

MONITORING BARRAMUNDI IN THE FITZROY BASIN

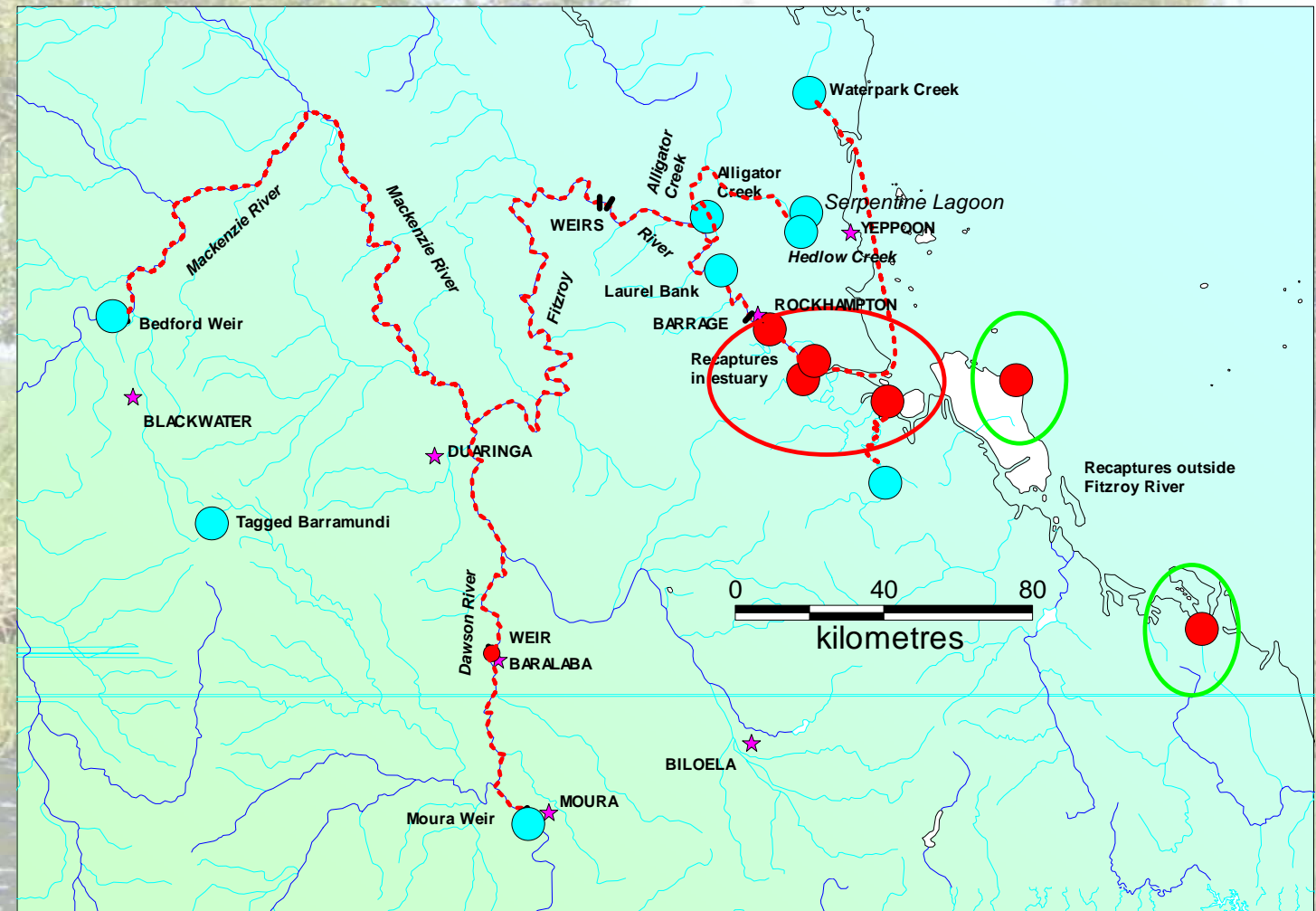


Community monitoring of Barramundi in the Fitzroy Basin has been going on for almost 25 years as part of the Suntag fish tagging program and this has recently been incorporated under CapReef.

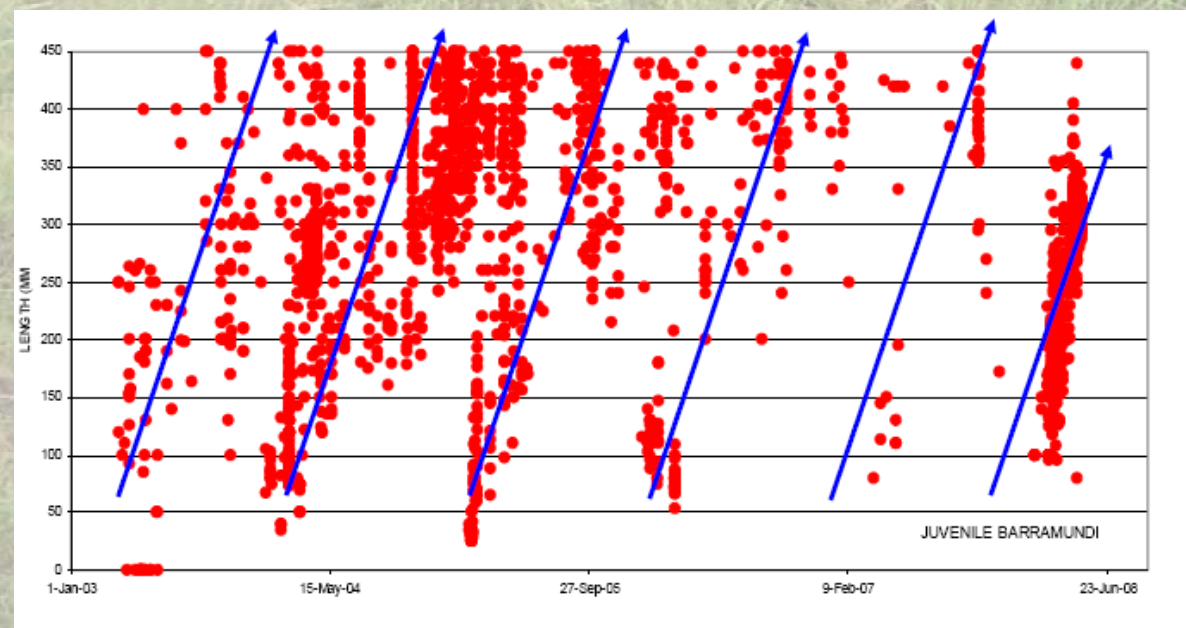
Recent work has focussed on understanding what influences Barramundi recruitment and the effects of the 2008 flooding in the river.

The success of Barramundi recruitment is dependent on river flow, local rainfall and the timing of when that occurs. Peak recruitments occurred in 1991, 1996, 2001 and now 2008.

Following the flooding tagged Barramundi stocked by local groups at Moura and Blackwater were recaptured in the Fitzroy estuary (400-500km down river). Stocked fish from Hedlow Creek were also caught in the estuary and as far away as Curtis Island and Turkey Beach.



Top right: Map showing where tagged fish were recaptured following the 2008 flooding



Bottom Left: Annual recruitment of Barramundi with arrows showing growth and numbers of recruits (density of dots indicates strength of recruitment).

Bottom right: Predictor of success of Barramundi recruitment

YEAR	FLOW AND TIMING				RECRUITS		FITZROY RIVER			12 MILE	
	monthly flow > 0.4GL	wet season flow > 1.5GL	Max flow Jan/Feb	monthly 12 mile rain > 140mm in Jan/Feb	Fitzroy recruits < 250mm	12mile recruits < 250mm	wet season flow	monthly flow	flow timing	12 mile rain	rain timing
1988	✓	✓			73	41					
1989	✓	✓	✓	✓	56	0					
1990				✓	9	0					
1991	✓	✓	✓	✓	227	117					
1992					27	0					
1993			✓		5	0					
1994	✓	✓		✓	29	0					
1995			✓	✓	21	5					
1996	✓	✓	✓	✓	1271	1236					
1997	✓	✓			37	18					
1998			✓		5	0					
1999	✓	✓			80	49					
2000			✓	✓	31	9					
2001	✓	✓	✓	✓	253	193					
2002			✓		44	7					
2003	✓	✓		✓	42	14					
2004	✓		✓	✓	189	11					
2005			✓	✓	140	24					
2006					68	6					
2007					29	0					
2008	✓	✓	✓	✓	566	282					

■ Conditions outside range
■ Conditions close to range
■ Conditions inside range