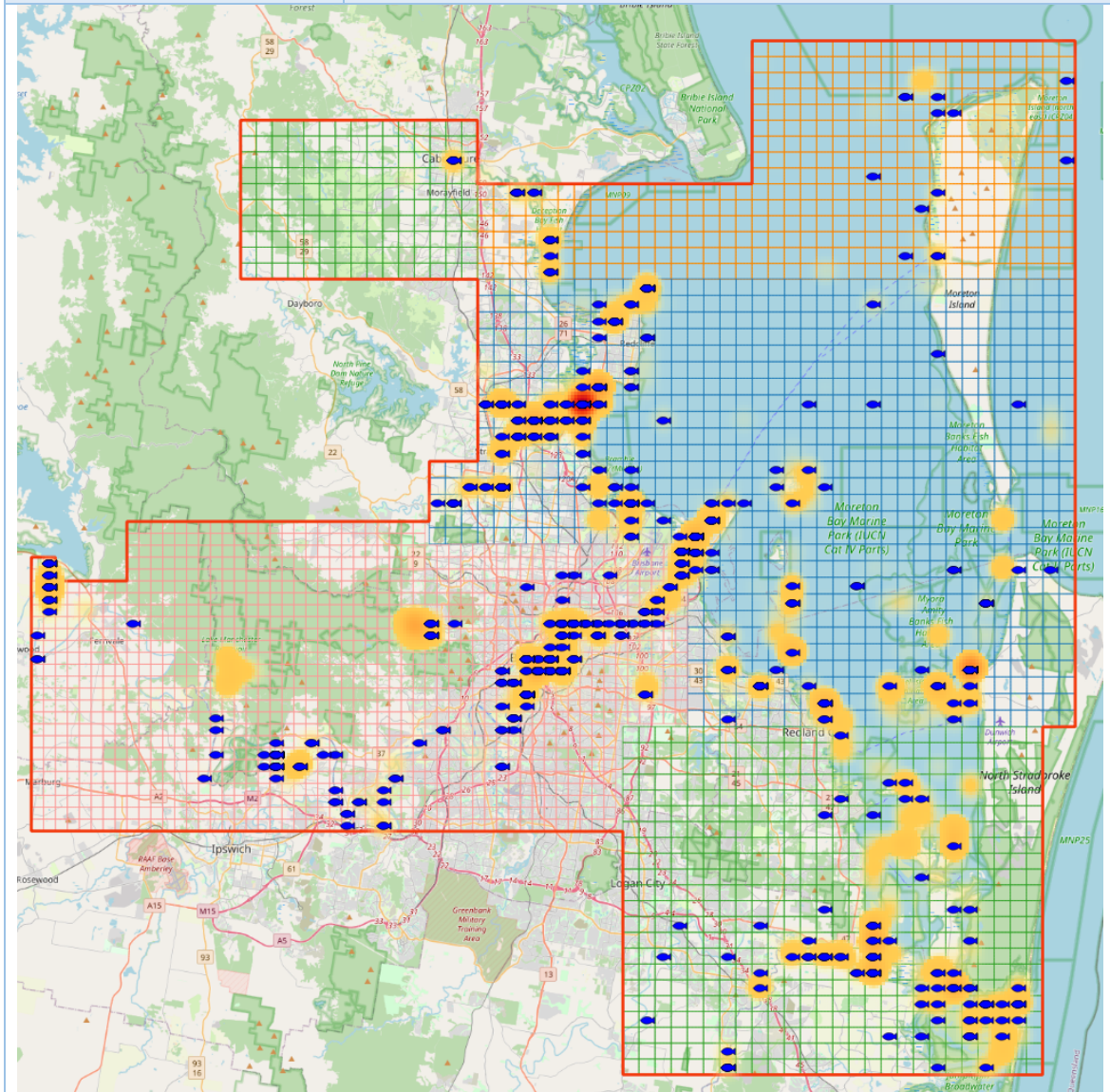
Recaptured (blue fish)

2016-2025

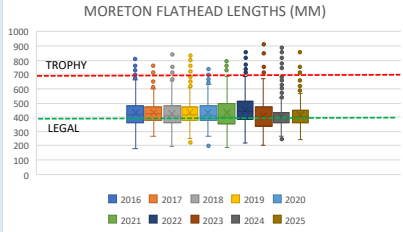
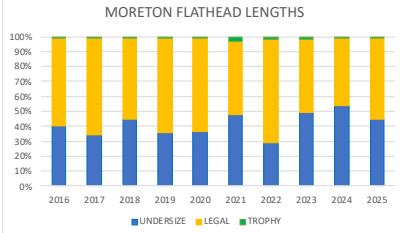
2025 Jan-Jun

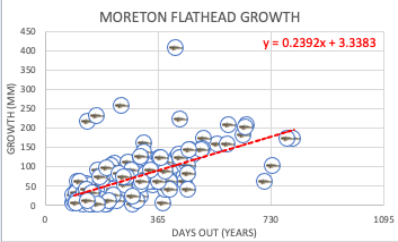
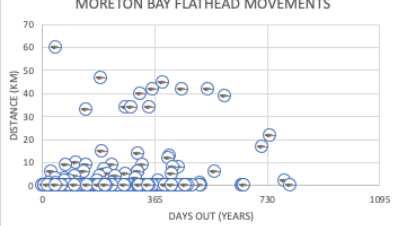
Tagged 5933

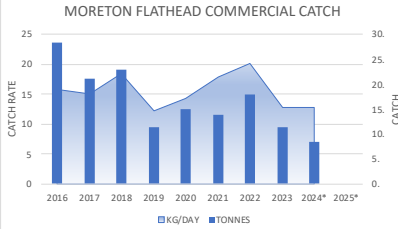
Recaptured 1062



FLATHEAD		ACTUAL				GRAPH or MAP	
							
DATA RELIABILITY							
Sample size (av fish/year)		Reliability level		LOW		MODERATE	
Tags (blue arrow)		Samples		10	41	68	271
Recaptures (orange arrow)		Confidence		80%	80%	90%	90%
Confidence %		Error		20%	10%	10%	5%
Error %							95%
2021-2025							99%
							5%
							5%
TAGGED AND TAG RATE							
Catch and effort		High		Low		Now	
Taggers		Tagged fish					
Tagged fish		2024		2021		2025	
Days fished		620		218		347	
2016-2025		Days					
2025 Jan-Jun		2023		2021		2025	
		158		74		89	
Flathead		Tagged		Recaptured			
Tagged		4854		285 (5.9%)			
Recaptured							
2016-2025							
2025 Jan-Jun							
Tag rate		High		Low		Now	
Fish/day		Tag rate					
2016-2025		2017		2021		2025	
2025 Jan-Jun		4.8		2.9		3.9	
		10 year average				3.8	

LENGTHS				
Average length (mm)	High	Low	Now	
Bars show length range	Average length			
Dots show outliers	2022	2024	2025	
2016-2025	452	407	414	
2025 Jan-Jun	Max			
	2023	2020	2025	
	910	740	860	
Fish lengths percentage	High	Low	Now	
Undersize <400mm	Legal-trophy			
Legal 400-700mm	2022	2023	2025	
Trophy 700+mm	69%	49%	54%	
2016-2025	Trophy			
2025 Jan-Jun	2021	2024	2025	
	3%	1%	1%	

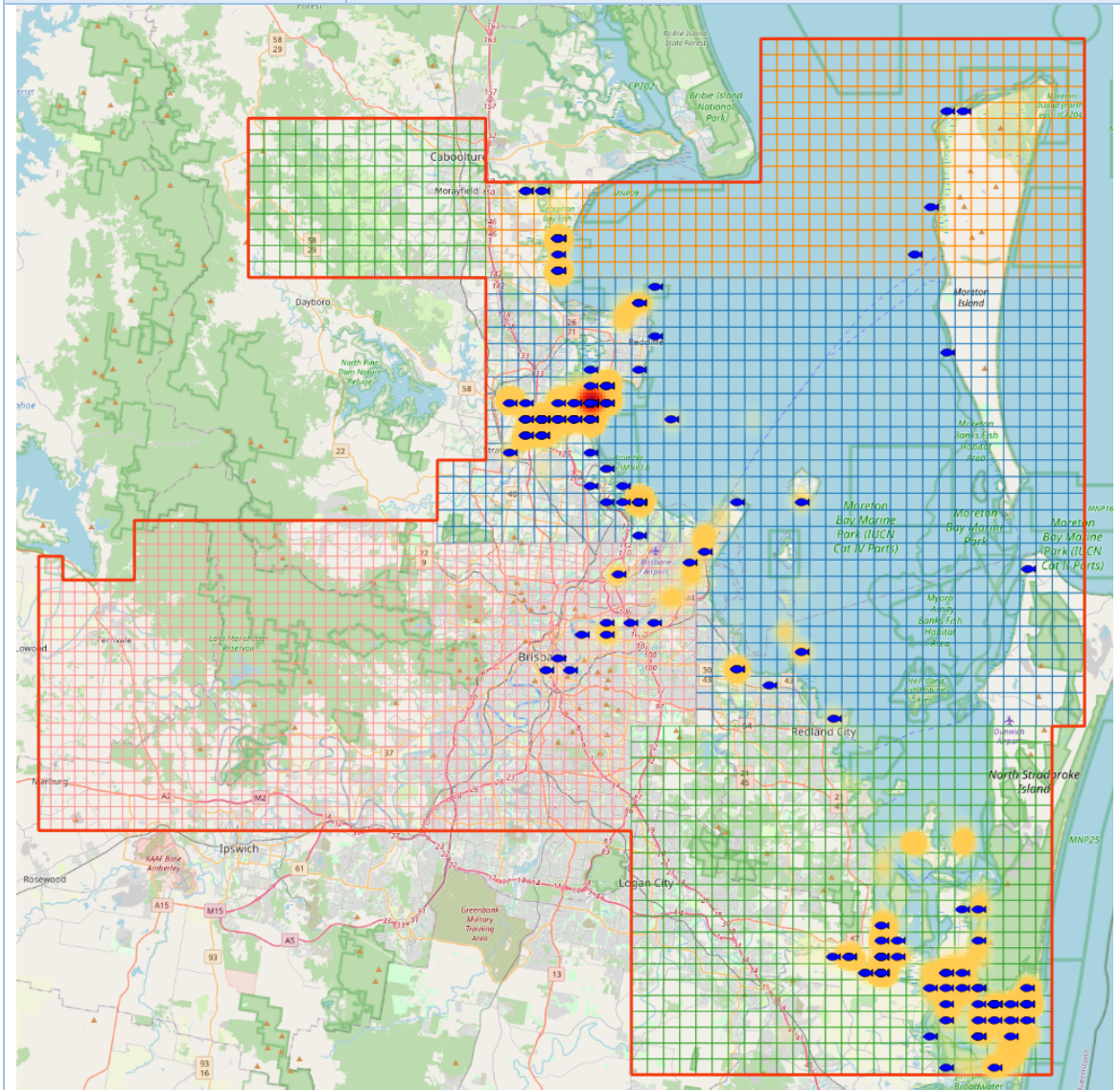
GROWTH			
Flathead growth at the end of each year based on recaptures of fish tagged 2016-2025 2025 Jan-Jun	Recaptures	55	
	Growth (mm)		
	Year 1	91	
	Year 2	178	
	Year 3	265	
MOVEMENT			
Flathead movement Distance moved (km) 2016-2025 2025 Jan-Jun	Recaptures	255	
	Same area	206 (81%)	
	Moved	49 (19%)	
	Max distance	60km	

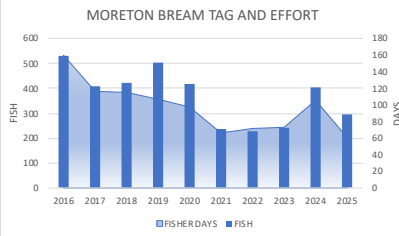
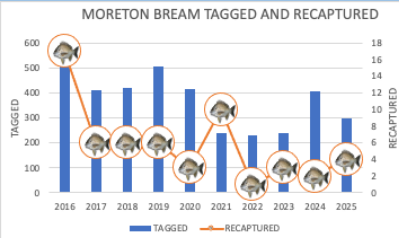
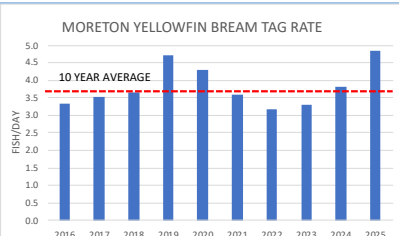
COMMERCIAL CATCH				
Commercial Flathead catch Grids W37, W38 2016-2025 2024* incomplete 2025* incomplete	High	Low	Now	
	Catch (tonnes)			
	2016	2019	2025*	
	28.4	11.4	NA	
	Catch rate (kg/day)			
	2022	2019	2025*	
	20.2	12.2	NA	

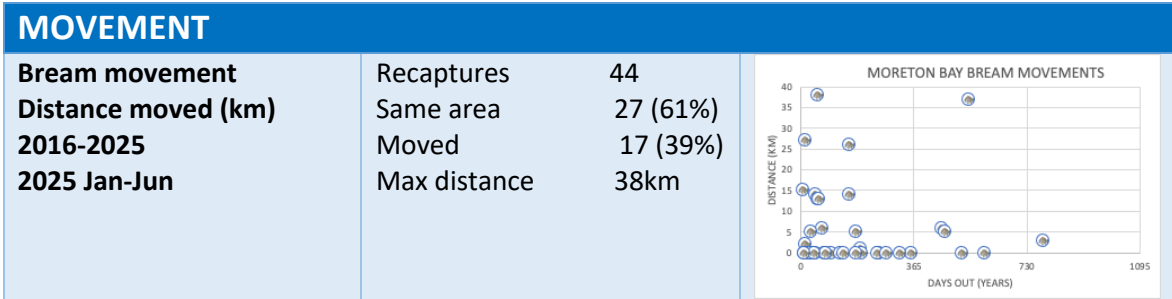
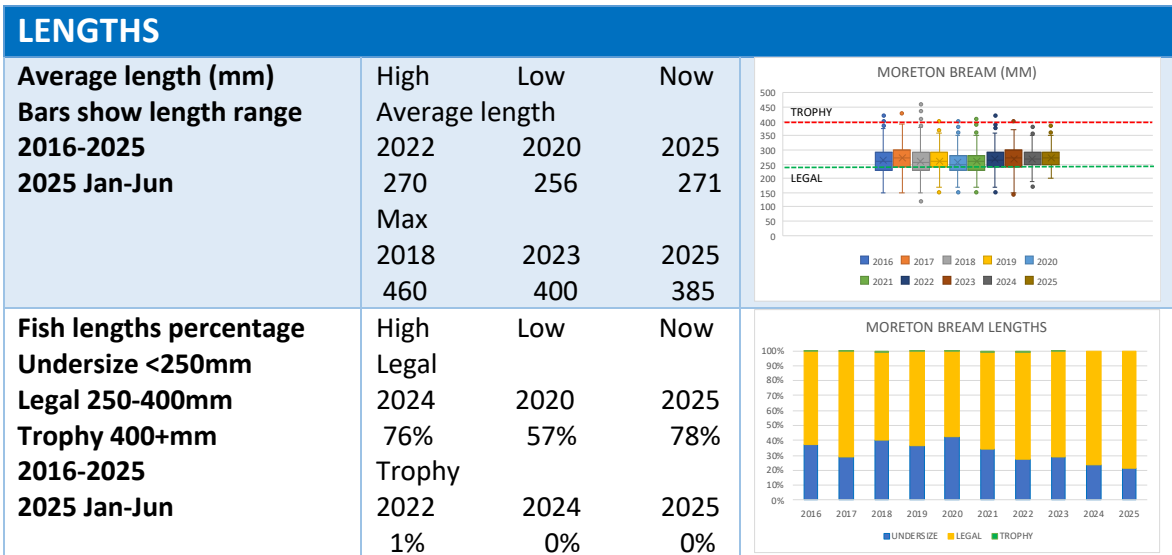
LOCATIONS

Flathead tagged
(red-orange heat map)
Recaptured
(blue fish)
2016-2025
2025 Jan-Jun

Tagged 4854
Recaptured 285



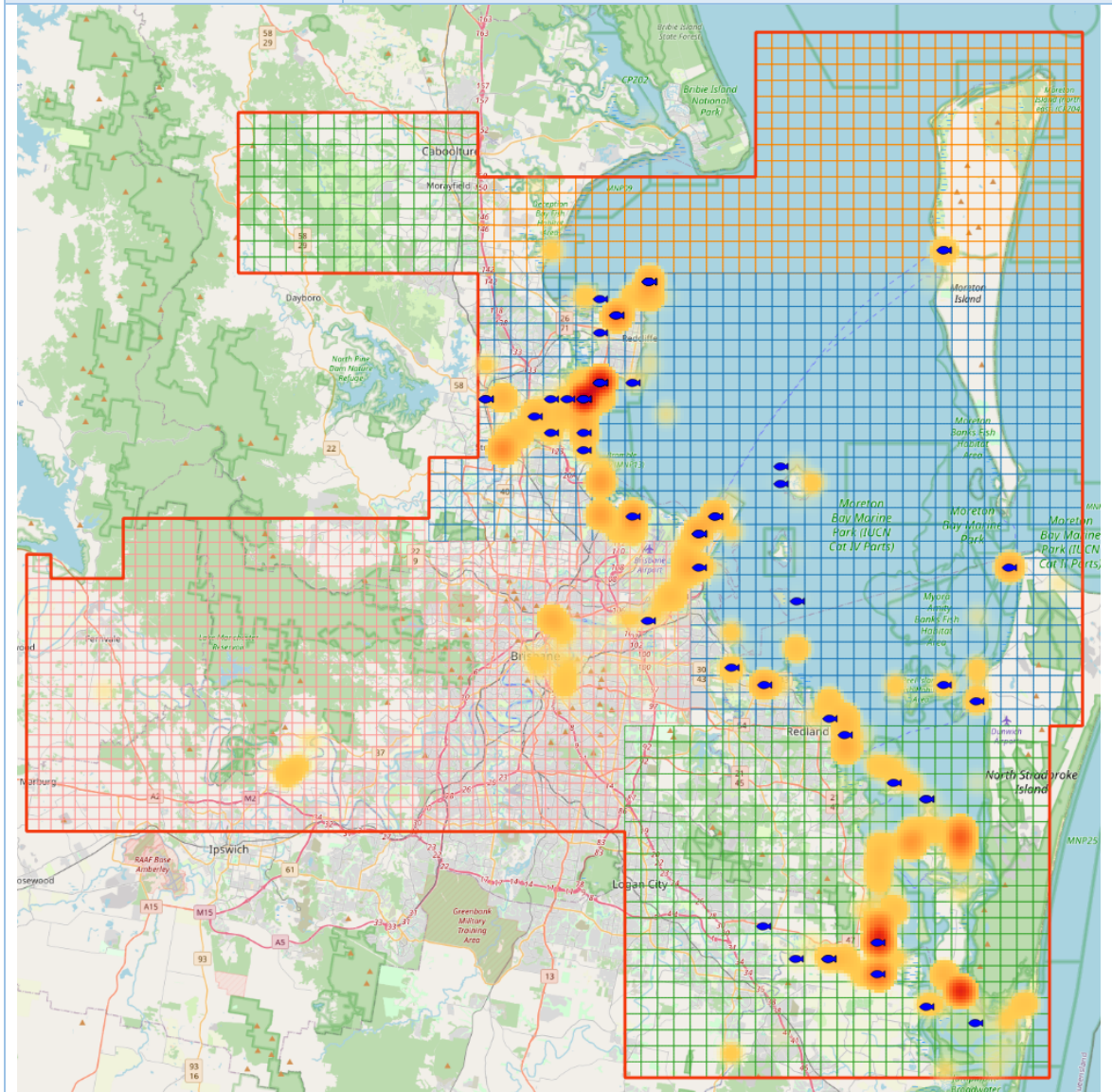
BREAM		ACTUAL		GRAPH or MAP																											
																															
DATA RELIABILITY																															
Sample size (av fish/year)		<table><tr><td>Reliability level</td><td>LOW</td><td>MODERATE</td><td>MODERATE</td><td>HIGH</td></tr><tr><td>Samples</td><td>10</td><td>41</td><td>68</td><td>271</td></tr><tr><td>Confidence</td><td>80%</td><td>80%</td><td>90%</td><td>90%</td></tr><tr><td>Error</td><td>20%</td><td>10%</td><td>10%</td><td>5%</td></tr></table>		Reliability level	LOW	MODERATE	MODERATE	HIGH	Samples	10	41	68	271	Confidence	80%	80%	90%	90%	Error	20%	10%	10%	5%	<table><tr><td>384</td><td>664</td></tr><tr><td>95%</td><td>99%</td></tr><tr><td>5%</td><td>5%</td></tr></table>		384	664	95%	99%	5%	5%
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Recaptures (orange arrow)																															
Confidence %																															
Error %																															
2021-2025																															
TAGGED AND TAG RATE																															
Catch and effort		High Low Now																													
Taggers																															
Tagged fish		2016 2022 2025																													
Days fished		532 229 296																													
2016-2025		Days																													
2025 Jan-Jun		2016 2021 2025																													
		160 66 61																													
Bream		Tagged Recaptured																													
Tagged		3689 58 (1.6%)																													
Recaptured																															
2016-2025																															
2025 Jan-Jun																															
Tag rate		High Low Now																													
Fish/day		Tag rate																													
2016-2025		2019 2022 2025																													
2025 Jan-Jun		4.7 3.2 4.9																													
		10 year average 3.8																													

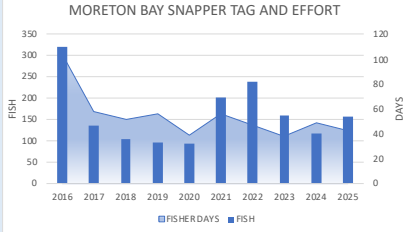
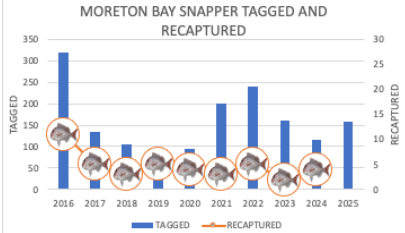
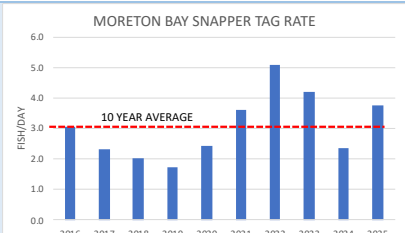


LOCATIONS

**Tagged Bream
(red-orange heat map)
Recaptured
(blue fish)
2016-2025
2025 Jan-Jun**

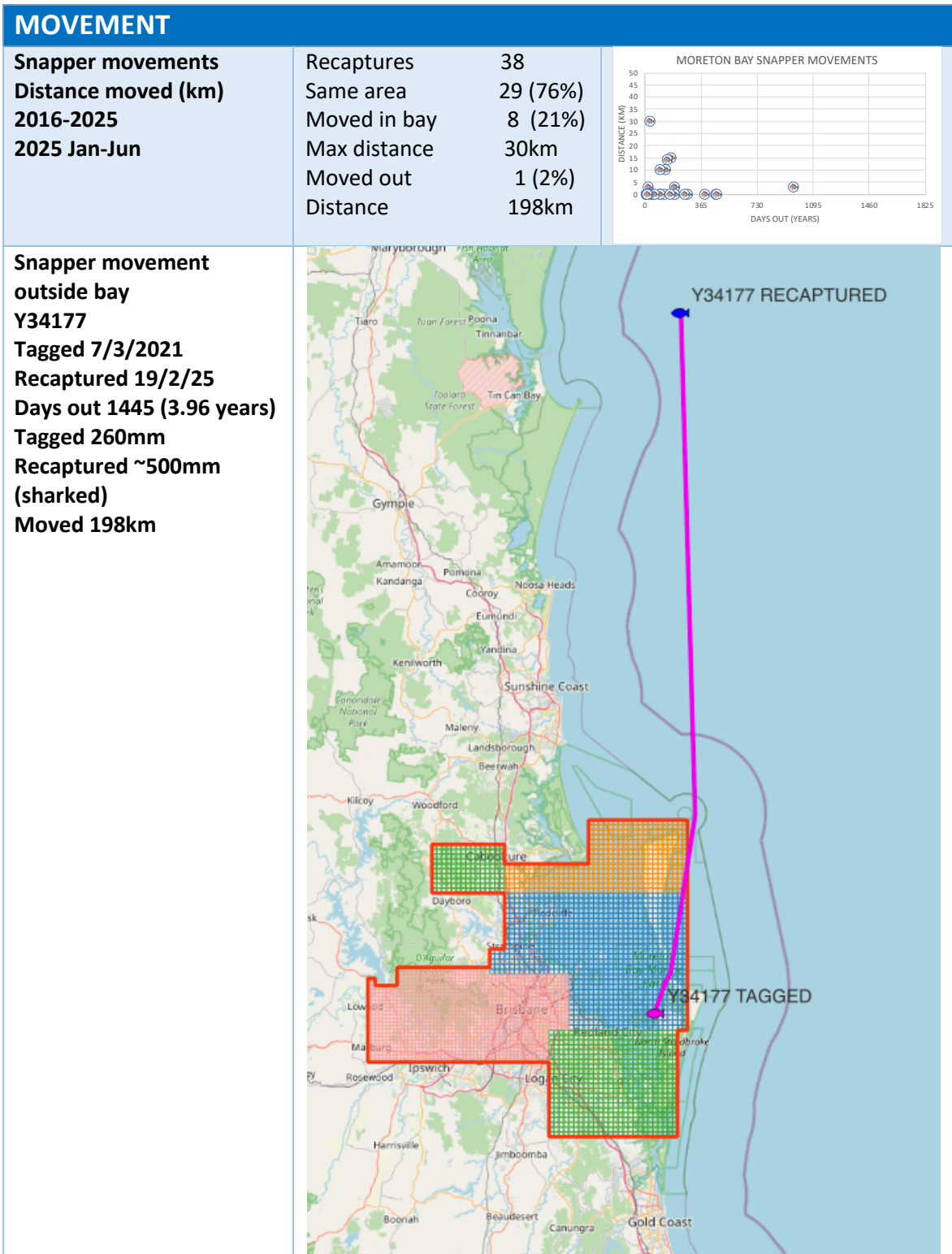
Tagged 3689
Recaptured 58



SNAPPER	ACTUAL			GRAPH or MAP																									
																													
DATA RELIABILITY																													
Sample size (av fish/year)	<table><tr><td>Reliability level</td><td>LOW</td><td colspan="2">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><td>664</td></tr><tr><td>Confidence</td><td>80%</td><td>80%</td><td>90%</td><td>90%</td><td>99%</td></tr><tr><td>Error</td><td>20%</td><td>10%</td><td>10%</td><td>5%</td><td>5%</td></tr></table>					Reliability level	LOW	MODERATE		MODERATE	HIGH	Samples	10	41	68	271	664	Confidence	80%	80%	90%	90%	99%	Error	20%	10%	10%	5%	5%
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Recaptures (orange arrow)																													
Confidence %																													
Error %																													
2021-2025																													
TAGGED																													
Catch and effort	High	Low	Now																										
Taggers																													
Tagged fish	2016	2020	2025																										
Days fished	319	94	157																										
2016-2025	Days																												
2025 Jan-Jun	2016	2023	2025																										
	104	38	42																										
Snapper	Tagged		Recaptured																										
Tagged	1622		42 (2.6%)																										
Recaptured																													
2016-2025																													
2025 Jan-Jun																													
Tag rate	High	Low	Now																										
Fish/day	Tag rate																												
2016-2025	2022	2019	2025																										
2025 Jan-Jun	5.1	1.7	3.7																										
	10 year average		3.0																										

LENGTHS

Average length (mm) Bars show length range Dots show outliers 2016-2025 2025 Jan-Jun	High Average length 2019 363 Max 2019 870	Low 2022 276 2020 560	Now 2025 304 2025 700	
Fish lengths percentage Undersize <350mm Legal 350-700mm Trophy 700+mm 2016-2025 2025 Jan-Jun	High Legal-trophy 2019 38% Trophy 2019 5%	Low 2022 8% 20-24 0%	Now 2025 24% 2025 1%	



COMMERCIAL CATCH

Commercial Snapper catch

Grids W37, W38

2016-2025

2020-2023 NA

2024* incomplete

2025* incomplete

High

Low

Now

Catch (tonnes)

2016

2019

2025*

3.6

1.0

NA

Catch rate (kg/day)

2016

2017

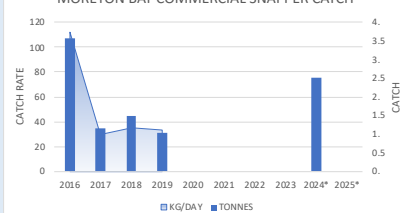
2025*

111.6

30.0

NA

MORETON BAY COMMERCIAL SNAPPER CATCH



LOCATIONS

Tagged Snapper

(red-orange heat map)

Recaptured in bay

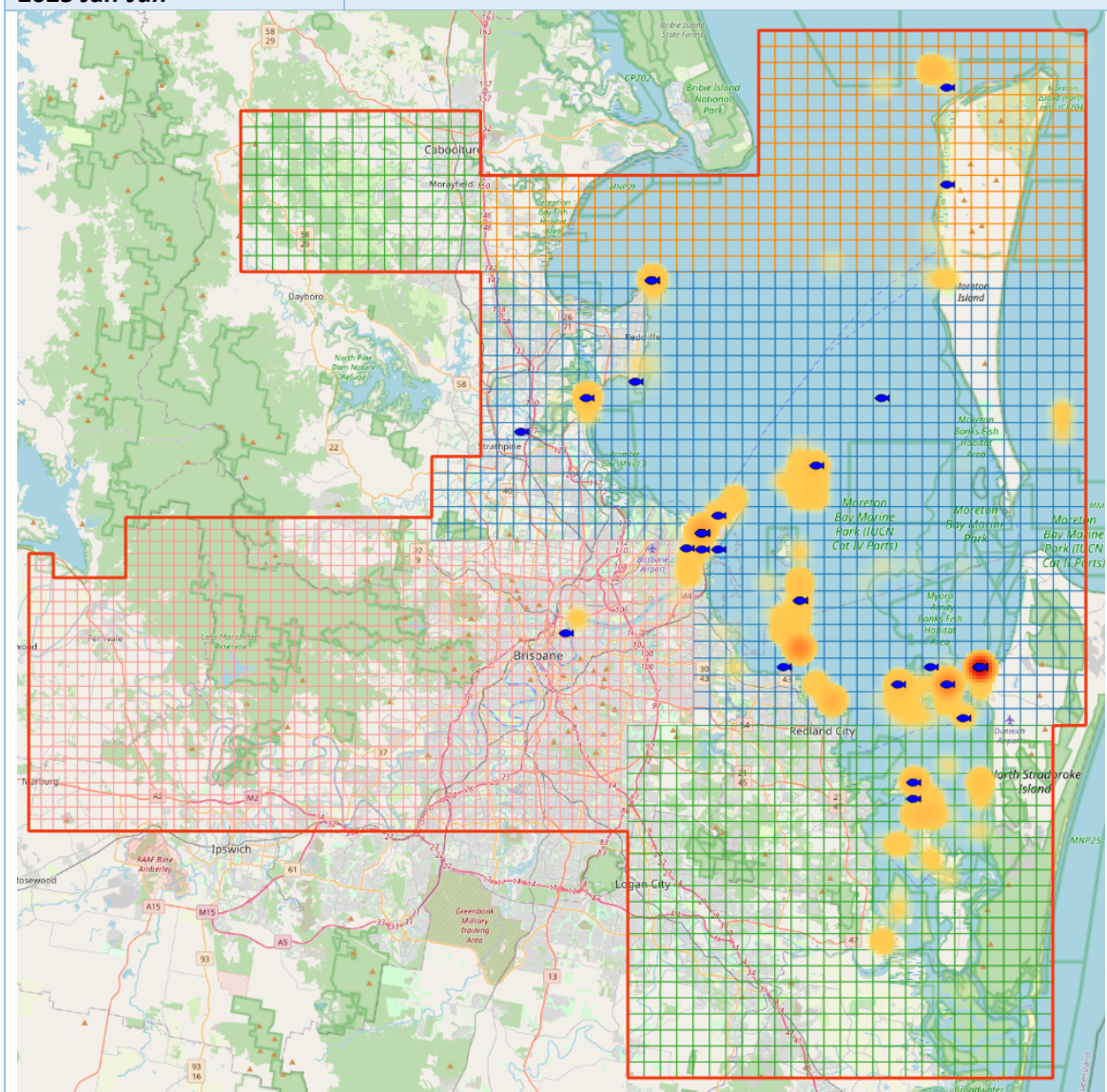
(blue fish)

2016-2025

2025 Jan-Jun

Tagged 1622

Recaptured 42

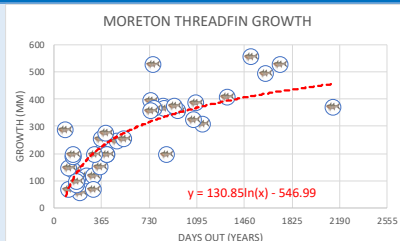


THREADFIN		ACTUAL		GRAPH or MAP	
					
DATA RELIABILITY					
Sample size (av fish/year)		Reliability level		MODERATE	
Tags (blue arrow)		Samples		MODERATE	
Recaptures (orange arrow)		Confidence		HIGH	
Confidence %		Error			
Error %					
2021-2025					
TAGGED AND TAG RATE					
Catch and effort taggers		High		Low	
Number of tagged fish		Tagged fish		Now	
Days fished		2018		2022	
2016-2025		237		18	
2025 Jan-Jun		Days		2025	
		2018		2022	
		157		37	
				55	
Tagged		Tagged		Recaptured	
Recaptured		988		273 (27.6%)	
2016-2025					
2025 Jan-Jun					
Tag rate		High		Low	
Fish/day		Tag rate		Now	
2016-2025		2018		2022	
2025 Jan-Jun		1.5		0.5	
				1.2	
		10 year average		1.0	
LENGTHS					
Average length (mm)		High		Low	
Bars show length range		Average length		Now	
Dots show outliers		2022		2017	
2016-2025		948		730	
2025 Jan-Jun		Max		2023	
		1270		1120	
				1200	
Fish lengths percentage		High		Low	
Undersize <650mm		Legal-trophy		Now	
Legal 650-1000mm		2020		2017	
Trophy 1000+mm		73%		47%	
2016-2025		Trophy		2025	
2025 Jan-Jun		2022		2018	
		33%		9%	
				14%	

GROWTH

Threadfin growth at the end of each year based on recaptures of fish tagged <650mm
2016-2025
2025 Jan-Jun

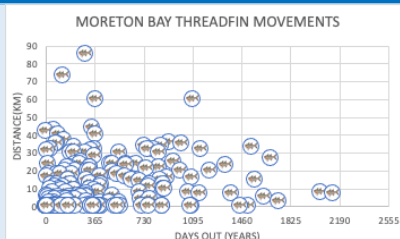
Recaptures	41
Growth (mm)	
Year 1	220
Year 2	310
Year 3	363



MOVEMENT

Movements
Distance moved (km)
2016-2025
2025 Jan-Jun

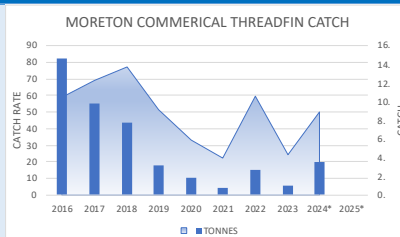
Recaptures	183
Same area	52 (28%)
Moved	131 (72%)
Max distance	85km
Movement up and down rivers and to bay	



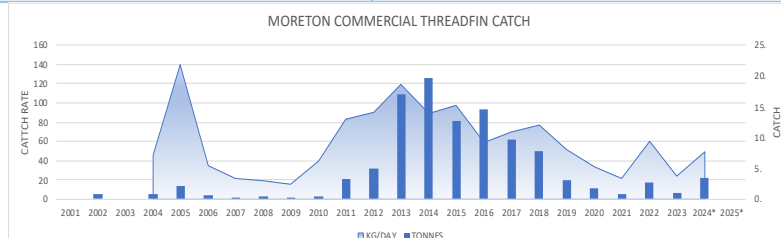
COMMERCIAL CATCH

Commercial catch
Grids W37, W38
2016-2025
2024* incomplete
2025* incomplete

High	Low	Now
Catch (tonnes)		
2016	2021	2025*
14.6	0.8	NA
Catch rate (kg/day)		
2018	2021	2025*
77.1	22.1	NA



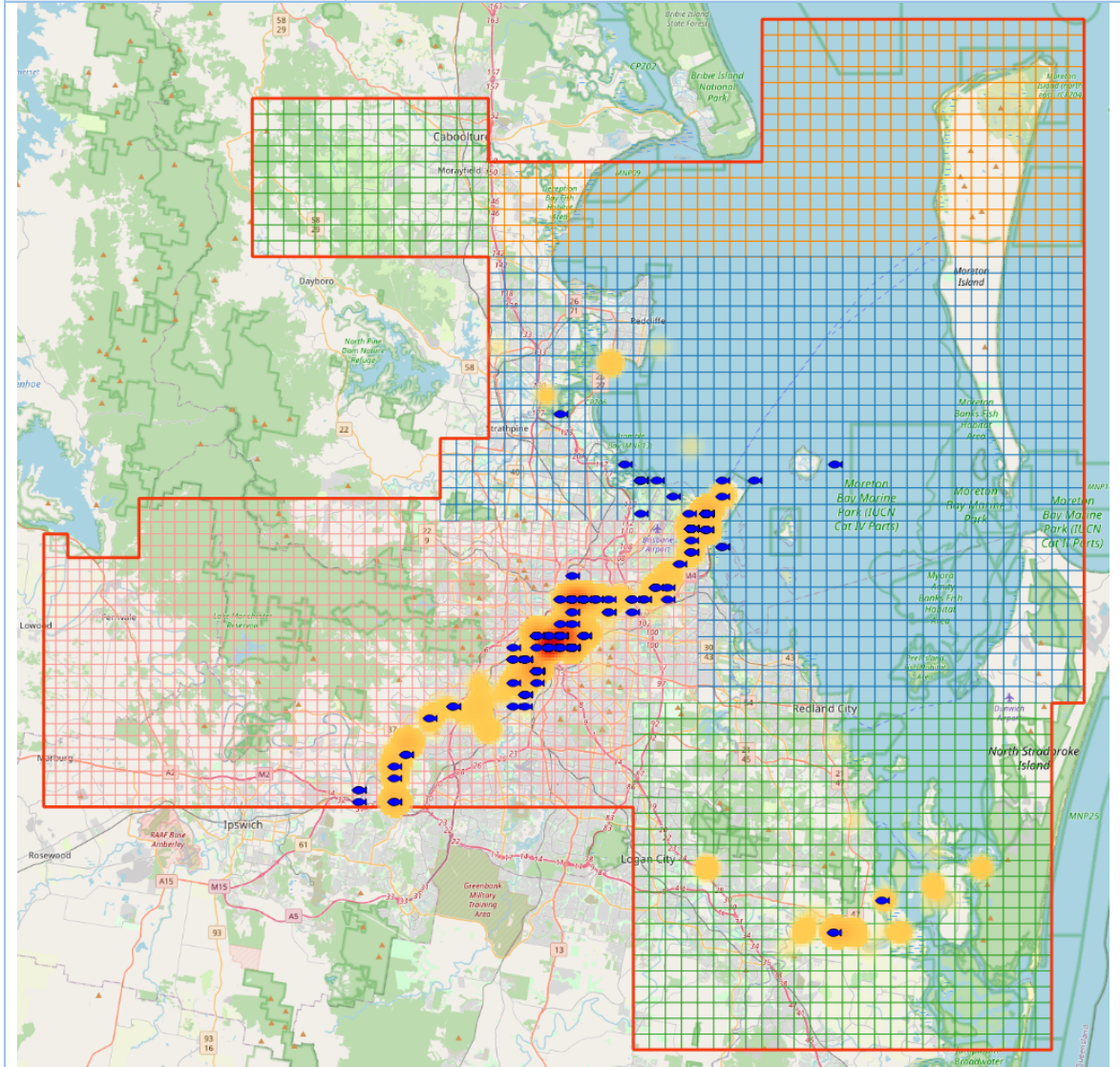
Commercial catch
Grids W37, W38
2001-2025
2024* incomplete
2025* incomplete

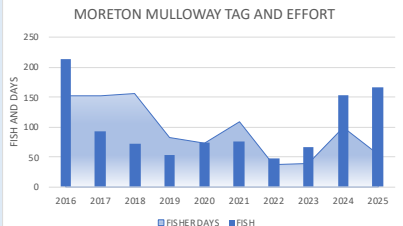
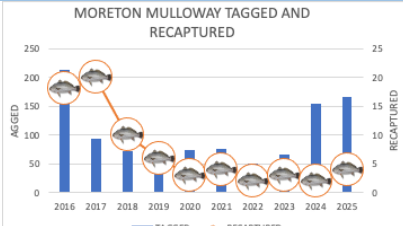
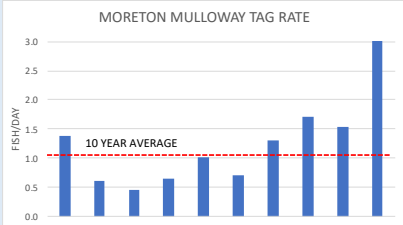


LOCATIONS

Tagged Threadfin (red-orange heat map)
Recaptured (blue fish)
2016-2025
2025 Jan-Jun

Tagged 988
Recaptured 273



MULLOWAY		ACTUAL		GRAPH or MAP																									
																													
DATA RELIABILITY																													
Sample size (av fish/year)		<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>10%</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%	10%	5%	<table><tr><td>2021-2025</td><td>2021-2025</td></tr><tr><td>2021-2025</td><td>2021-2025</td></tr></table>		2021-2025	2021-2025	2021-2025	2021-2025
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2021-2025	2021-2025																												
Tags (orange arrow)																													
Recaptures (blue arrow)																													
Confidence %																													
Error %																													
2021-2025																													
TAGGED																													
Catch and effort		High Low Now																											
Taggers		Tagged fish																											
Tagged fish		2016 2022 2025																											
Days fished		213 48 166																											
2016-2025		Days																											
2025 Jan-Jun		2018 2022 2025																											
		157 37 55																											
Tagged		Tagged																											
Recaptured		Recaptured																											
2016-2025		1021 71 (7.0%)																											
2025 Jan-Jun																													
Tag rate		High Low Now																											
Fish/day		Tag rate																											
2016-2025		2023 2018 2025																											
2025 Jan-Jun		1.7 0.5 3.0																											
		10 year average 1.1																											

LENGTHS					
Average length (mm) Bars show length range Dots show outliers 2016-2025 2025 Jan-Jun	High	Low	Now		
	Average length				
	2017	2022	2025		
	740	466	565		
	Max				
	2021	2022	2025		
	1130	770	890		
Fish lengths percentage Undersize <750mm Legal 750-1000mm Trophy 1000+mm 2016-2025 2025 Jan-Jun	High	Low	Now		
	Legal-trophy				
	2017	2022	2025		
	57%	2%	4%		
	Trophy				
	2019	2023	2025		
	11%	0%	0%		

MOVEMENT

Mulloway movements Moreton Bay Distance moved (km) 2016-2025 2025 Jan-Jun	Recaptures Same area Moved in bay Moved out Max dist in bay	65 24 (37%) 31 (48%) 10 (15%) 72km	MORETON BAY MULLOWAY MOVEMENTS
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Mulloway recaptures outside Moreton Bay 2016-2025 2025 Jan-Jun Recaptures Outside bay Max north Max south	10 (15%) 312km* 200km	*W07262 was initially recaptured at River Heads (260km) and then later in Burrum River (52km)
--	-----------------------------	--

COMMERCIAL CATCH

Commercial Mulloway catch

Grids W37, W38

2016-2025

2024* incomplete

2025* incomplete

High

Catch (tonnes)

2018

3.6

Low

2021

0.5

Now

2025*

NA

Catch rate (kg/day)

2018

41.7

2021

11.3

2025*

NA

MORETON COMMERCIAL MULLOWAY CATCH



LOCATIONS

Tagged Mulloway

(red-orange heat map)

Recaptured in map area

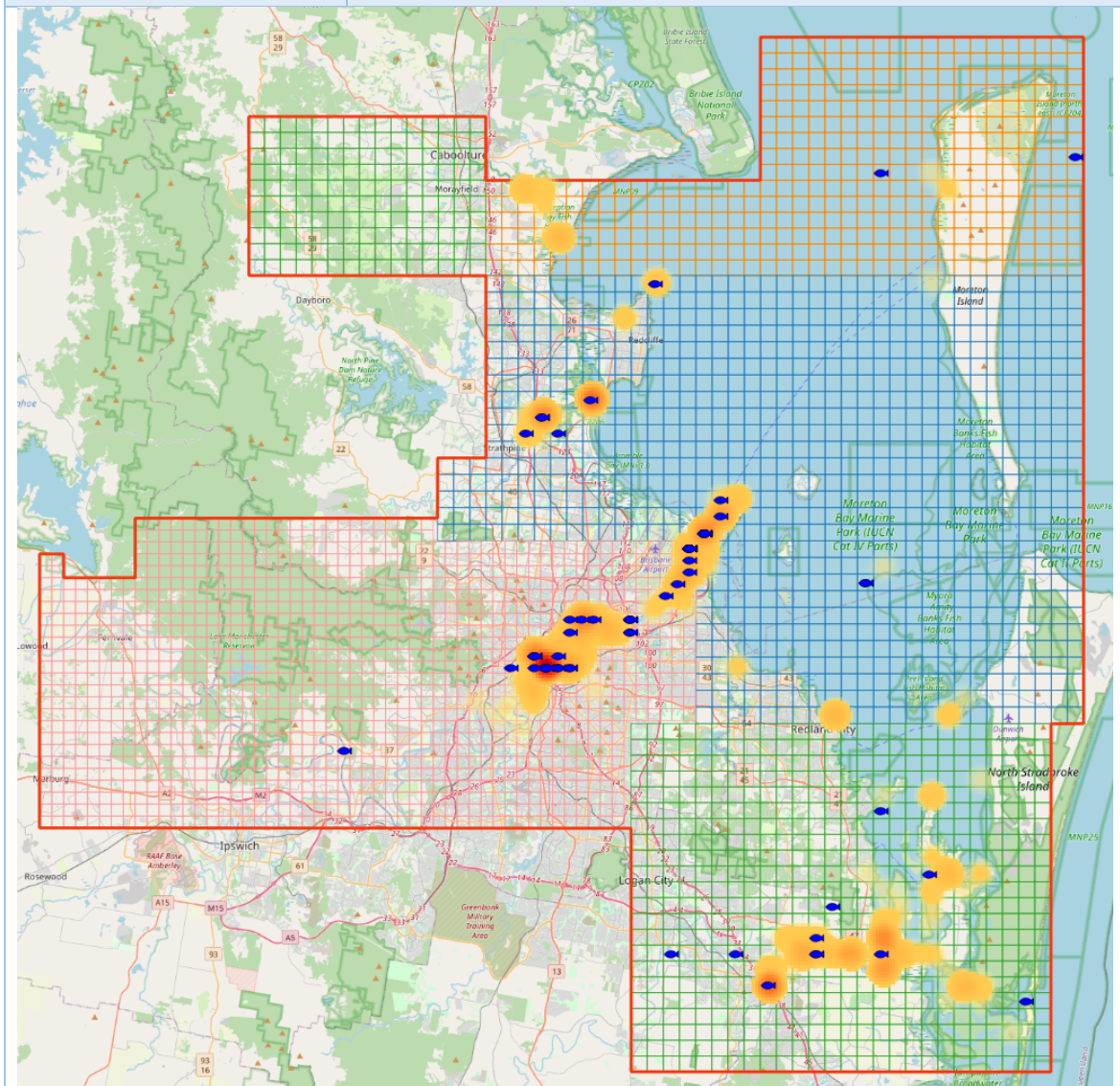
(blue fish)

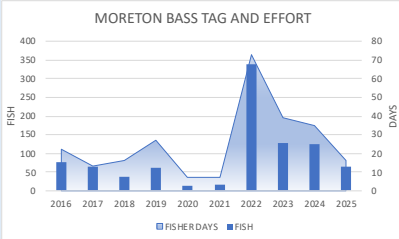
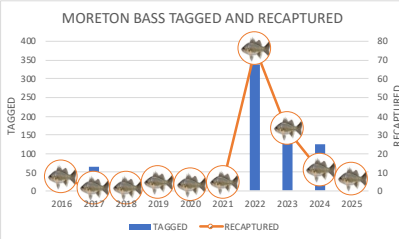
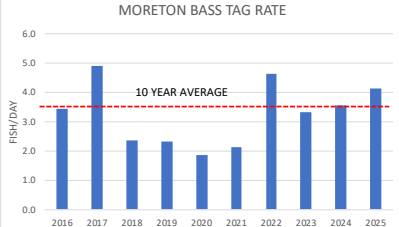
2016-2025

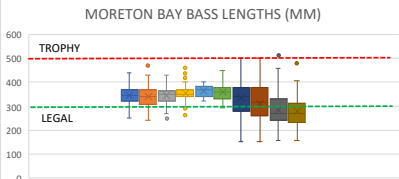
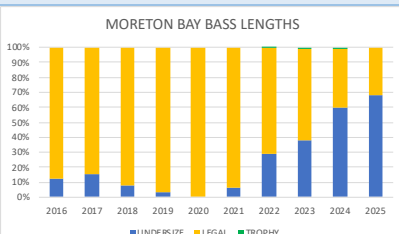
2025 Jan-Jun

Tagged 1021

Recaptured 72



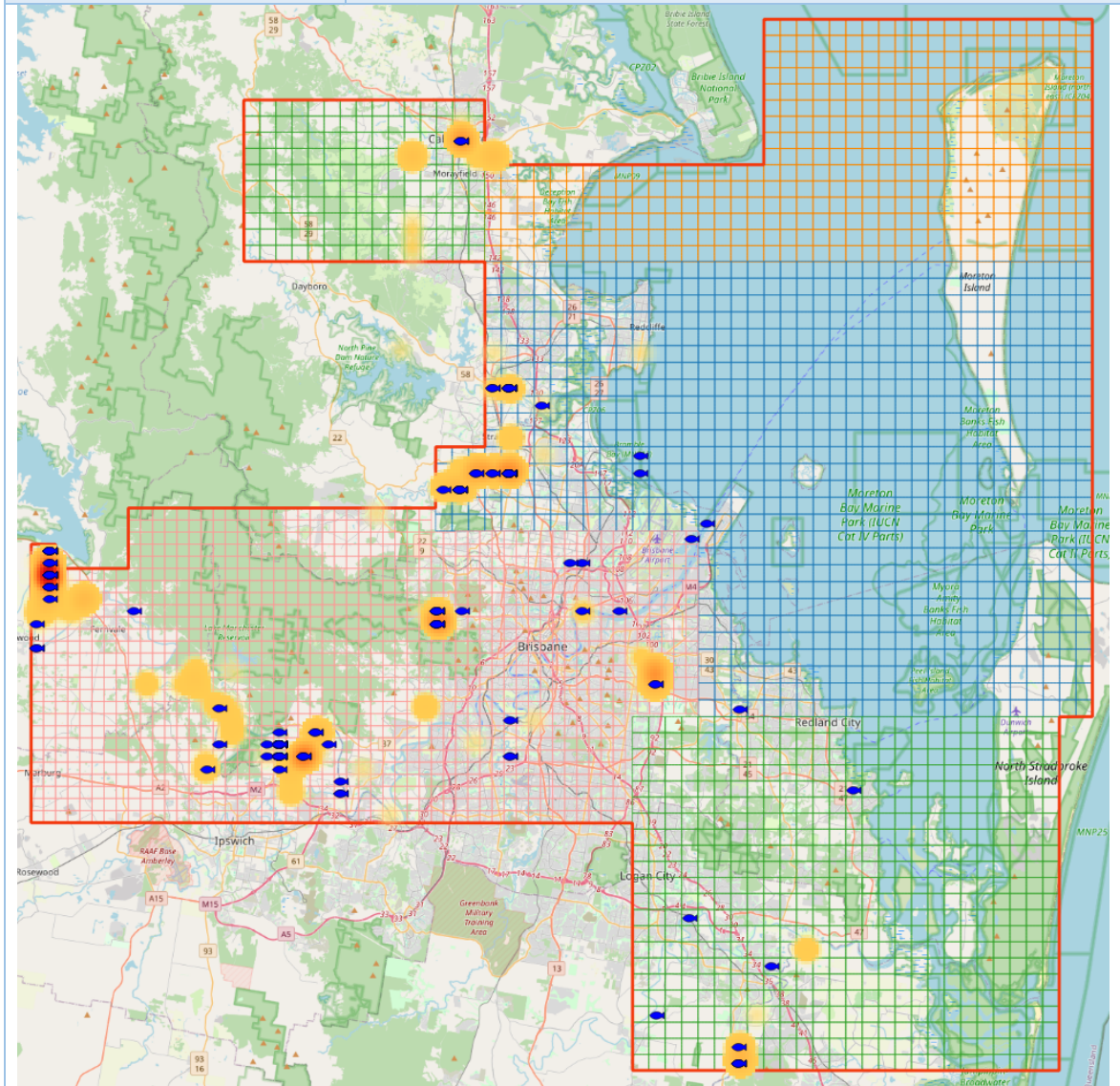
BASS		ACTUAL		GRAPH or MAP																					
																									
DATA RELIABILITY																									
Sample size (av fish/year)		<table><tr><td>Reliability level</td><td>LOW</td><td>MODERATE</td><td>MODERATE</td><td>HIGH</td></tr><tr><td>Samples</td><td>10</td><td>41</td><td>68</td><td>271</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>10%</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%	10%	5%		
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Error	20%	10%	10%	5%																					
Tags (blue arrow)																									
Recaptures (orange arrow)																									
Confidence %																									
Error %																									
2021-2025																									
TAGGED																									
Catch and effort		High Low Now																							
Taggers		Tagged fish																							
Tagged fish		2022 2020 2025																							
Days fished		339 13 66																							
2016-2025		Days																							
2025 Jan-Jun		2022 2021 2025																							
		73 7 16																							
Bass tagged and recaptured		Tagged Recaptured																							
2016-2025		927 146 (15.7%)																							
2025 Jan-Jun																									
Tag rate		High Low Now																							
Bass		Tag rate																							
Fish/day		2017 2020 2025																							
2016-2025		4.9 1.9 4.1																							
2025 Jan-Jun		10 year average 3.6																							

LENGTHS				
Average length (mm) Bars show length range Dots show outliers 2016-2025 2025 Jan-Jun	High	Low	Now	
	Average length			
	2020	2024	2025	
	364	285	281	
	Max			
	2024	2020	2025	
	515	400	490	
Fish lengths percentage Undersize <300mm Legal 300-500mm Trophy 500+mm 2016-2025 2025 Jan-Jun	High	Low	Now	
	Legal-trophy			
	2020	2024	2025	
	100%	39%	32%	
	Trophy			
	22-24	16-21	2025	
	1%	0%	0%	
				
				

LOCATIONS

Tagged Bass
(red-orange heat map)
Recaptured
(blue fish)
2016-2025
2025 Jan-Jun

Tagged 927
Recaptured 147



Data sources

Data used in the Moreton Crystal Bowl are:

- Tag records and recapture records for Moreton Bay and estuaries at <http://crystalbowl.infofishaustralia.com.au/>.
- River flow data from <https://water-monitoring.information.qld.gov.au/>.
- Rainfall and temperature data from Station 040913 Brisbane from <http://www.bom.gov.au/climate/data>.
- Commercial catch data from <https://qfish.fisheries.qld.gov.au/>.

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 taggers with a minimum of 12 fisher days (at least 1 per month) to provide an acceptable catch rate.
- For Dusky Flathead undersized fish are <400mm, legal fish are ≥400 and <700mm and trophy fish are ≥700mm.
- For Yellowfin Bream undersized fish are <250mm, legal fish are ≥250mm and <400mm and trophy fish are ≥400mm.
- For Snapper undersized fish are <350mm, legal fish are ≥350mm and <700 and trophy fish are ≥700mm.
- For King Threadfin undersized fish are <650mm, legal fish are ≥650mm and <1000 and trophy fish are ≥1000mm.
- For Mulloway undersized fish are <750mm, legal fish are ≥750mm and <1000 and trophy fish are ≥1000mm.
- For Australian Bass undersized fish are <300mm, legal fish are ≥300 and <500 and trophy fish are >500mm.
- Growth calculated from recaptures where fish were out for 90 days or more and had positive growth.
- Locations based on Infofish grid maps CAB, MB01, MB02, MB03 and MB05 for Moreton Bay.
- Movement distance calculated as the shortest distance by water from the tag to the recapture location using Google Earth.
- Distance from fisher's address, suburb, town or postcode to recapture location is the straight-line distance between locations based on Google Earth coordinates. Local is <60km, intrastate is >60k with a 4... postcode, interstate is a postcode other than 4.... or from overseas.
- Heat maps and fish movement are presented using QGIS software.