



STANAGE BAY REVIEW 2025

INFORMATION RATING



Key species: Barramundi, Golden Snapper, Blue Threadfin

Fish timeframe: 2016-2025

Fisher timeframe: 2021-2025

Scroll through the dashboard to cover all subjects or for information on a specific subject go to:

[STANAGE BAY OVERVIEW](#)

[STANAGE BAY LOCATION AND WATERWAYS](#)

[ENVIRONMENTAL](#)

[TYPE OF FISHERY](#)

[FISHER ACTIVITY](#)

[FISHER EFFORT](#)

[FISHER TRAVEL](#)

[WHERE RECAPTURE FISHERS LIVE](#)

[COMMERCIAL CATCH](#)

[STANAGE BAY KEY SPECIES TAGGED](#)

[BARRAMUNDI](#)

[GOLDEN SNAPPER](#)

[BLUE THREADFIN](#)



Product of Infotech Australia

Supported by Suntag and
Department of Primary Industries

STANAGE BAY OVERVIEW

The Stanage area includes Broadsound creeks, Shoalwater Bay creeks, Port Clinton, Herbert Creek, Styx River and St Lawrence River. The area includes the Shoalwater Bay Military Training Area with area closures during military exercises.

Stanage is a small coastal settlement remote from any major population centres with limited facilities for visiting fishers. A tidal range of 8m makes for challenging fishing conditions on the spring tides and most of the fishing is associated with neap tides.

A trip to Stanage involves about 100km of dirt road which can be badly affected by heavy rainfall. Most that fish the area come from Rockhampton, Gladstone and Mackay and trips are mostly several days in duration due to the long travel distances.

The area also has extensive green zones (no fishing) limiting the areas that can be fished. The area still draws fishers that see the remoteness, low fishing pressure and tidal conditions as attractive and challenging.

All this results in data from the area being limited however it still provides basic information that is indicative of the fishing in the area.

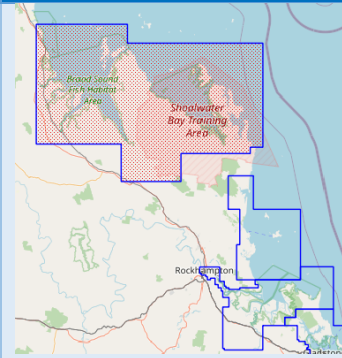
Main target species are Barramundi, Golden Snapper and Blue Threadfin which account for 62% of the tagging effort. There is also fishing for reef species around the islands.

The number of recaptured legal fish by reefishers (other than taggers) is low. The Barramundi fishery appears to have moved from harvest to experiential over the past decade however for other species, it is likely to continue to be a harvest fishery.

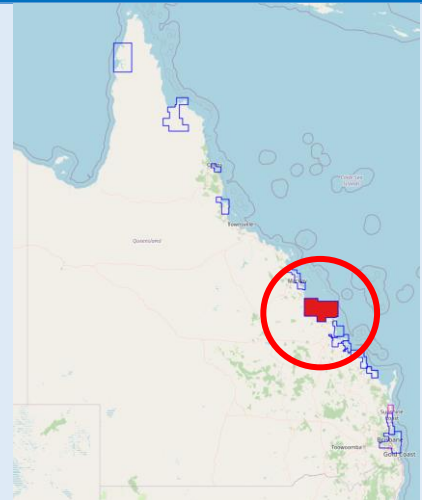
In 2016 most of the tagging was carried out by Captag taggers in the creeks at the southern end of Shoalwater Bay with the support of the Department of Defence which boosted fishing effort. Since then, most of the tagging has been around the Stanage and Thirsty Sound areas with an occasional long-distance trip to the creeks at the southern end of Shoalwater Bay.

The low fishing activity results in fewer recaptures of tagged fish however there were 2 recaptures of Golden Snapper outside the area that were caught north of Mackay and around the Whitsundays having moved over 200km. There have also been 3 Barramundi recaptured outside the area with 1 fish recaptured in the Fitzroy River to the south and 2 to the north near Sarina and north of Mackay.

STANAGE BAY LOCATION AND WATERWAYS



Stange
22.1°S
150.0°E

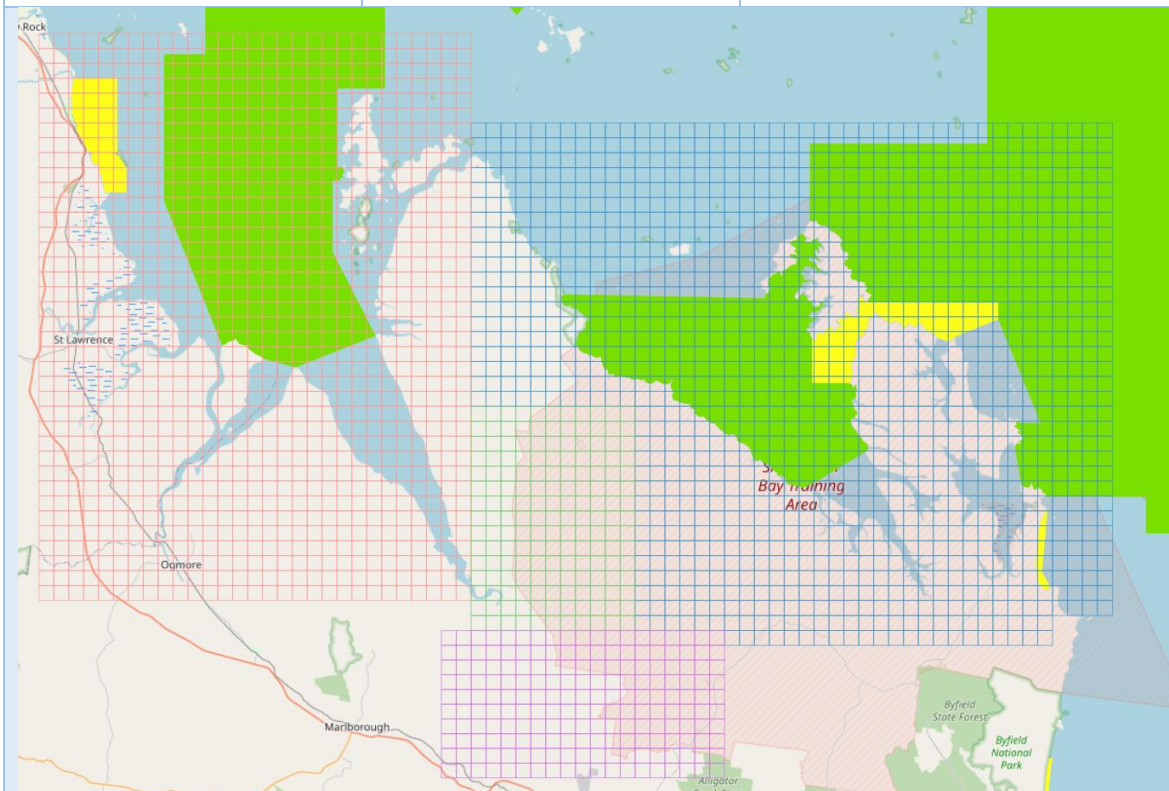


Stange Bay
Grid maps
Broadsound
Shoalwater Bay
Herbert Creek
Torilla

BSD
SWB
HCK
TOR

Waterways
Stange Bay
Broadsound
Shoalwater Bay Creeks
Port Clinton
Herbert Creek
Styx River
St Lawrence Creek

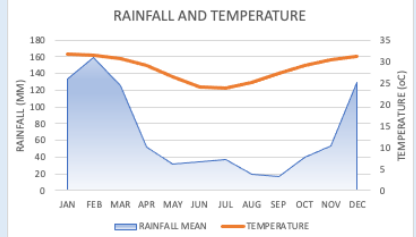
Including GBRMPA Conservation
and Marine National Parks zoning



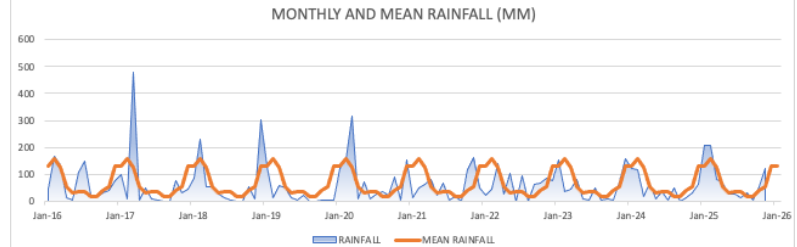
ENVIRONMENTAL CONDITIONS

Stange (Williamson)
Mean monthly rainfall (mm)
Mean monthly air temperature (°C)

Rainfall	Max (mm)
Feb	160
Temperature	Max (°C)
Jan	32
Feb	31



Stange (Williamson)
Monthly rainfall and
Monthly mean rainfall (mm)
2016-2025

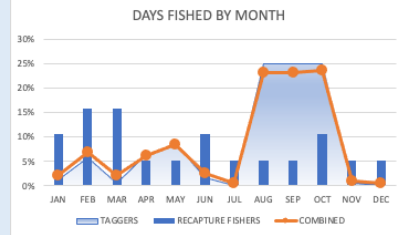


FISHER ACTIVITY

Monthly activity
Days fished (combined)
Taggers (172)
Recapture fishers (19)
2021-2025

Month
 Oct
 Sep
 Aug

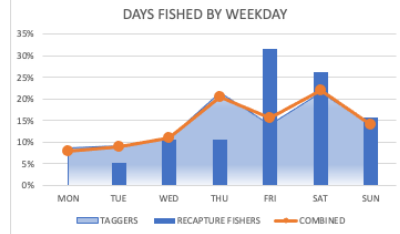
All fishers
 Days
 45 (24%)
 44 (23%)
 44 (23%)



Weekday activity
Days fished (combined)
Taggers (172)
Recapture fishers (19)
2021-2025

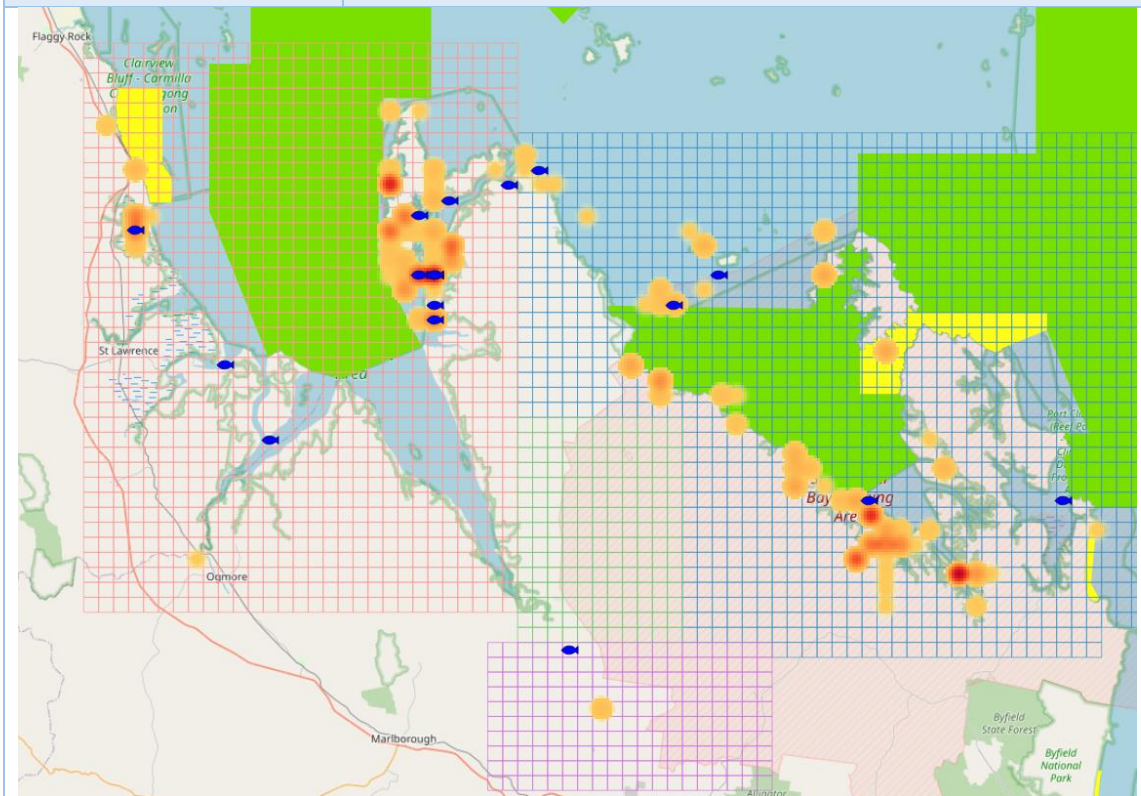
Weekend
 Weekdays

All fishers
 Days
 69 (36%)
 122 (64%)



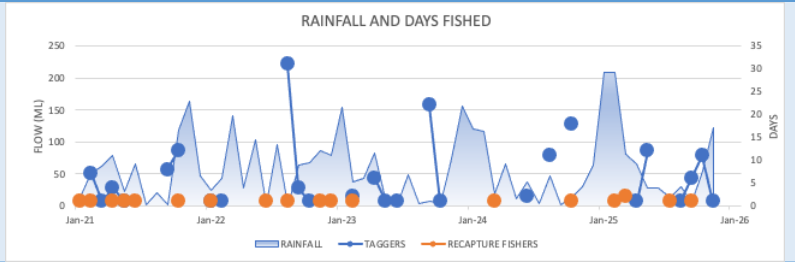
Location activity
Taggers (red-orange heat map)
Recapture fishers (blue fish)
2021-2025

Tagged 829
 Recaptured 50

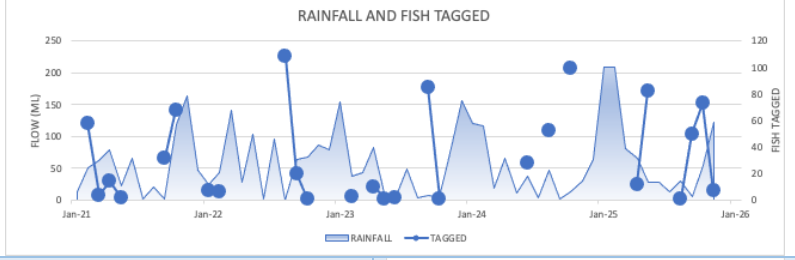


FISHER EFFORT

Monthly rainfall
Days fished
Taggers
Recapture fishers
2021-2025

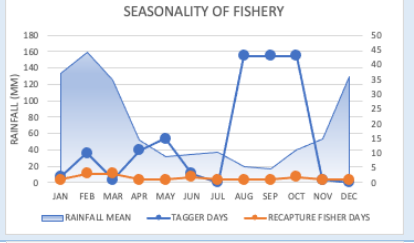


Monthly rainfall
Fish tagged
2021-2025



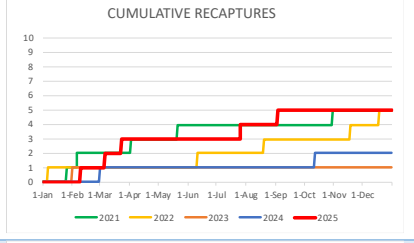
Mean monthly rainfall
Days fished combined
Taggers
Recapture fishers
2021-2025

	Month	Days
Most	Oct	45
Least	Jul	1
Least	Nov-Dec	3



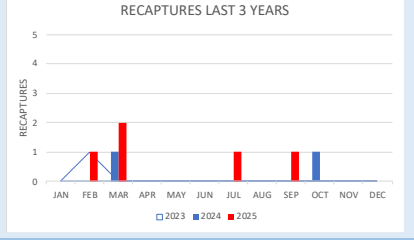
Cumulative recaptures
2021-2025

Year	Recaps
2021	5
2022	5
2023	1
2024	2
2025	5



Monthly recaptures
2023-2025

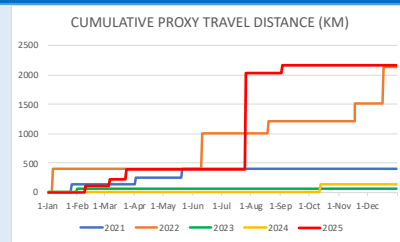
Month	2023	2024	2025
JAN	0	0	0
FEB	0	0	0
MAR	0	0	0
APR	0	0	0
MAY	0	0	0
JUN	0	0	0
JUL	0	0	0
AUG	0	0	0
SEP	0	0	0
OCT	0	0	0
NOV	0	0	0
DEC	0	0	0



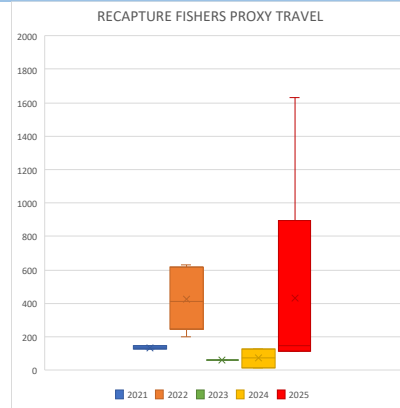
FISHER TRAVEL

Cumulative distance (km) home to recapture location 2021-2025

Year	Km
2021	409
2022	2143
2023	63
2024	143
2025	2172

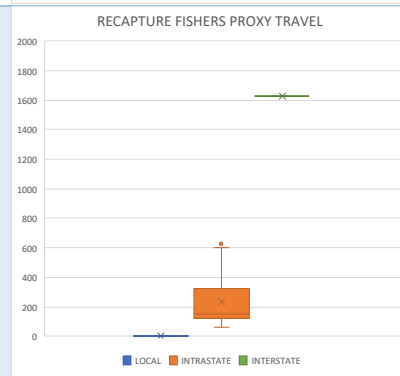


Distance (km) home to recapture location 2021-2025



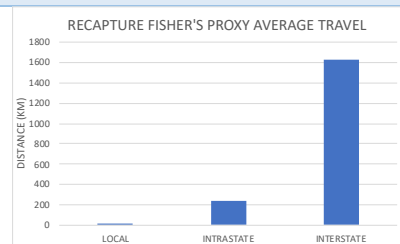
Distance (km) home to recapture location Bars show distance range Dots show outliers 2021-2025

	Range (km)
Local	13
Intrastate	63-630
Interstate	1630



Average distance (km) from home to recapture location 2021-2025

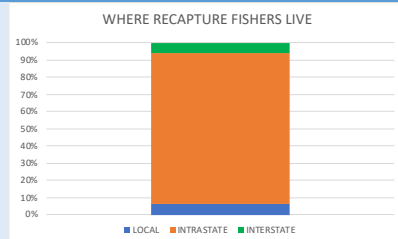
	Av distance (km)
Local	13
Intrastate	235
Interstate	1630



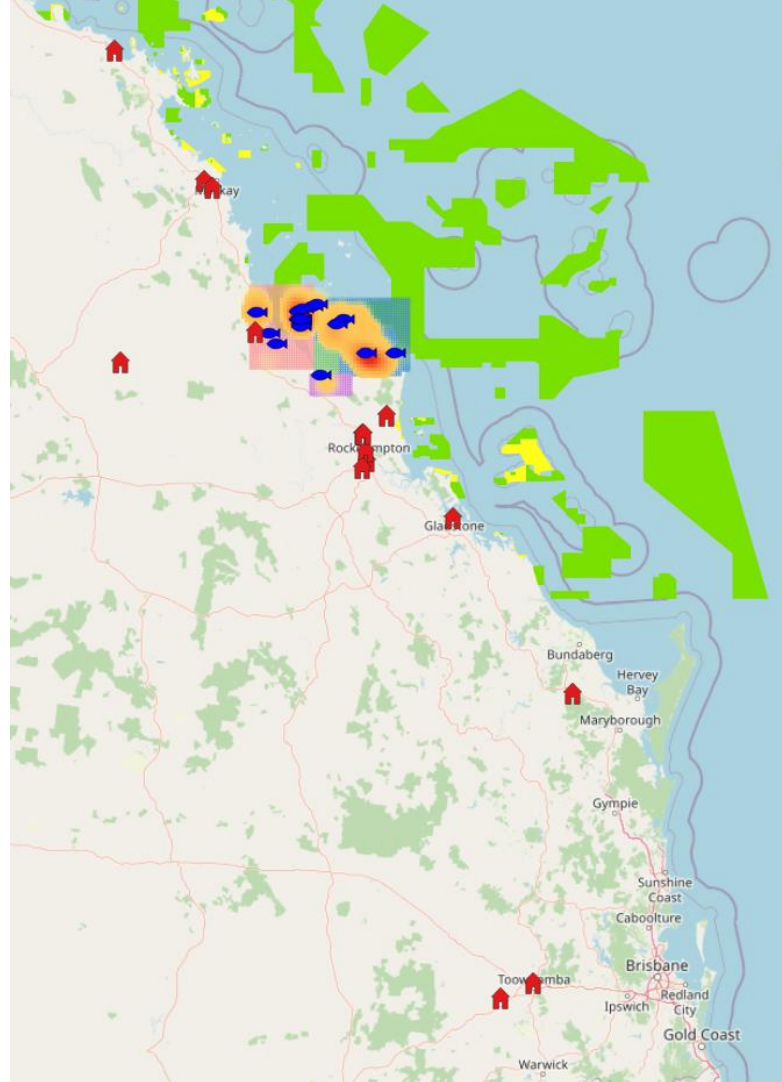
WHERE RECAPTURE FISHERS LIVE

**Where recapture fishers live
2021-2025**

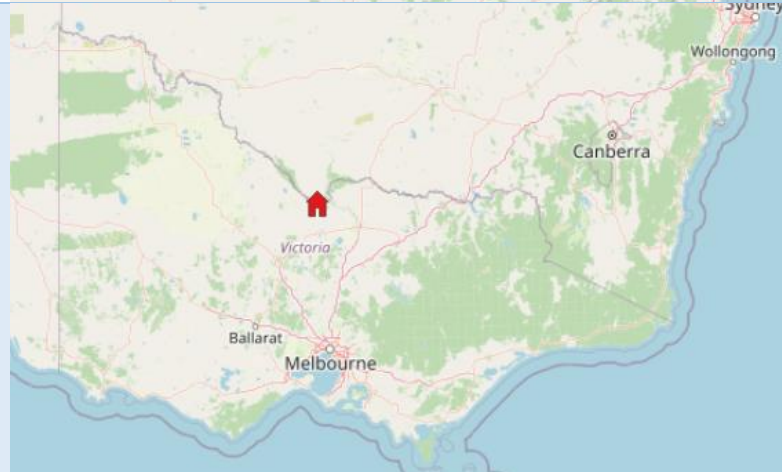
Recapture fishers	16
Local	1 (6%)
Intrastate	14 (88%)
Interstate	1 (6%)



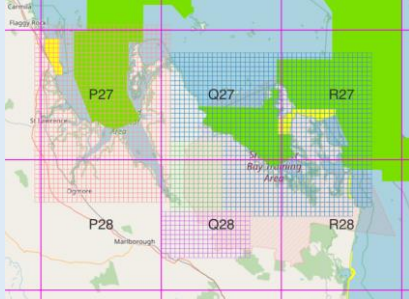
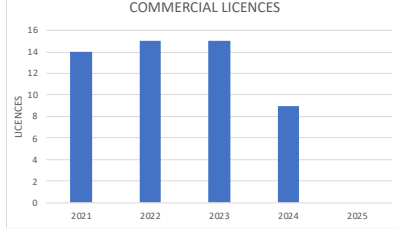
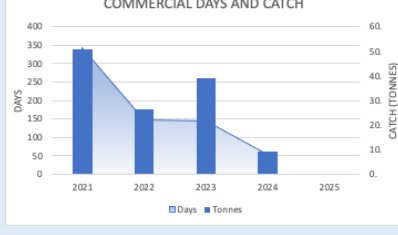
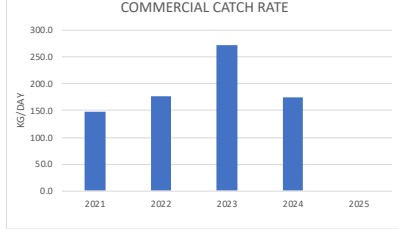
**Where fishers recapturing fish live (red houses)
Recaptured fish (blue fish)
Local
Intrastate
2021-2025**



**Where fishers recapturing fish live (red houses)
Interstate
2021-2024**



COMMERCIAL CATCH

Commercial QFISH Grids	Grids P27 Q27 R27 P28 Q28 R28																			
Commercial Licences fishing the area	<table border="1"> <thead> <tr> <th>Year</th> <th>Licences</th> </tr> </thead> <tbody> <tr> <td>2021</td> <td>14</td> </tr> <tr> <td>2022</td> <td>15</td> </tr> <tr> <td>2023</td> <td>15</td> </tr> <tr> <td>2024</td> <td>9</td> </tr> <tr> <td>2025</td> <td>NA</td> </tr> </tbody> </table>	Year	Licences	2021	14	2022	15	2023	15	2024	9	2025	NA							
Year	Licences																			
2021	14																			
2022	15																			
2023	15																			
2024	9																			
2025	NA																			
Commercial effort and catch Net fishery (all) Days Catch (tonnes) 2021-2025	<table border="1"> <thead> <tr> <th>Year</th> <th>Days</th> <th>Catch</th> </tr> </thead> <tbody> <tr> <td>2021</td> <td>343</td> <td>50.65</td> </tr> <tr> <td>2022</td> <td>148</td> <td>26.20</td> </tr> <tr> <td>2023</td> <td>101</td> <td>30.13</td> </tr> <tr> <td>2024</td> <td>NA</td> <td>9.39</td> </tr> <tr> <td>2025</td> <td>NA</td> <td>NA</td> </tr> </tbody> </table>	Year	Days	Catch	2021	343	50.65	2022	148	26.20	2023	101	30.13	2024	NA	9.39	2025	NA	NA	
Year	Days	Catch																		
2021	343	50.65																		
2022	148	26.20																		
2023	101	30.13																		
2024	NA	9.39																		
2025	NA	NA																		
Commercial catch rate Kg/day	<table border="1"> <thead> <tr> <th>Year</th> <th>Kg/day</th> </tr> </thead> <tbody> <tr> <td>2021</td> <td>147.7</td> </tr> <tr> <td>2022</td> <td>177.0</td> </tr> <tr> <td>2023</td> <td>271.7</td> </tr> <tr> <td>2024</td> <td>173.9</td> </tr> <tr> <td>2025</td> <td>NA</td> </tr> </tbody> </table>	Year	Kg/day	2021	147.7	2022	177.0	2023	271.7	2024	173.9	2025	NA							
Year	Kg/day																			
2021	147.7																			
2022	177.0																			
2023	271.7																			
2024	173.9																			
2025	NA																			

STANAGE BAY KEY SPECIES TAGGED

BARRAMUNDI



GOLDEN SNAPPER



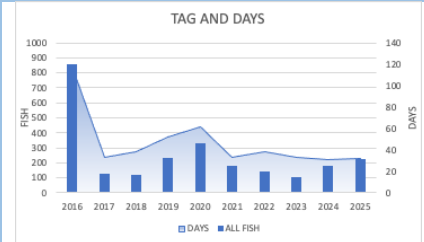
BLUE THREADFIN



TAGGED AND TAG RATE

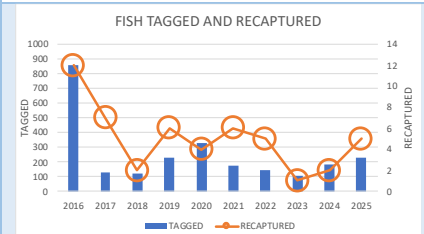
Tag and effort taggers
Fish tagged (2491)
Days fished (471)
2016-2025

	High	Low	Now
Tagged fish			
2016	2023	2025	
860	102	225	
Days fished			
2016	2024	2025	
119	31	32	



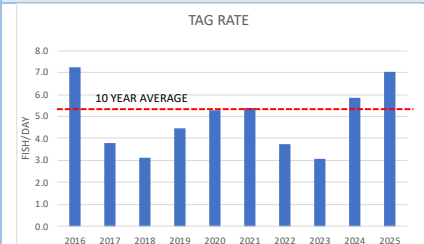
Fish tagged
Recaptures
2016-2025

Tagged	2491
Recaptured	50
Recapture rate	2.0%



Tag rate
All fish tagged
Fish/days fished
2016-2025

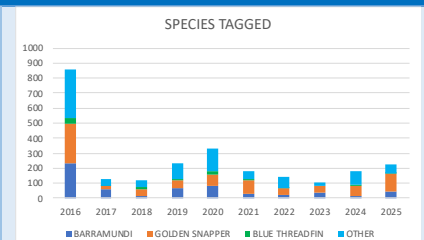
	High	Low	Now
Tag rate			
2016	2023	2025	
7.2	3.1	7.0	
10 year average			5.3



SPECIES

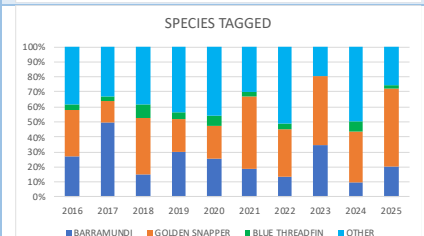
Species composition
Numbers tagged
2016-2025

Barramundi	615
Golden Snapper	805
Blue Threadfin	113



Species composition
Percentage tagged
2016-2025

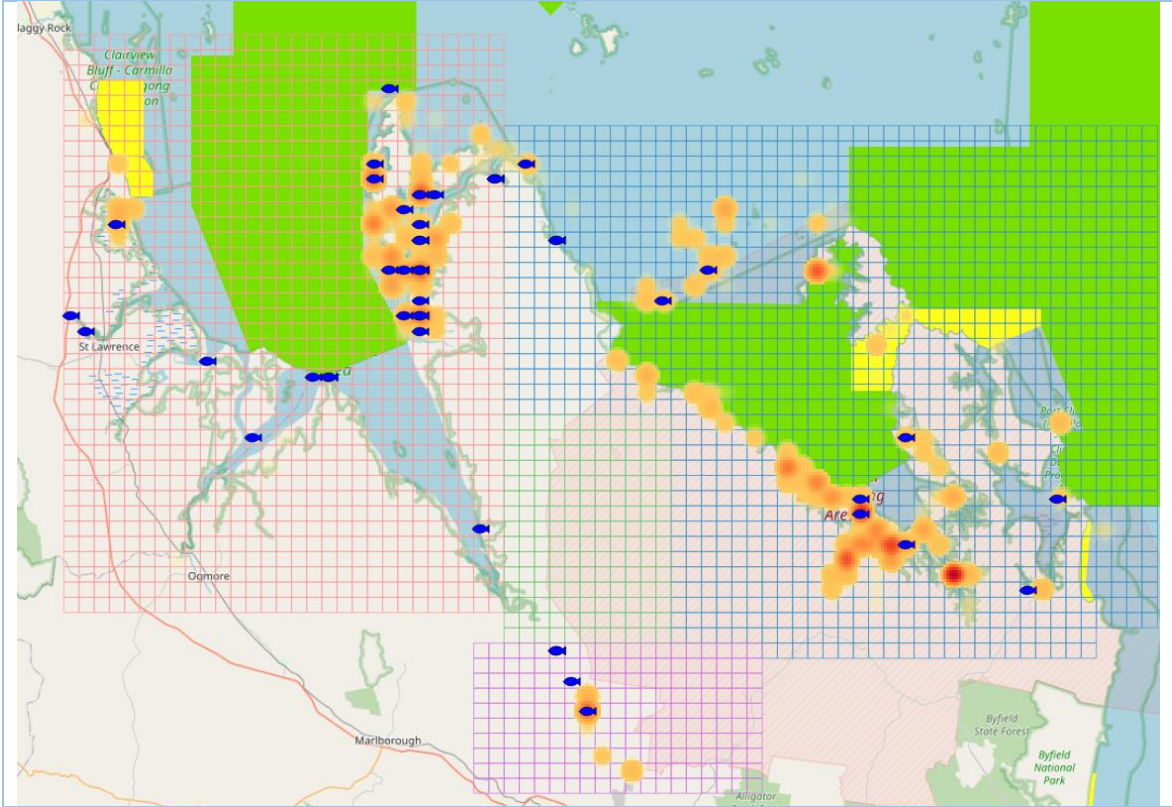
Barramundi	25%
Golden Snapper	32%
Blue Threadfin	5%
Combined	62%



LOCATIONS

All tagged fish (red-orange heat map)
Recaptured (blue fish)
2016-2025

Tagged	2491
Recaptured	50



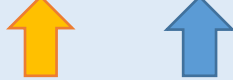
BARRAMUNDI



DATA RELIABILITY

Sample size (av fish/year)
Tagged (blue arrow)
Recaptures (orange arrow)
Confidence %
Error %
2021-2025

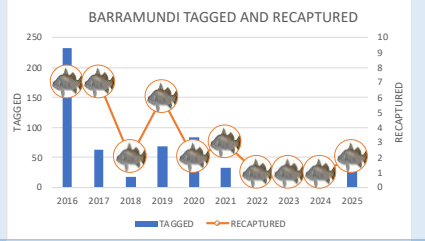
Reliability level	LOW	MODERATE	MODERATE	HIGH
Samples	10	41	68	271
Confidence	80%	80%	90%	95%
Error	20%	10%	10%	5%



TAGGED AND TAG RATE

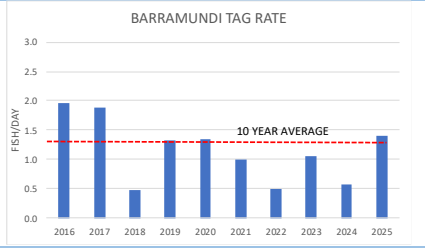
Barramundi
Tagged
Recaptures
2016-2025

Tagged	615
Recaptured	32
Recapture rate	5.2%
Tagged 2025	45



Tag rate
Barramundi
Fish/day
2016-2025

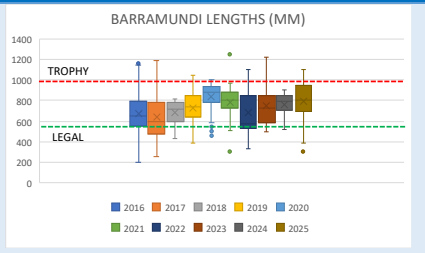
	High	Low	Now
Tag rate			
2016	2.0	0.5	1.4
2018			
2025			
10 year average			1.3



LENGTHS

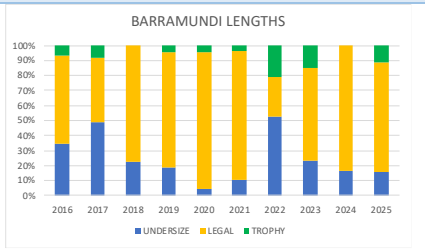
Average length (mm)
Bars show length range
Dots show outliers
2016-2025

	High	Low	Now
Average length			
2020	844	635	793
2017			
Largest			
2021	1250	820	1100
2018			
2025			



Fish lengths percentage
Undersize <580mm
Legal 580-1000mm
Trophy 1000+mm
2016-2025

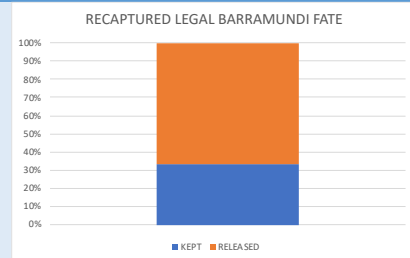
	High	Low	Now
Legal-trophy			
2020	2020	26%	73%
2022			
Trophy			
2022	21%	0%	11%
2018			
2025			



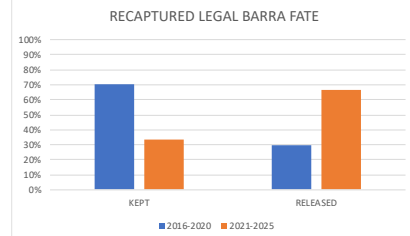
FATE

Legal recaptures by recfishers (ex-taggers)
Kept
Released
2021-2025

Recaptures **6**
Kept **2 (33%)**
Released **4 (67%)**



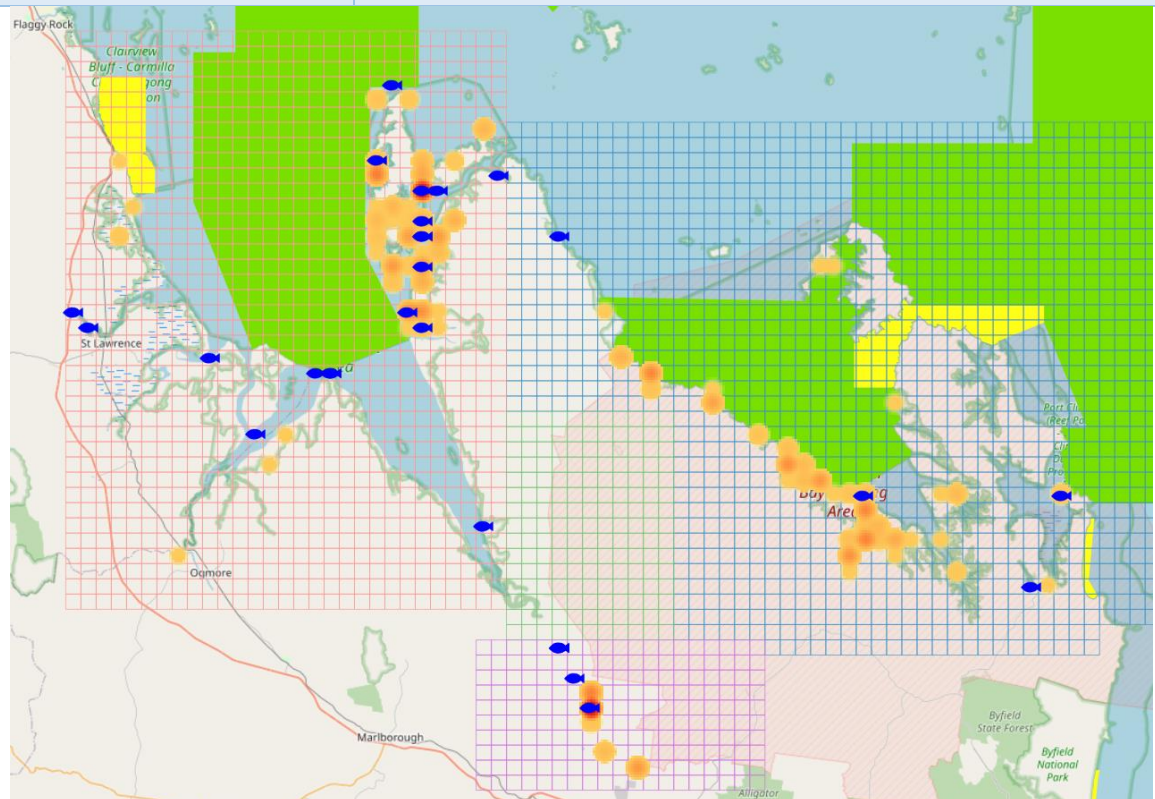
Legal recaptures by recfishers (ex-taggers)
Kept
Released
2016-2020
2021-2025



LOCATIONS

Barramundi
Tagged (red-orange heat map)
Recaptured (blue fish)
2016-2025

Tagged **615**
Recaptured **312**

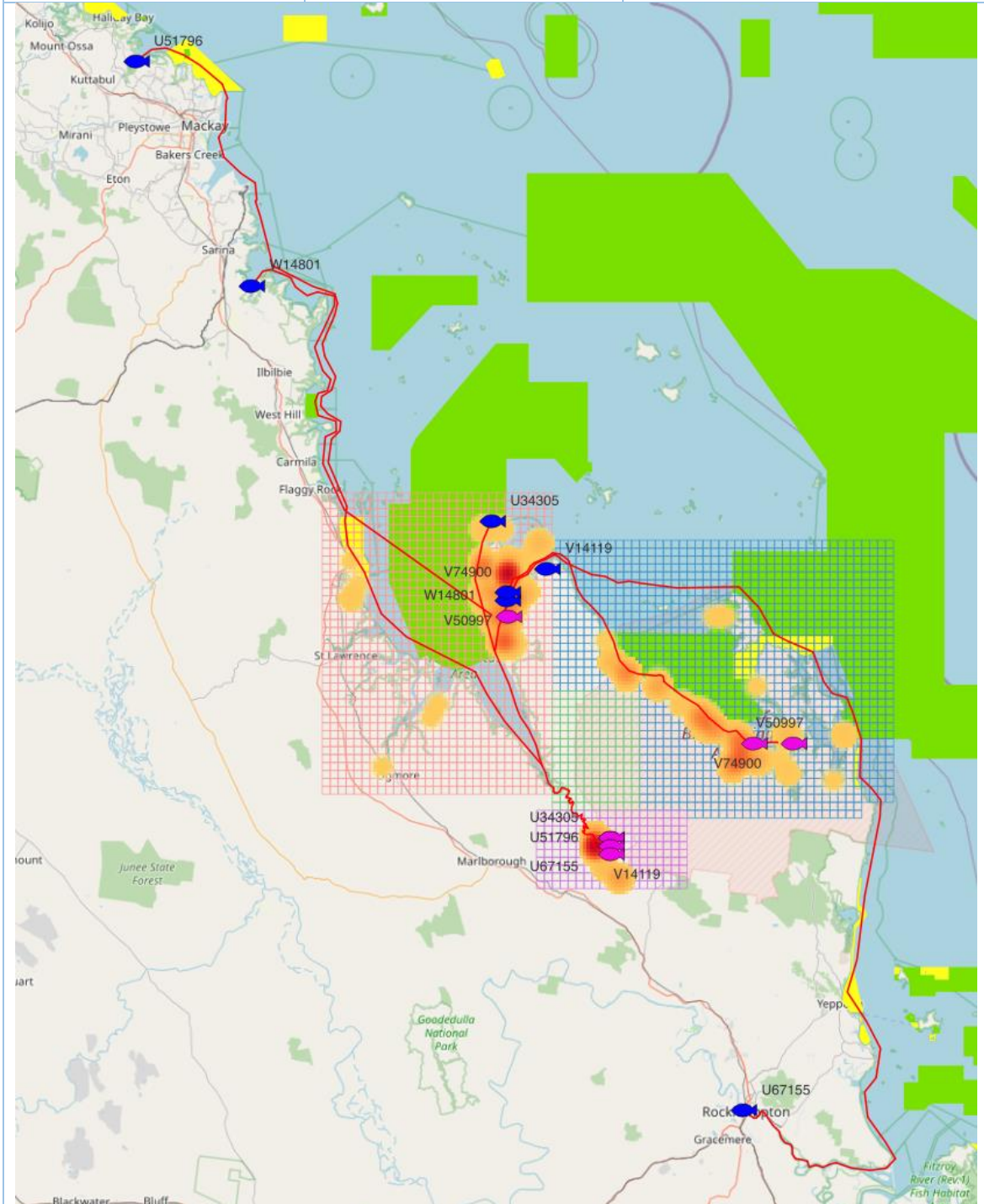


MOVEMENT

Barramundi movement
Tagged (pink fish)
Recaptured (blue fish)
2016-2025

U67155 (moved 380km)
 U51796 (moved 300km)
 W14801 (moved 120km)
 U34305 (moved 105km)

V14119 (moved 100km)
 V74900 (moved 92km)
 V50997 (moved 85km)



GOLDEN SNAPPER

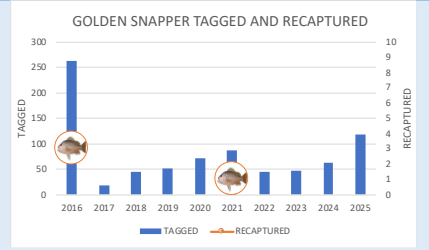


DATA RELIABILITY

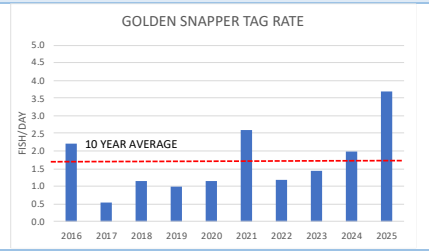
Sample size (av fish/year)		LOW		MODERATE		MODERATE		HIGH	
Tagged (blue arrow)	10	41	68	271	384	664			
Recaptures (orange arrow)	80%	80%	90%	90%	95%	99%			
Confidence %	20%	10%	10%	5%	5%	5%			
Error %									

TAGGED AND TAG RATE

Golden Snapper	Tagged	805
	Tagged	4
	Recaptures	0.5%
	2016-2025	
	Tagged 2025	118

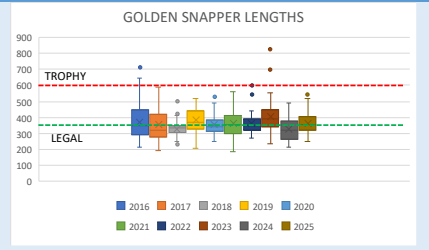


Tag rate	High	Low	Now	
	Golden Snapper			
	Fish/day	2021	2017	2025
	2016-2025	2.6	0.5	3.7
	10 year average			1.7

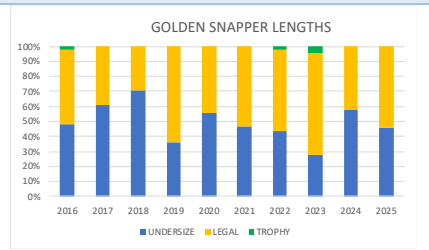


LENGTHS

Average length (mm)	High	Low	Now	
	Bars show length range			
	Dots show outliers	2023	2024	2025
	2016-2025	402	325	363
	Largest	2023	2024	2025
	825	490	550	



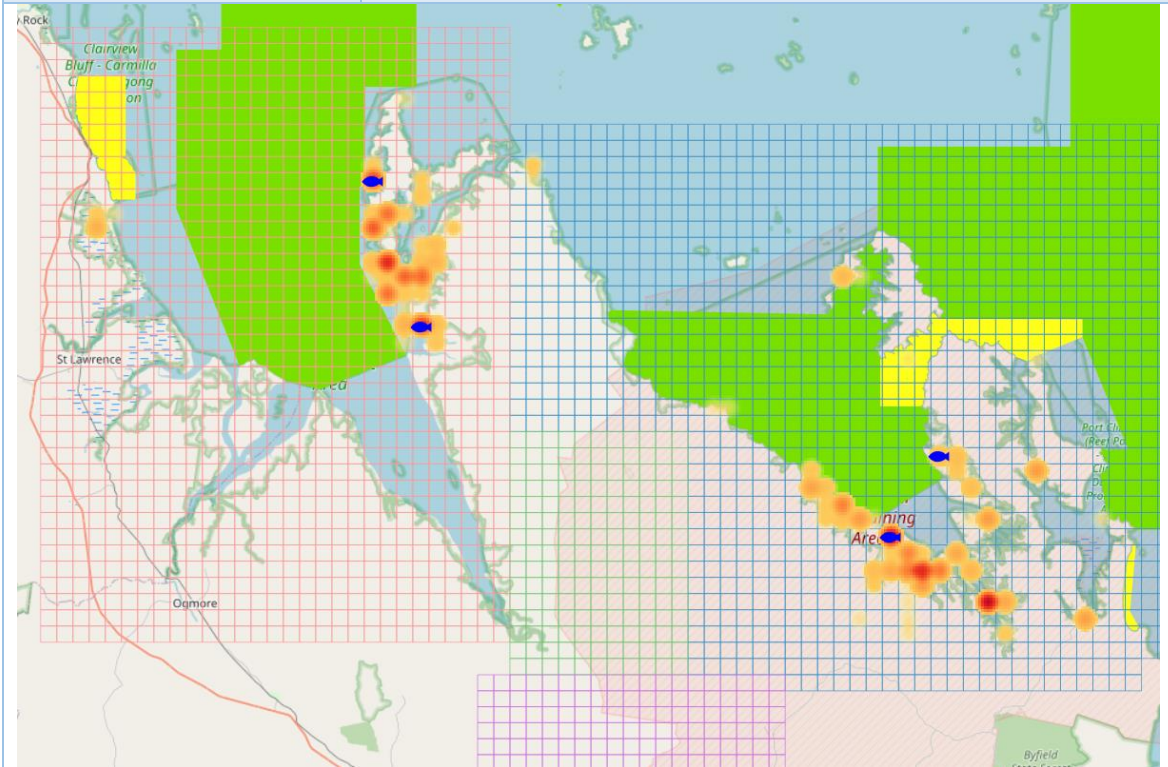
Fish lengths percentage	High	Low	Now	
	Undersize <350mm			
	Legal 350-600mm	2023	2018	2025
	Trophy 600+mm	67%	30%	54%
	2015-2024	2023	2024	2025
	5%	0%	0%	



LOCATIONS

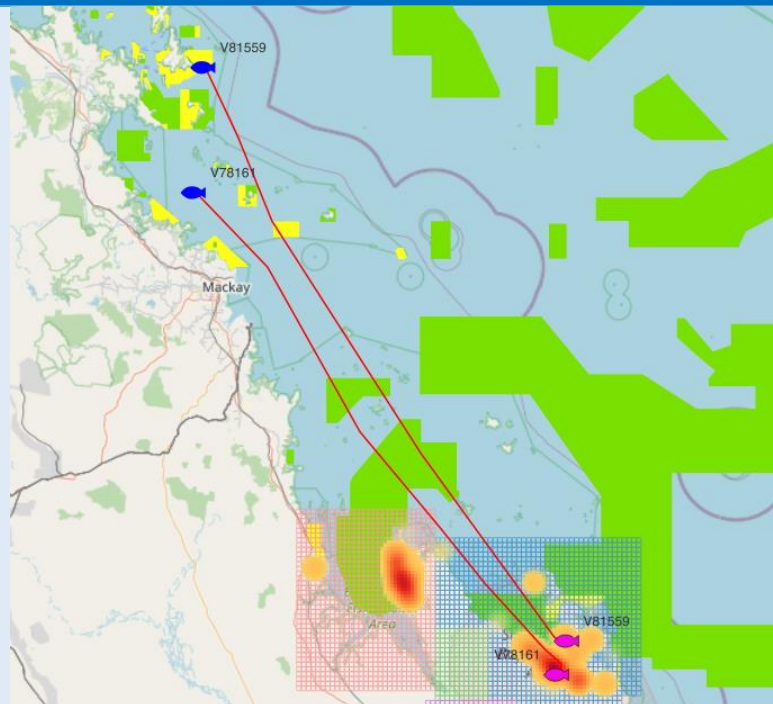
Golden Snapper
 Tagged (red-orange heat
 map)
 Local recaptures (blue
 dots)
 2016-2025

Tagged	805
Recaptured	4



MOVEMENT

Golden Snapper
 Tagged (pink fish)
 Recaptured north of
 Stange Bay area (blue
 fish)
 V78161 (moved 260km)
 V81559 (moved 287km)
 2016-2025



BLUE THREADFIN



DATA RELIABILITY

Sample size (av fish/year) Tagged (blue arrow) Recaptures (orange arrow) Confidence % Error % 2021-2025	Reliability level	LOW	MODERATE	MODERATE	HIGH			
	Samples	10	41	68	271	384	664	99%
	Confidence	80%	80%	90%	90%	95%	99%	
	Error	20%	10%	10%	5%	5%	5%	

TAGGED AND TAG RATE

Blue Threadfin Tagged Recaptured 2016-2025	Tagged Recaptured Recapture rate Tagged 2025	113 4 3.5% 5		
Tag rate Blue Threadfin Fish/day 2016-2025	High Tag rate 2024 0.4 10 year average	Low 2022 0.1 0.2	Now 2025 NA 0.2	

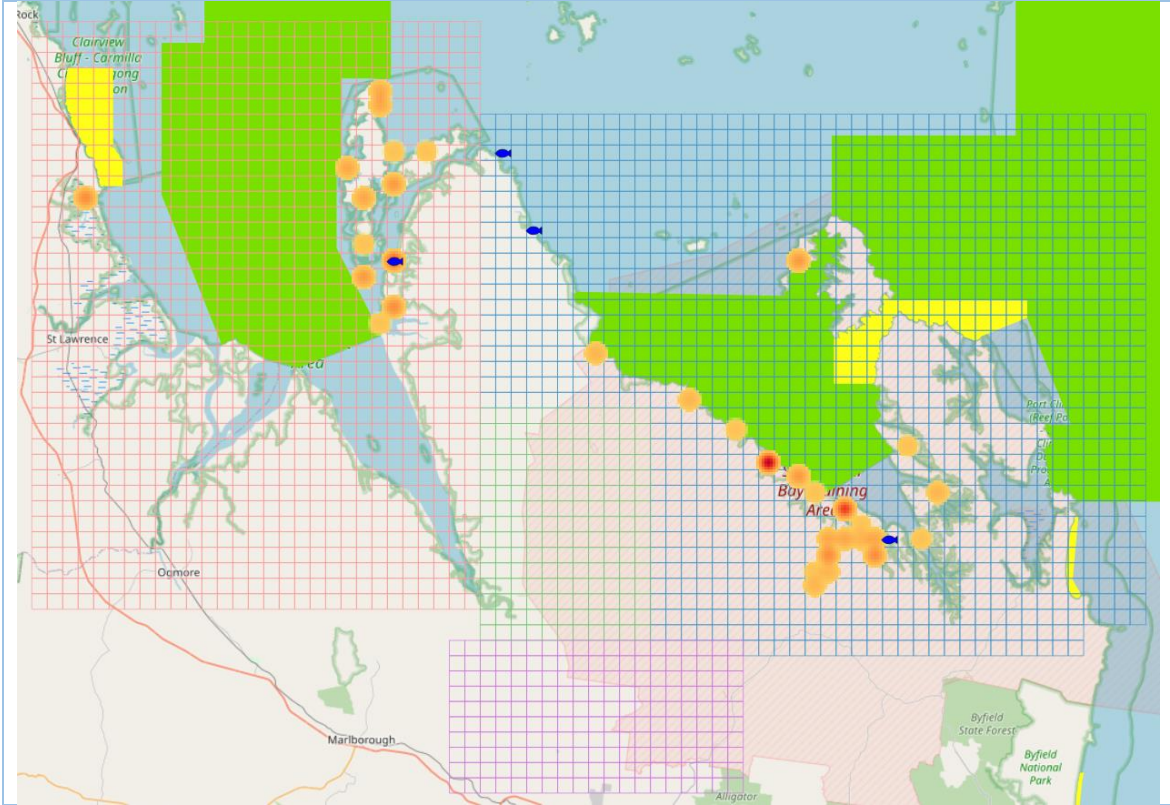
LENGTHS

Average length (mm) Bars show smallest to largest fish Dots show outliers 2015-2024	High Average length 2020 595 Largest 2020 750	Low 2024 466 2024 570	Now 2025 NA 2025 NA	
Fish lengths percentage Undersize <650mm Legal 650-1000mm Trophy 1000+mm 2015-2024	High Legal-trophy 2024 100% Trophy 2020 8%	Low 2018 82% 2024 0%	Now 2025 NA 2025 NA	

LOCATIONS

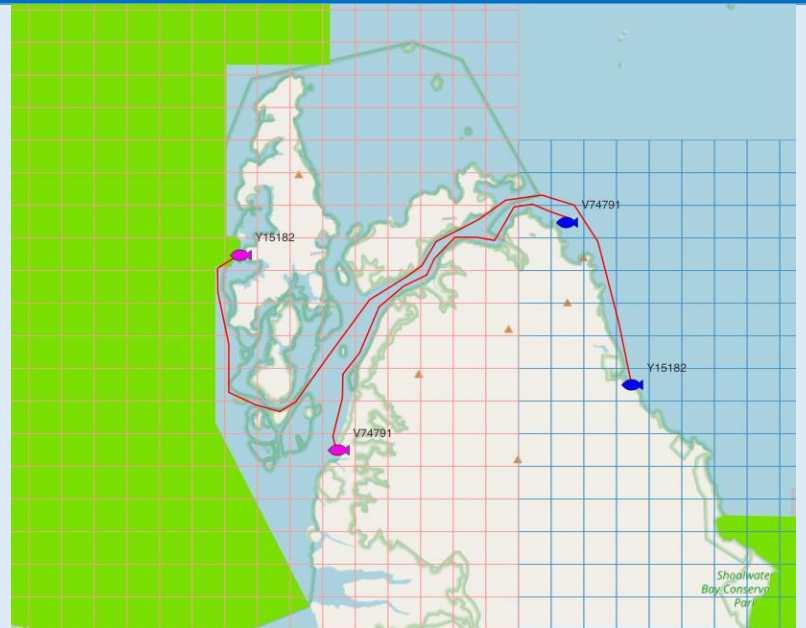
Blue Threadfin
Tagged (red-orange heat map)
Recaptured (blue fish)
2016-2025

Tagged	113
Recaptured	4



MOVEMENT

Blue Threadfin
Movement
Tagged (pink fish)
Recaptured (blue fish)
Y15182 (moved 43km)
V74791 (moved 24km)
2016-2025



Data sources

Data used in the Stanage Crystal Bowl are:

- Tag records and recapture records for the river at <http://crystalbowl.infofishaustralia.com.au/>.
- Rainfall records and temperature records from Williamson Station 33295 from <http://www.bom.gov.au/climate/data/>.

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 over the past 5 years.
- Catch rates calculated as number of fish tagged/fisher day for taggers with a minimum of 12 fisher days (at least 1 per month) to provide an acceptable catch rate.
- For Barramundi undersized fish are <580mm, legal fish are \geq 580 and <1000mm and trophy fish are \geq 1000mm.
- For Golden Snapper undersized fish are <350mm, legal fish are \geq 350mm and <600mm and trophy fish are \geq 600mm.
- For King Threadfin undersized fish are <650mm, legal fish are \geq 650mm and <1000 and trophy fish are \geq 1000mm.
- Locations based on Infofish grid map BSD, SWB, TOR and HCK and other grid maps where fish were recaptured outside the area.
- Movement distance calculated as the shortest distance by water from the tag to the recapture location using Google Earth.
- Distance from fisher's address to recapture location is the straight-line distance between locations based on Google Earth coordinates with Local <80km, Intrastate \geq 80km and Qld postcodes, Interstate postcodes other than Qld.