

# Black Bream (2023)

*Acanthopagrus butcheri*



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## STOCK STATUS OVERVIEW

Jurisdiction	Stock	Stock status	Indicators
Western Australia	Western Australia South Coast Estuaries	Sustainable	Catch
Western Australia	Western Australia West Coast Estuaries	Sustainable	Catch
New South Wales	Southern New South Wales	Undefined	Catch, CPUE
Victoria	The Gippsland Lakes	Recovering	Catch, CPUE, size composition, fishing mortality
Victoria	Victoria Eastern Estuaries	Undefined	CPUE, size composition
Victoria	Victoria Western Estuaries	Undefined	CPUE, size composition
Tasmania	Tasmania Scalefish Fishery	Undefined	Catch
South Australia	Lakes and Coorong Fishery	Depleted	Catch, targeted effort, age composition

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South Australia	South Australia Marine Scalefish Fishery	Sustainable	Catch, CPUE
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**STOCK STRUCTURE**

Black Bream have a wide distribution in the estuaries of southern Australia from central New South Wales to the central Western Australian coast, including Tasmania [Kailola et al. 1993]. Black Bream are estuarine-dependent, completing much of their life cycle within a single estuary [Chaplin et al. 1997; Conron et al. 2016; Earl et al. 2016]. Genetic studies of Black Bream in Victoria and Western Australia have indicated that, while there has been gene flow between adjacent estuaries, there is evidence of isolation by distance between populations [Chaplin et al. 1997; Farrington et al. 2000; Burridge et al. 2004; Burridge and Versace 2007; Sarakinis et al. 2024]. Results of tagging studies conducted in the Swan River [Norriss et al. 2002], Gippsland Lakes [Butcher and Ling 1962; Hindell et al. 2008] and the Coorong estuary [Hall 1984] found limited or no evidence of coastal migration or emigration between estuaries. This indicates that estuarine Black Bream populations should be managed as distinct biological stocks. However, for most fisheries management agencies this is not practical.

Black Bream and the closely related Yellowfin Bream, *Acanthopagrus australis*, also exhibit considerable levels of hybridisation where their distributions overlap in south-eastern Australia [Farrington et al. 2000; Roberts et al. 2009, 2010, 2011; Ochwada-Doyle et al. 2012], further complicating status determination. Furthermore, Black Bream growth, size- and age-at-maturity and recruitment are strongly influenced by environmental conditions, particularly freshwater influx into estuaries [Norriss et al. 2002; Cottingham 2008]. It is therefore likely that over local scales at least, annual recruitment strength depends on environmental conditions, with substantial inter-annual variation in recruitment affecting individual stock demographics and biomasses. These environmental drivers complicate management across multiple catchments.

Here, assessment of stock status is presented at the management unit level—Western Australia West Coast Estuaries, Western Australia South Coast Estuaries (Western Australia); Southern New South Wales (New South Wales); Victoria Western Estuaries, The Gippsland Lakes, Victoria Eastern Estuaries (Victoria); Tasmania Scalefish Fishery (Tasmania); Lakes and Coorong Fishery and South Australia Marine Scalefish Fishery (South Australia).

**STOCK STATUS**

**Lakes and Coorong Fishery** The Lakes and Coorong Fishery (LCF) has historically been the most important of South Australia’s commercial fisheries for Black Bream, accounting for around 85% of the state’s total commercial catch of the species since the 1980s. The Lakes and Coorong Black Bream stock encompasses the populations in the Coorong Estuary and Lower Lakes and has been classified as depleted since 2016 [Earl et al. 2016]. The most recent assessment of this stock was completed in 2023 and used a weight-of-evidence approach that considered fishery data up to 30 June 2022, and a 14-year time series of annual age structures up to 2021–22 [Ye et al. 2022; Earl 2023].

The primary measures for biomass and fishing mortality are total catch and targeted effort from LCF gillnet fishers and fishery age structures. Total catches of Black Bream by the LCF were greater than 35 tonnes (t) per year during the mid-1980s and then progressively declined to 3.7 t in 1990–91. They were low during the 1990s, averaging 3.7 t per annum, before increasing to 11 t in 2002–03. By 2008–09, catches had fallen to 1.7 t and they have been less than 2 t in

most years since. The total catch of 3.4 t in 2021–22 was the highest catch since 2007–08, despite the implementation of a fishery closure from 1 August 2021 to 31 January 2022, aimed at recovering the stock. Nevertheless, the low catches over the past two decades have been associated with low targeted effort. Given the high wholesale value of Black Bream compared to other LCF species [EconSearch 2022], the lack of targeting since the 1980s has been indicative of low biomass.

Annual fishery age structures from 2007–08 to 2021–22 comprised mostly 4 to 17-year-old fish, although fish older than 10 years were rare, despite the potential for this species to live up to 32 years of age [Ye et al. 2022]. Within any year, few age classes contributed most to the catch, reflecting the relative strength of these year classes. This variation in year class strength relates to inter-annual variation in recruitment. Larger year classes appear to be linked to freshwater releases to the Coorong Estuary in 1997–98, 2003–04, 2006–07, 2009–10, 2012–13, 2015–16 and 2016–17, suggesting that environmental conditions associated with freshwater inflow are important for successful reproduction of Black Bream in the Coorong [Ye et al. 2022]. The recruitment of these year classes to the fishable biomass indicates that environmental conditions in the Coorong Estuary supported successful spawning in those years. In 2021–22, catches were dominated by fish from the 2017–18 and 2016–17 year classes (4 and 5 years old, respectively) [Ye et al. 2022]. In recent years fishery production has remained low despite the recruitment of young fish to the fishable biomass, which indicates that recruitment levels have not been strong enough to support recovery of the stock. In 2022, successful recruitment of Black Bream in the Coorong was evident by the detection of higher-than-average abundances of young-of-year that likely originated from spawning that occurred in 2020–21 in association with low-moderate freshwater inflows [Ye et al. 2022]. Recruitment of these juveniles to the fishable biomass has not yet occurred and is expected to take several years.

The above evidence indicates that the biomass of this stock has been reduced through fishing mortality, such that recruitment is impaired. Management measures to recover the stock from its recruitment impaired state have been implemented since 2018; however, measurable improvements are yet to be detected.

On the basis of the evidence provided above, the Lakes and Coorong Fishery management unit is classified as a **depleted stock**.

**South  
Australia  
Marine  
Scalefish  
Fishery**

Black Bream is a Tier-3 species in South Australia's commercial Marine Scalefish Fishery (MSF). The MSF Black Bream stock encompasses the populations in marine waters of South Australia, outside the Coorong Estuary and Lower Lakes [Earl et al. 2016].

The most recent assessment of this stock was completed in 2023 and used a weight-of-evidence approach that considered MSF data to the end of June 2022 [Smart et al. 2023]. The primary measures of biomass and fishing mortality are total catch and nominal catch rate from commercial fishers.

Total annual catch in the MSF averaged less than 1.5 t per annum from 1983–84 to 2005–06, due to low targeted effort. Between 2014–15 and 2018–19, catches were marginally higher, ranging from 1.7–3.2 t per annum, and estimates of annual catch rate were, on average, around 80% higher than the long-term average catch rate for the sector [Smart et al. 2023]. Estimates of total catch and catch per unit effort (CPUE) for 2021–22 are confidential (i.e., based on

data reported by fewer than five licence holders), but are both stable with no evidence of recent declines. While Black Bream is not a major component of recreational landings in South Australia, the recreational sector accounts for a considerable proportion of the state's total catch of Black Bream. The estimated harvest of Black Bream by the recreational sector in 2021–22 was 5.5 t, which represented approximately 66% of the state's total combined commercial and recreational catch [Beckmann et al. 2023].

The above evidence indicates that the biomass of this stock is unlikely to be depleted, that recruitment is unlikely to be impaired and that the current level of fishing mortality is unlikely to cause the stock to become recruitment impaired.

On the basis of the evidence provided, the South Australia MSF management unit is classified as a **sustainable stock**.

### **Southern New South Wales**

Black Bream is known to occur in estuaries and coastal lagoons in New South Wales south of approximately 32° latitude, but there is massive hybridization with Yellowfin Bream [Roberts et al. 2009, 2010, 2011; Ochwada-Doyle et al. 2012; Gray 2022; van de Meulen et al. 2023]. Genetic analyses of 688 juvenile fish from five coastal lagoons in southern New South Wales by Roberts et al. [2010] found that 50% were Yellowfin Bream, 45% were Yellowfin/Black Bream hybrids and only 5% were Black Bream. Similarly, and more recently, among 29 genetically assessed bream in the Shoalhaven River by van der Meulen et al. [2023], 58% were Yellowfin Bream and 38% were hybrids. Ochwada-Doyle et al. [2012] observed no differences with hybrids in terms of their growth, population structure or maturity, but excessive introgression has negative implications for the persistence of Black Bream as a species in this region.

Difficulty in visually separating both species of bream and hybrids means that all have been historically amalgamated with Yellowfin Bream for reporting purposes, confounding any inter-specific estimates of commercial and especially recreational catches [Murphy et al. 2020, 2023]. Nevertheless, since 2009, commercial fishers have recorded 'Black Bream' as a separate species (mostly south of 31° S), where approximately 80% of their catches are landed using mesh nets and 17% using haul seines. Estimated catches remained fairly stable at approximately 20 t each year from 2010 to 2015, and then decreased to 14 t in 2017 and 10 t in 2019, but with some simultaneous reductions in fishing effort. Catches have since increased to 20 to 30 t each year. Additional data are required to determine the exact compositions of Black Bream in catches, which will undoubtedly be substantially less than 100%.

On the basis of the evidence provided above, the Southern New South Wales management unit is classified as an **undefined stock**.

### **Tasmania Scalefish Fishery**

The sale of Black Bream from Tasmanian State waters has been prohibited since 1998, resulting in a cessation of significant harvest of the species for commercial purposes. Prior to 1998, Black Bream were harvested commercially using seine nets (including beach seine) and gillnets and, to a lesser extent, hand lines. Maximum commercial catches of 9.9 t were recorded in 1996–97. In the years following 1998, catches remained below 1 t, and average below 10 kg per annum from 2007 onwards.

Black Bream are a popular target for recreational fishers in Tasmania. Recreational fishers target the species primarily in estuaries using lines with bait or lures. Catches have remained fairly stable over time but dropped by about

50% between the last two surveys in 2012–13 and 2017–18 [Lyle et al. 2009; Lyle et al. 2014; Lyle et al. 2019]. Release rates have increased markedly since 2001, reflecting a documented change in fisher ethic towards catch-and-release sports fishing [Lyle et al. 2009; Lyle et al. 2014; Lyle et al. 2019]. The estimated total recreational catch in 2012–13 was 59,000 fish, with an estimated 40,000 of these released [Lyle et al. 2014]. In 2017–18, total recreational catch was estimated at 27,000, with about 18,000 released and 9,000 kept [Lyle et al. 2019]. Post-release survival of Black Bream is considered to be high but known to vary with hooking depth [Conron et al. 2010].

The above evidence suggests that the biomass of this stock is unlikely to be depleted. However, due to a significant decrease in recreational catch observed in the 2017–18 recreational survey, this management unit is classified as an **undefined stock**.

### **The Gippsland Lakes**

The Gippsland Lakes are a series of temperate coastal lagoons almost 70 km long in eastern Victoria that are connected to the sea by a single permanent, narrow entrance at Lakes Entrance. Three main rivers, the Mitchell, Nicholson, and Tambo, discharge into this system.

Management measures have been implemented through the Gippsland Lakes Recreational Fishery Plan, including the buy-out of all commercial netting licences in April 2020 and the introduction of a Black Bream slot limit of 28–38 cm on 1 April 2021. The minimum size limit of 28 cm remained unchanged and was enhanced by a new maximum size limit of 38 cm to provide added protection for larger bream. Large Black Bream are more prolific breeders, producing more eggs and thereby potentially contributing more stock to future generations [Norriss et al. 2002]. The selection of the slot limit is guided by science with modelling adapted from methods developed to estimate the impacts of a particular bag and/or size limit using previously sampled fishery catch data [Hamer et al. 2019]. In this case, the modelling indicating that 12% more breeding biomass would have remained in the population with the Black Bream slot limit in place [VFA 2020]. Recently, additional measures to protect the species and improve its sustainability over the next few years have been implemented. Notably, the daily bag limit for Black Bream in the Gippsland Lakes and tributaries was lowered from 10 to 7 in September 2023 [VFA 2023].

The removal of the commercial fishery has resulted in CPUE (standardised and nominal) for commercial mesh net no longer being suitable as a primary performance measure for Black Bream stock status in the Gippsland Lakes. Commercial fishing has now ceased in the Gippsland Lakes. Historical commercial harvests decreased considerably since the 1980s, and more recently declined substantially in response to reduced netting effort due to commercial licence attrition since 2010 up until the fishery ceased in March 2020. The estimated fishing mortality rate imposed on the stock during 2015–19 was in the order of 0.2 (95% CLs = 0.1–0.3) which is not relatively high within the bounds of a species with the life history characteristics of Black Bream [VFA et al. 2021]. Removal of the commercial fishery is likely to result in a reduction in the fishing mortality rate. There is no recent information on recreational harvest or effort.

Standardised CPUE from the creel surveys, spanning a period of 43 years, has remained low (compared to historical levels) since the early 2000s, with the lowest point during the reference period occurring in 2003–2005. Since then, recreational CPUE has mostly increased over the last decade and in the recent few years remained just below the reference-period average [Bell et al. 2023]. Diary-angler targeted CPUE, which includes catches of fish above and below the

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LML, shows peaks in 2006 and 2012–13, similar to the timing of peaks in the mesh net and creel survey CPUE. Like mesh-net and creel-survey CPUE, diary-angler CPUE declined from 2013 to 2016, and has more recently increased to 2022 to be well above the reference-period average, consistent with a recovering stock. Standardised CPUE from mesh nets has declined continually from 2011, and during 2017–18 through until 2019–20 when fishing ceased in the Gippsland Lakes, it was below the lowest point recorded during the reference period (Bell et al. 2023).

Length composition data from creel surveys has been generally stable, but with signs of an increase in the median size of fish harvested in 2022. Increased proportions of smaller fish were observed among diary-angler catches during 2012–22, indicative of recently increased recruitment rates, further evidenced by more sub-legal fish in recent years. Angler-diary size-composition data also confirm that the slot limit has provided greater protection to fish above 38 cm which appear to be increasing in relative abundance [Bell et al. 2023].

Recruitment is highly influenced by freshwater flow conditions [Williams et al. 2012]. Recruitment of 0+ age Black Bream has been relatively stronger (c.f. 2010–16) from 2017 to 2020, and although lower in 2021, in 2022 it was the highest since monitoring commenced [Bell et al. 2023]. These recent cohorts will grow to legal size over the next 5–6 years. However, because of the short duration of the recruitment time series it remains unclear how the recruitment index relates to replenishment of adult biomass, or how this relates to historic recruitment rates.

The above evidence indicates that the current level of fishing mortality has reduced commensurately with the cessation of the commercial fishery and the introduction of further recreational size limit restrictions. The current level fishing mortality should allow the stock to recover. Increased creel-survey CPUE from the lowest point recorded in 2004 to just below the reference-point average in recent years, with an increase well above the reference-period average in angler-diary CPUE over the last 5 years until 2022, coupled with relatively stronger recruitment of 0+ age black bream during 2017–22 (c.f. 2010–16) support this contention.

The above evidence indicates that the biomass of this stock is likely to be depleted, however recruitment is unlikely to be impaired, and for the period 2017–22 these indicators suggest a recovering stock.

The above evidence indicates that the current level of fishing mortality should allow the stock to recover from its depleted state.

On the basis of the evidence provided above, the Gippsland Lakes management unit is classified as a **recovering stock**. average in angler-diary CPUE over the last 5 years until 2022, coupled with relatively stronger recruitment of 0+ age black bream during 2017–2022 (c.f. 2010–2016) support this contention.

The above evidence indicates that the biomass of this stock is likely to be depleted, however recruitment is unlikely to be impaired, and for the period 2017–2022 these indicators suggest a recovering stock.

The above evidence indicates that the current level of fishing mortality should allow the stock to recover from its depleted state.

On the basis of the evidence provided above, the Gippsland Lakes management unit is classified as a recovering **stock**.

**Victoria  
Eastern  
Estuaries**

The status of stock biomass and impact of fishing pressure was evaluated using CPUE and size-composition data from fishers participating in an angler-diary program. There is now no commercial fishery for Black Bream in Lake Tyers and Mallacoota Inlet with commercial fishing being removed from these estuaries in 2003 [Conron et al. 2010].

Changes in the levels of fishing pressure on Black Bream stocks following the removal of commercial fishing were investigated using data collected by volunteer angler diarists targeting Black Bream in Mallacoota Inlet and Lake Tyers [Conron et al. 2010]. Total mortality rate estimates of legal-sized Black Bream, from age-based cohort analysis of catch data, indicated that the annual mortality declined from 57% to 31–36% following the removal of commercial fishing from Mallacoota Inlet. Data collected in Lake Tyers after the removal of commercial fishing indicated an annual mortality rate of 24%.

There is no recent information about the amount of fishing pressure on the Black Bream populations in Lake Tyers and Mallacoota Inlet and natural mortality has not been estimated. Size composition data show that larger fish (greater than 35 cm total length (TL)) are consistently recorded in catches [Bell et al. 2023] suggesting fishing mortality is still likely to be relatively low. Black Bream below the minimum legal size (28 cm) are also regularly caught in both locations, suggesting recent spawning success. Diary-angler targeted CPUE has declined to below its average in recent years [Bell et al. 2023]. Reduced participation in the angler-diary program has increased the uncertainty regarding recent diary-angler CPUE (i.e. recent declines in CPUE, but there is uncertainty about whether these reflect declines in biomass or unreliability of angler-diarist data). Overall, there is insufficient information available to confidently classify the status of this stock.

On the basis of the evidence provided above, the Victoria Eastern Estuaries management unit is classified as an **undefined stock**.

**Victoria  
Western  
Estuaries**

Black Bream predominantly occur in the estuarine reaches of rivers in western Victoria and Port Phillip Bay. The main indicators used for assessment of the Victoria Western Estuaries management unit are CPUE of harvests by the recreational and commercial sectors. Information on recruitment and fishing pressure is also obtained from size-composition data measured by anglers participating in an ongoing angler fishing-diary program [Conron and Oliveira 2016], but these data do not provide estimates of total recreational catch.

There is no direct information on the amount of fishing pressure on the Black Bream population in the Glenelg River. Size-composition data shows that larger fish (greater than 35 cm) are consistently recorded in the catches [Bell et al. 2023]. suggesting fishing mortality is likely to be relatively low. There have been also consistent catches of undersize fish suggesting recent spawning success with the exception of 2018. The lack of undersize fish recorded by angler diarists in 2018 is unexpected given their prevalence in previous years and this may be due to changes in locations fished. Diary-angler targeted CPUE (number of fish per angler hour) in 2018 was just below its long-term average (1997–2015) and mostly well above its minimum during other years [Bell et al. 2023].

Similarly, in the Hopkins River there is also no direct information about the amount of fishing pressure on the Black Bream population. Size-composition data shows that larger fish (greater than 35 cm TL) are consistently recorded in

catches [Bell et al. 2023]. suggesting fishing mortality is likely to be relatively low. Reduced participation in the angler diary program has increased the uncertainty of recent angler-diarist catch data. Overall, there is insufficient information available to confidently classify the status of this stock.

On the basis of the evidence provided above, the Victoria Western Estuaries management unit is classified as a **undefined stock**.

**Western  
Australia  
South Coast  
Estuaries**

In each estuary, Black Bream is known to constitute a genetically discrete population [Chaplin et al. 1997] and temporal variations in recruitment that affect overall population abundance can differ substantially. Trends in annual recruitment vary among estuaries due to the influence of localised events, such as fish kills or favourable environmental conditions that trigger large, episodic recruitment events [Hoeksema et al. 2006]. This assessment has therefore focused on local and regional trends in commercial catch, with consideration also given to species biology and fishery-independent data.

Since 1976 annual commercial catches of Black Bream on the South Coast of Western Australia have fluctuated between a low of 1.4 t in 1976 and a high of 97 t in 1992. Although there have been several peaks and troughs, there has been an overall increasing trend in catch from the 1970s to the present. Although Black Bream are one of the top 10 species caught by recreational boat-based fishers within the region, the recreational harvest is small (approximately 1.6 t) relative to commercial catch [Ryan et al 2022]. The current shore-based recreational catch is unknown but considered likely to comprise a significant share of the catch of this species [Duffy et al. 2023]. Customary catch is unknown but likely to be low or negligible.

Fishery-independent data from 2013 to 2015 for three estuaries, two open to commercial and recreational fishing, and one open to recreational fishing alone, provide evidence that age structures are not truncated [Cottingham et al. 2018]. Maximum age varied slightly between the estuaries (approximately 16 to 19 years) and most age classes were represented in each estuary, Wilson Inlet was the exception with no fish between approximately 12 and 16 years. However, additional data, available for two of those estuaries, indicates that fish mature well below the minimum legal size [Cottingham et al. 2018], therefore commercial and recreational take is composed only of mature fish that have had multiple opportunities to spawn. The information suggests that mortality is not likely to be excessive on the spawning stocks.

The above evidence indicates that the biomass of this stock is unlikely to be depleted and that recruitment is unlikely to be impaired. Furthermore, the current level of fishing mortality is unlikely to cause the stock to become recruitment impaired.

On the basis of the evidence provided above, the Western Australia South Coast Estuaries management unit is classified as a **sustainable stock**.

**Western  
Australia  
West Coast  
Estuaries**

In each estuary, Black Bream is known to constitute a genetically discrete population [Chaplin et al. 1997] and temporal variations in recruitment that affect overall population abundance can differ substantially between estuaries. Trends in annual recruitment vary among estuaries due to the influence of localised events, such as fish kills, or favourable environmental conditions that trigger large, episodic recruitment events [Hoeksema et al. 2006]. This assessment has therefore focused on local and regional trends in commercial



catch, with consideration also given to species biology and fishery-independent data.

Since 1976 annual commercial catches of Black Bream on the West Coast of Western Australia have fluctuated between a low of less than 1 t up to a high of approximately 9 t. The main catches are taken in the Swan Canning Estuary and Hardy Inlet, with very low catches from the Peel-Harvey estuary. Commercial fishing effort in the two main systems is low, with only a single operator fishing each estuary.

Although Black Bream are one of the top 10 species caught by recreational boat-based fishers within the region, the recreational harvest is small (approximately 1.5 t) [Ryan et al 2022]. The current estimate of shore-based recreational catch of Sparidae spp. (including Black Bream) from ongoing Perth Metropolitan surveys is small [Tate et al. 2022], however, the actual catch may be much larger due to the species inhabiting areas not covered by the survey. Customary catch is unknown but likely to be low or negligible.

Fishery-independent age and size data collected for Black Bream in the commercially and recreationally fished Swan River Estuary and the recreationally fished Moore River Estuary, for the periods 1993–94 [Sarre and Potter 2000; Cottingham et al. 2018] and 2013–15 [Cottingham et al. 2018], indicate relatively low fishing pressure in the more recent period for the former estuary, and in both periods for the latter estuary. For the Swan River Estuary, very few fish greater than 6 y were sampled in the former period compared with substantial numbers in the latter period. In the Moore River Estuary, substantial numbers of fish were above 6 y in both periods. Age data collected in 2013–15 for a third estuary on the west coast (Peel-Harvey Estuary) are more truncated than for the other two estuaries during this period, with few fish greater than 6 years [Cottingham et al. 2018]. However, fish in these estuaries mature at less than 3 years and less than 20 cm total length, with the latter being below the minimum legal length of 25 cm [Cottingham et al. 2018]. Therefore, commercial and recreational take is composed only of mature fish that have had multiple opportunities to spawn. The information suggest that the spawning stocks were not overfished at that time.

The Black Bream population in Hardy Inlet is heavily reliant on a small number of age classes resulting from episodic recruitment events (natural or restocked) [Cottingham et al. 2020], indicating the juvenile recruitment of Black Bream in this system is environmentally limited. Since Hardy Inlet was restocked with Black Bream in 2001/02, there has been only one major natural recruitment event (2008), to which mature restocked fish are estimated to have contributed approximately 55% to egg production in that year [Cottingham et al. 2015]. The presence of fish surviving to relatively old ages in this estuary (most 9+ years old in 2018), suggest that fishing mortality in recent years has not been excessive [Cottingham et al. 2020].

The above evidence indicates that the biomass of this stock is unlikely to be depleted and that recruitment is unlikely to be impaired, although in Hardy Inlet it is environmentally limited. Furthermore, the current level of fishing mortality is unlikely to cause the stock to become recruitment impaired.

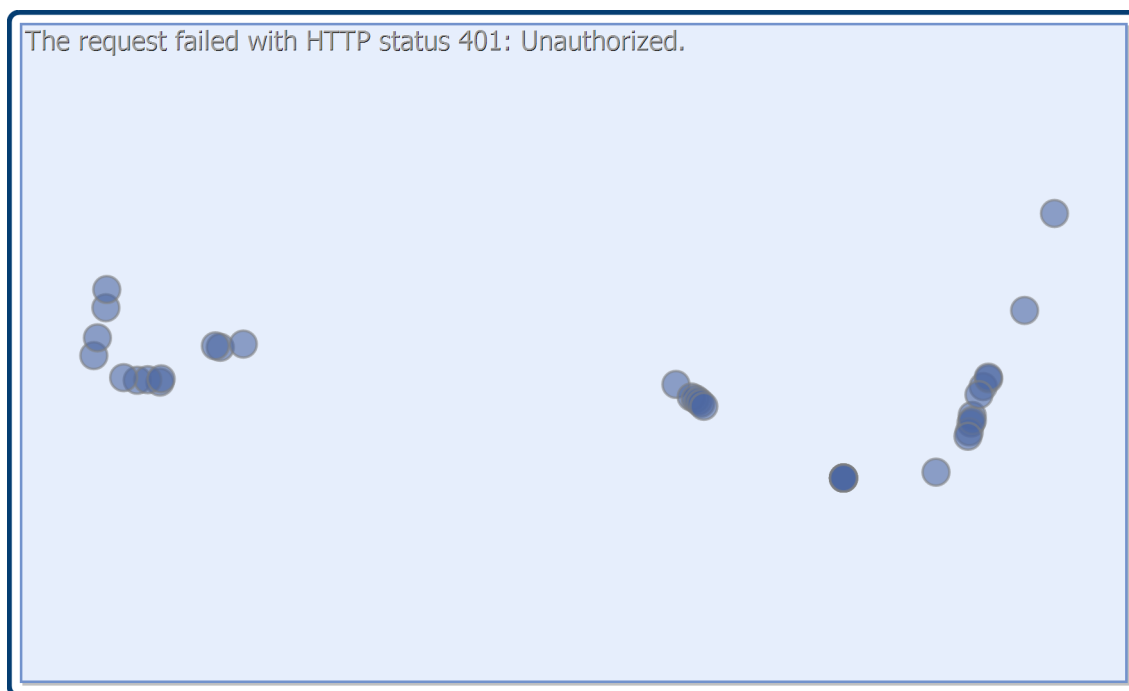
On the basis of the evidence provided above, the Western Australian West Coast Estuaries management unit is classified as a **sustainable stock**.

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**Black Bream biology** [Kuitert 1993; Sarre and Potter 2000; Walker and Neira 2001; Cheshire et al. 2013]

Species	Longevity / Maximum Size	Maturity (50 per cent)
Black Bream	37 years, 600 mm TL	180–340 TL mm

**DISTRIBUTION**



Distribution of reported commercial catch of Black Bream

**TABLES**

Fishing methods	New South Wales	South Australia	Tasmania	Victoria	Western Australia
<b>Charter</b>					
Diving				✓	
Hook and Line				✓	
<b>Commercial</b>					
Gillnet		✓			✓
Handline		✓			
Haul Seine	✓				✓
Hook and Line		✓			

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Mesh Net	✓				
Net				✓	
Seine Nets		✓			
Unspecified		✓	✓	✓	
Various	✓				
<b>Recreational</b>					
Diving				✓	
Gillnet		✓	✓		✓
Handline	✓	✓	✓		✓
Hook and Line		✓		✓	
Spearfishing	✓				

Management Methods					
	New South Wales	South Australia	Tasmania	Victoria	Western Australia
<b>Charter</b>					
Bag limits				✓	
Gear restrictions				✓	
Licence				✓	
Size limit				✓	
Spatial restrictions				✓	
<b>Commercial</b>					
Effort limits		✓		✓	
Fishing gear and method restrictions	✓				
Gear restrictions		✓		✓	✓
Licence				✓	
Limited entry	✓	✓		✓	✓
Size limit	✓	✓		✓	✓
Spatial closures	✓	✓		✓	✓
Temporal closures	✓	✓			
<b>Recreational</b>					
Bag and possession limits			✓		

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<b>Bag limits</b>	✓	✓	✓	✓	✓
<b>Gear restrictions</b>		✓	✓	✓	✓
<b>In possession limits</b>	✓				
<b>Licence</b>	✓		✓	✓	
<b>Licence (boat-based sector)</b>					✓
<b>Possession limit</b>					✓
<b>Size limit</b>	✓	✓		✓	✓
<b>Spatial closures</b>	✓	✓		✓	✓
<b>Temporal closures</b>		✓			

<b>Catch</b>	<b>New South Wales</b>	<b>South Australia</b>	<b>Tasmania</b>	<b>Victoria</b>	<b>Western Australia</b>
<b>Charter</b>					Negligible
<b>Commercial</b>	21.6786 t	3.42346 t	0 t	4.386 t	69.1019 t
<b>Indigenous</b>	Unknown	Unknown	Unknown	Unknown (No catch under permit)	Unknown
<b>Recreational</b>	Unknown	5.5 t (in 2021–22)	16.7 t (in 2012–13)	Unknown	3.2 t (2020–21) Boat-based

**New South Wales – Recreational (Catch).** Murphy et al. [2022].

**New South Wales – Indigenous (Management Methods).**

(<https://www.dpi.nsw.gov.au/fishing/aboriginal-fishing>)

**Victoria - Recreational fishing (Management Methods).** Recreational fishing licence requirement, and minimum legal size, maximum legal size and a bag limits apply. For further details see <https://vfa.vic.gov.au/recreational-fishing/recreational-fishing-guide/catch-limits-and-closed-seasons/types-of-fish/marine-and-estuarine-scale-fish/bream-all-species>

**Victoria – Indigenous (Management Methods).** A person who identifies as Aboriginal or Torres Strait Islander is exempt from the need to obtain a Victorian recreational fishing licence, provided they comply with all other rules that apply to recreational fishers, including rules on equipment, catch limits, size limits and restricted areas. Traditional (non-commercial) fishing activities that are carried out by members of a traditional owner group entity under an agreement pursuant to Victoria's *Traditional Owner Settlement Act 2010* are also exempt from the need to hold a recreational fishing licence, subject to any conditions outlined in the agreement. Native title holders are also exempt from the need to obtain a recreational fishing licence under the provisions of the Commonwealth's *Native Title Act 1993*.

**Tasmania – Recreational (Management Methods).** In Tasmania, a recreational licence is required for fishers using dropline or longline gear, along with nets, such as gillnet or beach seine. The species is subject to a minimum size limit of 250 mm. A bag limit of five individuals and a possession limit of ten individuals is in place for recreational fishers fishing in marine waters.

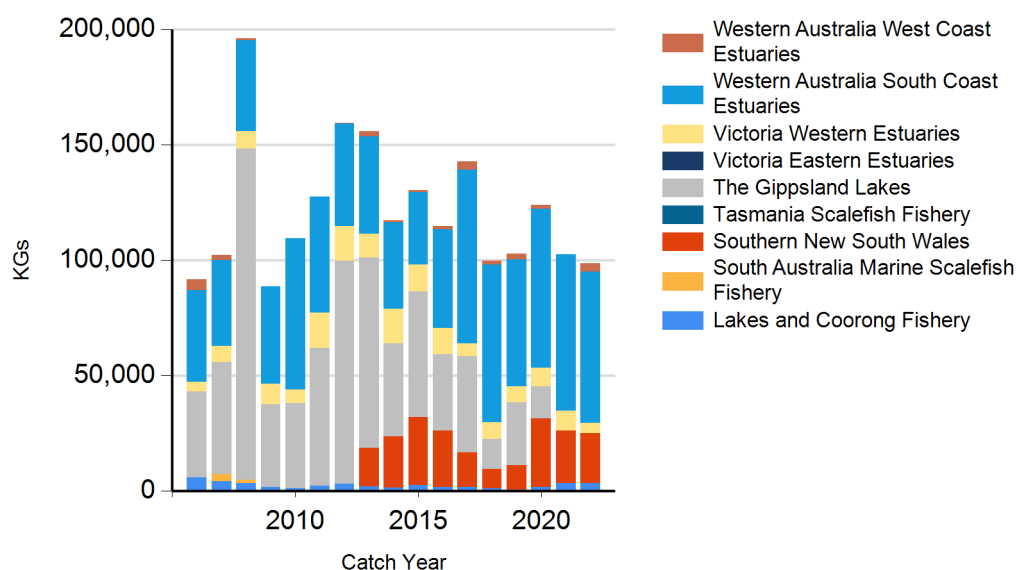
**Tasmania - Indigenous (Management Methods).** In Tasmania, Indigenous persons engaged in traditional fishing activities in marine waters are exempt from holding recreational fishing licences but must comply with all other fisheries rules as if they were licensed. For details, see the policy document 'Recognition of Aboriginal Fishing Activities'

(<https://fishing.tas.gov.au/Documents/Policy%20for%20Aboriginal%20tags%20and%20alloting%20an%20UIC.pdf>).

**Western Australia – Recreational (Management Methods).** In Western Australia a recreational fishing licence is only required for fishing from a boat. Black Bream are subjected to a minimum size limit of 250 mm TL and a bag limit of six (of which only two fish may be over 400 mm TL if fishing in the Swan and Canning rivers).

## CATCH CHART

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Commercial catch of Black Bream - note confidential catch not shown

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