A RESOURCED-BASED MANAGEMENT APPROACH FOR RECREATIONAL FISHING IN WESTERN AUSTRALIA 2012 – 2017

State-wide management proposals for finfish, crustaceans, molluscs and other invertebrates

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FOREWORD

Across WA there are currently four different sets of bioregional bag limits – for the North Coast, Gascoyne, West Coast and South Coast bioregions - with significant variation between each bioregion. This has created a situation where the rules are complex and difficult to understand.

The Department of Fisheries is now reviewing the recreational fishing management framework to make the rules as consistent and easy to understand as possible and also help meet future challenges.

These challenges will centre on the effective management of finfish stocks, particularly demersal scalefish. Based on the experiences in the west coast it is important to take steps now to better protect the quality of recreational fishing experiences in regional Western Australia.

This paper outlines a new, simplified framework of bag and possession limits that is based on state-wide management arrangements for various categories of finfish and invertebrate resources. This new approach will help simplify advisory material and make the recreational fishing experience more enjoyable.

While it is not within the scope of this state-wide review to look at individual fishery arrangements such as closed seasons or minimum legal size limits, the Department will continue to adopt an integrated management approach to fisheries management that takes into account the impacts of all sectors.

The proposals contained in this document are not intended to in any way result in a catch shift to the commercial sector. The new proposed rules take into account the significant management changes that have occurred over the last decade in the commercial sector, which are outlined at Appendix 6.

It is intended that, when implemented, the new rules remain in place for a five-year period before being formally reviewed. This would not preclude taking management action if sustainability issues arise with particular stocks, or making adjustments to deal with Integrated Fisheries Management (IFM) catch shares.

The Department of Fisheries urges all recreational fishers to consider the proposals outlined in this paper. Recfishwest, as the peak body representing recreational fishers, will compile advice on the views of the recreational sector. This feedback will then be forwarded to the Minister for Fisheries for his consideration.

Stuart Smith
Director General

SECTION 1 SUMMARY OF PROPOSALS

Proposal 1 – Resource-based approach

That a resource-based approach is adopted for the management of recreational fishing that focuses on managing fish species within the following zones:

- Estuarine and nearshore estuarine waters and from the beach to a depth of 20 metres;
- Inshore Demersal from 20 metres to 250 metres;
- Offshore Demersal from 250 metres to the edge of the Exclusive Economic Zone (200 nautical miles);
- Pelagic includes the pelagic fishes in the water column 'above' the Inshore Demersal and Offshore Demersal groups.

Proposal 2 – State-wide finfish possession limits

- 10 kg of fillets* or pieces of fish of any species (plus an additional 10kg of the 'Large Pelagic' category of fish^); or
- 7 kg of fillets or pieces of fish plus one day's bag limit of whole fish; or
- Two days' bag limit of whole fish.
- * Fish heads, tails and 'wings' are not included in the fillet weight possession limit.

Proposal 3 – Unaccompanied fish

That unaccompanied recreationally-caught fish cannot be transported by commercial courier businesses

Proposal 4 – Landing fish

Fish with a minimum size limit can be carried at-sea and landed in the following forms:

- Filleted, skin and scale on, minimum 30cm length;
- Trunked, skin and scale on; minimum 30cm length; or
- Whole (can be gutted and gilled).

Fish with a maximum size limit must be carried whole at-sea and landed whole (except shark).

Fish without a size limit can be carried at sea and landed in the following forms:

- Filleted, skin on; or
- Trunked, skin on; or
- Whole (can be gutted and gilled).

Proposal 5 – Bag limits and size limits for finfish.

There are no proposals to change minimum size limits. A review of size limits that will involve consultation with the recreational and commercial sectors will be undertaken as a separate exercise.

[^] Fillets of any 'Large Pelagic' fish (as defined in the bag limits) would need to have skin-on for identification purposes.

Demersal Finfish & Sharks/Rays

High vulnerability due to biological characteristics (e.g. long-lived, late maturing, large maximum size, sex change, limited distribution or small stock size, late maturing reproduction, etc) .

Individual bag limits

All species have an individual bag limit of 2 fish per fisher (or licensed fisher, when taken from a boat) unless otherwise specified – note some species have a bag limit of 1 or 5.

South Coast, Gascoyne, North Coast Bioregions

• Mixed species daily bag limit – 5 per angler

West Coast Bioregion (as per existing arrangements)

- Mixed species daily bag limit 2 per angler
- Boat limit of 2 Western Australian dhufish (6 on a charter boat)
- Closed season 15 October to 15 December for demersal finfish (excludes sharks and rays)

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE
Barramundi cod	Cromileptes altivelis	
Boarfish	Paristiopterus spp.	
Cods, all species (breaksea, estuary, harlequin, eightbar grouper, Chinaman, sea perch, etc)	Families Serranidae and Epinephelidae	Estuary – 400mm Fish over 1,000mm or 30kg are protected – excluding eightbar
Coral trout and coronation trout Bag limit of 1	Plectropomus spp. and Variola louti	Coral trout – 450mm
Dhufish and Pearl perch Bag limit of 1	Glaucosoma spp.	Dhufish – 500mm
Emperors and seabream (spangled emperor, grass emperor, Robinson's sea bream, etc)	Family Lethrinidae	Spangled – 410mm Grass – 320mm Other emperor – 280mm
Foxfish and pigfish	Bodianus spp	
Baldchin groper# and tuskfish	Choerodon spp.	Baldchin and blackspot – 400mm
Hapuku, bass groper and trevalla	Polyprion spp. and Family Centrolophidae	
Redfish (bight redfish, yellow-eyed red snapper, swallowtail, etc) Bag limit of 5 in South Coast Bioregion	Family Berycidae	300mm
Morwong (blue (queen snapper), jackass)	Nemadactylus spp.	Queen snapper – 410mm
Dory (John and mirror)	Family Zeidae	
Knifejaw	Oplegnathus woodwardi	
Parrot fish	Family Scaridae	

Pink snapper#	Pagrus auratus	410mm
		500mm (south of 31deg south latitude, just north of Lancelin)
Pink snapper – inner gulfs of Shark Bay#	Pagrus auratus	500mm
Bag limit of 1		maximum 700mm
Note, additional rules apply in Freycinet Estuary		
Sharks and rays	Class Chondrichthyes	Whalers – maximum size 70cm interdorsal fin length in West Coast and South Coast bioregions
Sea sweep	Scorpis aequipinnis	
Trevally, Golden and Giant	Caranx ignobilis, Gnathanodon speciosus	
Tropical snappers and sea perch (red emperor, ruby snapper, job fish, fingermark, goldband, chinaman fish, stripey sea perch, etc.)	Family Lutjanidae	Red emperor – 410mm Fingermark, and stripey sea perch – 300mm
Western blue devilfish	Paraplesiops meleagris	
Western blue groper Bag limit of 1	Achoerodus gouldii	500mm

[#] Additional closed seasons apply

^{*} Proposed new maximum size limit

Large Pelagic Finfish

Moderate/high vulnerability

State-wide

Mixed species daily bag limit – 3 per fisher (or licensed fisher, when taken from a boat)

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE
Barracuda	Sphyaena barracuda	
Amberjack, Samson fish and yellowtail kingfish	Seriola spp.	600mm
Marlin, sailfish, swordfish	Family Istiophoridae, Family Xiphiidae	
Cobia	Rachycentron canadum	750mm
Dogtooth tuna	Gymnosarda unicolor	
Barracouta, gemfish	Family Gempylidae	
Mahi Mahi	Coryphaena spp.	500mm
Mackerel (grey/broad barred,	Scomberomorus spp. and	Grey – 750mm
school, shark, spotted, Spanish)	Grammatorcynus bicarinatus	School, spotted and shark – 500mm
		Spanish – 900mm
Wahoo	Acanthocybium solandri	900mm
Trevally, giant and golden	Caranx ignoblis and Gnathanodon speciosus	
Tuna (big eye, mackerel, northern bluefin, skipjack, southern bluefin, yellowfin)	Thunnus spp., Euthynnus affinis and Katsuwonis pelamis	

Nearshore/Estuarine Finfish

Moderate vulnerability

State-wide

- Mixed species daily bag limit 8 per fisher (or licensed fisher, when taken from a boat).
 Note some species in this category have a bag limit of 1 or 2
- Barramundi possession limit of 2

SPECIES	SCIENTIFIC NAME	MINIMUM	
		LEGAL SIZE	
Barramundi	Lates calcarifer	550mm	
Bag limit of 1		Maximum size 800mm in Ord and Fitzroy Rivers	
Bream (black, silver [tarwhine],		250mm	
Northwest black, pikey,	Rhabdosargus sarba	Yellowfin – 300mm	
yellowfin, etc)		Only 2 black bream over 400mm on the Swan-Canning Rivers	
Bonito and other tunas	Family Scombridae		
Dart	Trachinotus botla, etc		
Flathead	Family Platycephalidae	300mm	
Flounder	Pseudorhombus spp.	250mm	
Javelinfish and sweetlips	Family Haemulidae	300mm	
Leatherjacket	Family Monacathidae	250mm	
Marine and estuarine catfish	Families Ariidae and Plotosidae	Cobbler (<i>Cnidoglanis</i> macrocephalus) – 430mm	
		Cobbler – protected in Swan- Canning Rivers	
Black jewfish (northern mulloway) Bag limit of 2	Protonibea diacanthus	700mm	
Mulloway Bag limit of 2	Argyrosomus japonicus	500mm	
Mangrove Jack Bag limit of 2	Lutjanus argentimaculus	300mm	
Pike, long finned	Dinolestes lewini	300mm	
Snook, seapike	Family Sphyraenidae	Snook, striped barracuda – 300mm	
Tailor	Pomatomus saltatrix	300mm	
		Only two fish over 500mm	
Trevally, queenfish and other species except needleskin queenfish and yellowtail scad	Family Carangidae	Skipjack – 250mm	
Giant threadfin Bag limit of 2	Eleutheronema tetradactylum	King/giant – 450mm	
Threadfin – other species	Polydactulus spp.		

Tripletail Bag limit of 2	Lobotes surinamensis	300mm
Western Australian salmon	Arripis truttaceus	300mm
Whiting – King George	Sillaginodes punctata	KG – 280mm
Wrasse and parrotfish (all species not specifically mentioned)	Family Labridae	

Freshwater Finfish

State-wide

- Mixed species bag limit of 4 of all species
- Trout, freshwater cobbler this is a licensed recreational fishery

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE
Trout	Salmo trutta and Oncorhynchus mykiss	300mm
Freshwater catfish/cobbler	Families Plotosidae and Ariidae	N/A
Grunter (all freshwater species)	Family Terapontidae	Sooty grunter (Hephaestus fuliginasus) – 250mm

All Other Species of Finfish

All other unlisted species of fish (except baitfish and feral fresh water species) Lower/moderate vulnerability

State-wide

- Mixed species bag limit of 30
- No size limits for species in this category

Baitfish: A combined daily bag limit of nine litres applies to baitfish of the sardine, anchovy and hardyhead families (Clupeidae, Engralidae and Atherinidae – mulies whitebait, scaly mackerel, anchovies, hardyheads).

Feral freshwater species such as carp, tilapia, goldfish and redfin perch have no bag limit. These fish should not be returned to the water and should be humanely dispatched.

Proposal 6 – State-wide bag limits for crustaceans

CrustaceansState-wide possession limit of 24 rock lobster per person

CDEOLEC COLENTIFIC MINIMUM DAG LIMIT DOAT LIMIT				
SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT	BOAT LIMIT
Cherabin	Macrobrachium spp	N/A	30	N/A
Crab, blue swimmer #	Portunus pelagicus	127mm	10 West Coast	20 West Coast
		(carapace width)	20 other regions	40 other regions
Crab, mud (all species	Scylla spp	Green – 150mm	5	10
combined)		Brown – 120mm		
		(carapace width)		
Marron #	Cherax spp	80mm (carapace	10	
Licensed fishery		length)		
additional rules apply.		90mm – trophy waters	5 – trophy waters	
Prawns, school and king (combined) #	Family Penaeidae	N/A	9 litres	N/A
Redclaw	Cherax quadricarinatus	N/A	N/A	N/A
Rock lobster (all species combined) #	Panulirus and Jasus spp	76mm	6	12
Licensed fishery additional rules apply.				
Other crustacean species not specifically mentioned (combined)		N/A	10	N/A

[#] Closed seasons apply

$Proposal\ 7-State-wide\ bag\ limits\ for\ molluscs\ and\ other\ invertebrates$

Molluscs and Other Invertebrates				
SPECIES	SCIENTIFIC NAME	MINIMUM SIZE LIMIT	BAG LIMIT	BOAT LIMIT
Abalone # Licensed recreational fishery – additional rules apply	Haliotis spp	Roe's – 60mm Greenlip/Brownlip – 140mm	Roe's – 20 Greenlip/ Brownlip – 5	Greenlip/ Brownlip – 10
Specimen shell (cowries, volutes, clams, conch)	Families Cypraeidae, Volutidae and Strombidae	N/A	2	
Ark shells, cockles and pipis	Families Arcidae, Cardiidae and Donacidae	Trochus – 65 mm	20	
Mussels	Family Mytilidae		9 litres (shell on)	
Oysters	Family Ostreidae	N/A	20	Recreational harvesting of pearl oysters (<i>Pinctada maxima</i>) is prohibited
Razorshell	Family Pinnidae	N/A	20	
Scallops	Family Pectinidae	N/A	20	
Sea urchins #	Class Echinoidea	N/A	20	
Squid, cuttlefish and octopus (combined)	Family Cephalopoda	N/A	15	30
Bloodworms			1 litre	
Other molluscs and invertebrate species not specifically mentioned (combined)			10	

[#] Closed seasons apply in the west coast zone

SECTION 2 PLANNING FOR THE FUTURE

2.1 Opportunity for public comment - making a submission

The release of this discussion paper for public comment provides an opportunity for you to express an opinion on how recreational fishing should be managed. It is equally important that you respond whether you agree or disagree with the various proposals.

A review panel comprising of representatives from the Department of Fisheries and Recfishwest will consider the submissions received to ensure all issues are taken into consideration.

Recfishwest, as the peak body representing recreational fishers, will be providing independent advice to the Minister for Fisheries, which takes into account the level of support and community views expressed on each of the proposals.

The Minister will consider this advice, along with advice from the Department of Fisheries, before making decisions on the future management of recreational fishing.

When making your submission and to ensure your comments are as effective as possible, please:

- Clearly and briefly describe each separate subject you wish to address.
- Refer to the different proposals in the discussion paper.
- Tell us whether you agree/disagree with any or all of the proposals.
- Suggest alternative ways to resolve the issues raised in this paper or identified by you.

Where to send your submission

The closing date for submissions is 30 April 2012. Please send your submission along with your full name and address to:

Recfishwest PO Box 34 NORTH BEACH Western Australia 6920

Email: recfish@recfishwest.org.au

2.2 Resource-based approach to management

The geographic boundaries used in the current bioregional approach to recreational fishing are largely consistent with the major bio-geographic regions, coastal and climatic zones of Western Australia. Consequently, the current bioregional boundaries are consistent with the distribution of many fish species and reflect major boundaries between fishery resources¹ within WA.

However, within bioregional boundaries, further sub-divisions in the fish communities are evident on the basis of biological and ecological characteristics. For example, fish can be defined as:

- demersal (living close to the seafloor, e.g. Western Australia dhufish);
- pelagic (living in the water column, e.g. tuna); and

¹ The term 'resource' refers to any natural asset(s) utilised by a fishery - typically a suite of species, but it may also refer to an individual fish stock or a fish habitat.

• nearshore or estuarine (species living in estuary system and off the coast to a depth of 20 metres).

Species within each of these groups often share similar biological characteristics and, as a result, also share similar vulnerabilities to fishing. In a resource-based management framework, each of these groups of species can be considered as a discrete 'resource'.

Experiences in the West Coast Bioregion and elsewhere have clearly demonstrated the shared susceptibility of demersal fish to overfishing. Demersal fish in all regions share a range of characteristics (slow-growing, late-maturing, long-lived) that make them highly vulnerable. Given these shared characteristics and similar vulnerabilities, it is appropriate to have a consistent approach to the management of all demersal fishery resources in WA.

The same argument applies to other groups of species – pelagic and nearshore/estuarine – that can be defined on the basis of their shared characteristics and similar vulnerabilities to fishing.

Recent efforts to address concerns about the sustainability of demersal scalefish in the West Coast Bioregion have demonstrated the value of a resource-based approach to management. These efforts resulted in the development of a management framework that was capable of dealing with regional sustainability issues and tailored to meet the needs of a particular resource (i.e. West Coast demersal scalefish).

To better meet the sustainability and management challenges associated with other fishery resources, such as demersal scalefish in the Gascoyne and North Coast Bioregions, there is a need to adopt a resource-based framework for the management of all recreational fishing throughout WA.

Under the proposed resource-based framework, the focus would be on mixed species bag limits rather than individual species bag limits. Mixed species limits are intended to provide broad protection to the entire suite of species within a resource. However, some species within the group will continue to need high protection through lower individual species limits and/or size limits.

Replacing the current bag limit categories for finfish with new resource-based categories (i.e. demersal, pelagic and nearshore/estuarine) will create a framework for managing recreational fishing that is complementary with commercial fisheries management and research activities undertaken by the Department of Fisheries.

Although resource-based bag limits could be state-wide for some resources (e.g. pelagic finfish), there may still be a need for bioregion-specific rules in the management of certain finfish resources. For example, demersal finfish in the West Coast Bioregion currently require a higher level of specific management due to higher fishing pressure in the West Coast Bioregion in comparison to demersal finfish in other bioregions.

2.3 Sustainability

In the West Coast Bioregion and elsewhere (e.g. Shark Bay), increasing fishing pressure has driven various reductions in bag and possession limits for demersal species and other species. It is important to recognise that fishing pressure is also increasing in other bioregions and may ultimately result in similar reductions in bag limits to those that have already occurred in the West Coast Bioregion.

It is expected that the arrangements proposed here will provide for a period of broad stability in recreational fishing rules and reduce the need for ongoing change.

The state-wide rules proposed in this document will result in higher bag limits for some species and lower bag limits for other species. The new simplified bag limit structure needs to be considered in

conjunction with the proposed possession limits. These measures are designed to work to address the sustainability risks emerging, or likely to emerge, in bioregions outside the west coast.

The focus of recreational fishing in WA must be around the quality of the experience and the enjoyment of eating fresh fish. With limited fish stocks available, the focus can no longer be on bringing back large quantities of fish to eat for months after an individual trip.

The current state-wide possession limit of 20kg of fillets allows for 100 meals of fish (200g per serve). This is extremely generous and appears to have become the 'target' for some recreational fishers.

A number of organisations and individuals have asked the Department to review the appropriateness of this limit, especially for demersal species. However, in doing so, it has been necessary to take into account the specific circumstances associated with some large pelagic species such as mackerel.

2.4 Simplicity

Recreational fishing rules have become increasingly complex. In part, this is due to an *ad hoc* approach to dealing with sustainability concerns as they have arisen within particular fisheries. There is scope to make the rules more consistent across regions and easier to understand.

Examples of complexity in the current bag limits are given below:

- Within the North Coast Bioregion, the daily bag limit and the total possession limit for barramundi is two. However, there are exceptions in the Broome area (bag limit of one barramundi, possession limit of two) and in the Ord River (bag limit of one barramundi, possession limit of one) (Appendix 1). This situation could be simplified by having a bag limit of one barramundi and a possession limit of two in all waters. While this would 'soften' the management arrangements in the Ord River, it is unlikely to increase the sustainability risk to the species.
- There are numerous species for which the daily bag limit differs between bioregions, such as yellow-fin whiting (daily bag of 12 in West Coast, 16 in Gascoyne), King George whiting (eight in West Coast, 12 in South Coast), skipjack trevally (eight in West Coast, 12 in South Coast) and tarwhine (16 in Gascoyne, 12 in West Coast, eight in South Coast). This situation could be simplified by applying the same bag limit to a particular species in all bioregions.
- There are currently four notionally risk-based categories of finfish in the West Coast Bioregion ('high risk demersal', 'pelagic', 'medium risk' and 'low risk'). The mixed daily bag limits applicable to these categories are two, two, 12 and 30, respectively. In contrast, there are only three categories of finfish in the other bioregions ('high risk', 'medium risk' and 'low risk') with mixed daily bag limits of seven, 16, and 40, respectively.
- The risk-based framework of categories of finfish results in inconsistencies between bioregions. For example, Spanish mackerel is currently categorised as a 'pelagic species' in the West Coast Bioregion, but as a 'high risk species' in the Gascoyne Bioregion, although the daily bag limit for this species is two in both bioregions. This situation could be simplified by using the same categories in all bioregions.
- Currently, the bag limit and boat limit for rock lobster varies between bioregions (Appendix 2). This situation could be simplified by applying the West Coast boat and possession limits state-wide. Since the bag and boat limit differences between bioregions have arisen

principally for 'social' reasons, the introduction of state-wide rules is unlikely to increase the sustainability risk to the species.

In summary, there is considerable scope to simplify the rules applying to recreational fishing in WA by standardising bag limits and possession limits. This would make the rules easier to understand and simplify advisory material, such as recreational fishing guides.

Making the rules easier to understand would particularly benefit the fisher that only goes fishing occasionally, who currently has a myriad of different rules to understand which can detract from the fishing experience. Having simple rules will encourage recreational fishing as an accessible recreational and family activity.

Once introduced, the broad application of the state-wide rules is proposed to be reviewed every five years². This will make it easier for recreational fishers to keep up-to-date with, and understand, the latest rules because they will not need to keep track of frequent changes. It will also increase the lifespan of advisory material, reducing the costs associated with printing and distribution. Note this would not stop management action being taken to address sustainability concerns or catch allocation decisions associated with specific regional fisheries.

² This review would include bag limits, possession limits and size limits.

SECTION 3 OVERVIEW OF THE FISHERY

3.1 Historical management

3.1.1 Recreational

Prior to 1989, a limited set of management measures were in place for recreational fishing in WA. With an increase in fishing participation, increased leisure time, greater ownership of boats and 4WD vehicles, it was time to reassess the management of recreational fishing to ensure that the quality of the State's fisheries were maintained and fish stocks were sustainable.

It was for these reasons that the first comprehensive management framework for recreational fishing was developed during a two-year review between 1989 and 1991 (*The future for recreational fishing, issues for community discussion, Recreational Fishing Advisory Committee, March 1990*). The result of the review was a framework for the management of recreational fishing including:

- A state-wide set of daily bag and size limits for all fish species be developed.
- The establishment of a Recreational Fishing Account into which revenue from recreational licences was placed.

With more pressure on our fish resources in the ensuing years, a range of different fisheries issues arose in different parts of WA. This initiated the need for the development and implementation of modified management arrangements for specific fishing areas and species. In turn, this led to fisheries management becoming increasingly reactive between 1992 and 1995, with resources focused on dealing with different management issues as they occurred.

In 2006, a series of bioregional recreational fishing management reviews were undertaken. These were aimed at managing increases in recreational fishing pressure caused by a growth in angler participation and increases in efficiency through the use of technology such as Global Positioning Systems, colour sounders and gear improvements.

The bioregional reviews delivered the following three important outcomes:

- A new three-tiered bag limit structure, which was applied across the State.
- A general state-wide fish possession limit.
- A minimum fillet length for fish that have been processed at sea.

In 2009, research assessments on the status of key demersal finfish species (dhufish, pink snapper and baldchin groper) on the west coast indicated the level of fishing was not sustainable. This research indicated that catches of demersal species in the West Coast Bioregion needed to be reduced by at least 50 per cent in order to allow stocks to rebuild.

To deliver this catch reduction, the Government approved a range of new measures that included establishing a management framework for demersal species and introducing a state-wide recreational boat fishing licence. This involved separating out demersal species from pelagic ones in the 'high risk' category.

The new Recreational Fishing from Boat Licence (RFBL) was primarily designed to provide a state-wide database of recreational boat fishers to assist in surveys to more precisely determine recreational catch and effort.

3.1.2 Charter

The fishing and aquatic tour (charter) industry, previously an "open access activity", came under licensing and management arrangements in 2001 (up to this point, only a Department of Transport vessel survey was required to operate a charter boat). Although this sector is commercial in the sense that it is a fee-for-service industry, as the activity enables recreational fishing it is managed as a component of the broader recreational fishing sector.

There is now a limit on the number of fishing tour (i.e. charter fishing) licences granted state-wide and the number of fishing tour operations is currently limited to around 250. Under the current arrangements, there is still scope to issue new licences for particular activities if they are not being catered for in a particular area. A review of the licensing and management framework for the charter sector is currently underway and will be completed in 2012.

3.2.3 Commercial management - finfish

The commercial take of finfish around the state is regulated through a variety of different management arrangements. These arrangements limit the number of vessels permitted to operate in each bioregion and the amount of commercial catch taken through either quota or fishery effort controls. This is crucial to control exploitation of fish stocks.

Commercial fishers are required to comply with a comprehensive set of management arrangements including, but not limited to, fine-scale reporting of catch and effort, gear restrictions, restricted areas of operation and the need to use Vessel Monitoring Systems (VMS).

Over the last decade, the catch and effort by WA commercial fisheries that target finfish have been substantially reduced in all bioregions. The appropriateness of management settings for individual fisheries will be reviewed when new stock assessment information becomes available, or when implementing outcomes of different planning processes (e.g. Marine Parks or resource sharing negotiations with the recreational sector).

Commercial fisheries management initiatives that relate to finfish are summarised in Appendix 6 of this document.

3.2 Future challenges

3.2.1 Population growth

Western Australia is Australia's fastest-growing state, with a population that is predicted to double over the next 50 years. In 2009, the WA population was 2.3 million. About a third of WA's population are estimated to participate in recreational fishing each year (approximately 640,000 fishers).

The State's favourable climate and natural environment encourage a high participation in outdoor recreation, including fishing. The outdoor recreational opportunities also attract increasing numbers of interstate and international tourists.

WA also has rapidly expanding regional centres. The growth in these regional areas, particularly in the north of the State, will increase recreational fishing effort in places where there was little previously and where baseline information is limited.

Population growth poses two major challenges for fisheries management – one is to manage the impact of increasing levels of fishing activity, and the other is to limit the threats to fish habitats posed by the development of coastal and offshore infrastructure as well as on-shore effects of population growth on rivers and estuaries.

3.2.2 Improved fishing technology

Over the past 15 years, dramatic improvements in fishing technology have had a significant impact on the way people fish - particularly from boats. The digital technology explosion has meant that small, inexpensive, high quality fish-finding and navigation equipment is now readily available and widely used.

The availability of affordable Global Positioning Systems (GPS) and colour sounders is helping more recreational fishers to catch more fish, more often - even those that previously had a low level of success due to their inexperience. This technology is constantly advancing and becoming more affordable.

The increased exploitation rate as a consequence of improved technology is a major factor contributing to sustainability issues with demersal scalefish in the West Coast Bioregion.

Ongoing advancements in fishing technology are likely to further improve the accuracy with which anglers can target fish in the future. Fibre optics, better digital imaging equipment, and other advances will greatly increase the transparency of the ocean, and make the finding of fish increasingly a matter of science and applied technology rather than experience and skill.

3.2.3 Monitoring the recreational catch

A crucial element in effective recreational fisheries management is the availability of quality data for all recreational fisheries, including time-series data on catch levels (retained and discarded) and fishing activity and biological data to indicate the status of targeted fish populations.

In recent years, considerable resources have been devoted to the West Coast Bioregion and the inner gulfs of Shark Bay to determine the status of demersal scalefish stocks. While it is important to continue to monitor the recovery of these stocks, a better understanding of the status of other fish stocks is also required.

The Recreational Fishing from Boat Licence (RFBL) that was introduced in 2010 has provided a database of boat fishers across WA. The database, in conjunction with logbooks completed by a survey sample group of 3,500 RFBL holders, will assist in determining who is fishing, where they are fishing and what they are catching.

The RFBL database was used to develop the first state-wide recreational boat fishing survey, undertaken in 2011. The 2011 survey involved around 3,500 log book holders, selected from the RFBL database, and boat ramp surveys were undertaken to verify the logbook data. Results of the survey, including estimates of total state-wide recreational catch and effort levels, will be released in 2012. In future, surveys will be repeated every two years to provide ongoing estimates of catch and effort levels by boat-based fishers.

Catch surveys provide information essential to the sustainable management of recreational fisheries. They also provide a means of comparing recreational catches with the catch recorded in commercial fisheries, and are important in the resolution of resource-sharing conflicts.

3.2.4 Managing the total catch

Many of our current recreational fishing regulations are based on social values and, while they have widespread support in their current form, are unlikely to constrain the recreational catch in the face of population growth and improved access. It is inevitable that fisheries managers will need to seek community support for fishing controls that can more effectively constrain the total catch of targeted fish stocks by both the recreational and commercial sectors. Each sector will need to operate within its catch constraint.

In recreational fisheries, bag limits and other individual catch limits have a limited capacity on their own to constrain the total catch. Other measures that limit the overall level of participation in the fishery are likely to also be required to achieve real control of the total catch. For example, a seasonal closure was recently introduced to reduce the catch of West Coast demersal scalefish (which constrained the amount of effort that could be expended) and a total allowable catch (TAC) was implemented in 2003 in Shark Bay to explicitly limit the catch of pink snapper. These measures were required because bag limits alone were insufficient to limit the total recreational harvest.

In the future it will be necessary to have formal harvest strategies that set-out the sustainable catch and sectoral catch allocations.

A number of other fisheries such as Perth metropolitan abalone, western rock lobster and West Coast demersal scalefish.have already gone through a formal Integrated Fisheries Management (IFM) process. This involves setting the total sustainable harvest level for a particular resource, determining the allocations and then managing each sector's catch within their allocation.

Given that other fisheries will need to go through this process in the future, it will be necessary to establish a resource-based framework within which harvest strategies can be applied.

3.2.5 The contribution of recreational fishers

In future, recreational fishers will be expected to play an increasingly active role in monitoring their fishery. Rigorous and cost-effective assessments of the impacts of fishing on a stock need a large amount of information to be supplied by recreational and commercial fishers. In future, activities such as participating in boat-ramp surveys, donating fish frames or maintaining a daily logbook will need to be part of the recreational fishing experience in WA.

SECTION 4 PROPOSED MANAGEMENT STRATEGY

4.1 Resource-based framework

Managing the fishery resources of WA is challenging. The WA coastline is approximately 12,800 km-long and hosts at least 3,000 species of fish. To monitor such a vast area and diversity of species, the Department has divided the marine waters of the State into four marine bioregions, with four ecological zones in each bioregion, as follows (see Figure 1):

- Estuarine and Nearshore –from the shore seawards to a depth of 20 metres;
- Inshore Demersal from 20 metres to 250 metres;
- Offshore Demersal from 250 metres to the edge of the Exclusive Economic Zone (200 nautical miles);
- Pelagic includes the pelagic fishes in the water column above the Inshore Demersal and Offshore Demersal groups of fishes.

These ecological zones are applicable to all types of fishery resources – finfish and invertebrates. Most major fisheries operate within a particular zone within a region. This allows multiple fish species, and the fisheries that they support, to be collectively considered, assessed, monitored and managed by the Department. These sub-divisions are consistent with the proposed bag limit categories for finfish, i.e. demersal (including inshore and offshore), pelagic and nearshore/estuarine.

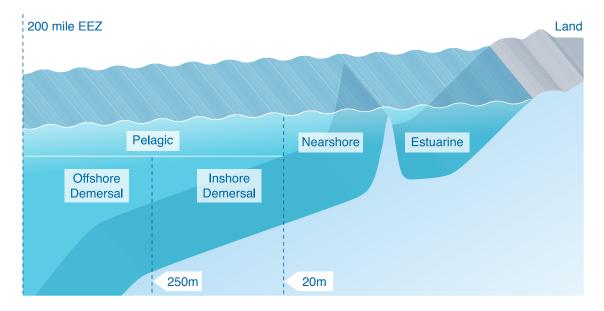


Figure 1 Schematic representation of the five ecological zones within each marine bioregion of Western Australia.

Each zone contains a large number of fish species - typically at least 20 to 30 key species (e.g. the West Coast Bioregion demersal zone has around 200 species). As a result of the large number of species contained in each zone/bioregion, monitoring the status of each individual species is logistically and fiscally impossible.

To overcome this problem, the Department instead monitors a small number of 'indicator species' in each ecological zone. Several indicator species are used in each zone to reduce the risk that a single species may not adequately represent an entire ecological group of species

or the full range of fishery impacts upon this ecological group of species. The status and sustainability risks affecting each ecological group are thus assessed by monitoring the status of all the indicator species within the group.

Appropriate indicator species are selected according to three broad criteria:

- The inherent vulnerability of a species to depletion (due to fishing or environmental factors), which is based on biological characteristics. An indicator species must be representative of the vulnerability of most species in the ecological group.
- Indicator species must be captured frequently enough, and/or in large enough quantities, to allow sufficient data to be collected relatively easily and cost-effectively.
- The level of information that is required to support the current management arrangements for the ecological group.

Using these criteria, the number of indicator species per ecological group can vary. Also, a particular species can be used to represent multiple ecological groups³.

In future, there are likely to be changes in fishing patterns and new biological information on fish species will become available, so the appropriateness of particular indicator species will need to be periodically reviewed. These reviews will be reliant on contributions from recreational fishers and other stakeholders.

Proposal 1 - Resource-based approach

That a resource-based approach is adopted for the management of recreational fishing that focuses on managing fish species within the following zones:

- Estuarine and nearshore estuarine waters and from the shore seawards to a depth of 20 metres;
- Inshore Demersal from 20 metres to 250 metres;
- Offshore Demersal from 250 metres to the edge of the Exclusive Economic Zone (200 nautical miles);
- Pelagic includes the pelagic fishes in the water column above the Inshore Demersal and Offshore Demersal groups of fishes.

4.2 State-wide finfish possession limits

The state-wide possession limit sets the maximum quantity of recreationally-caught finfish a person can have in their possession. The possession limit currently applies on the following basis (this includes a person's place of residence):

- 20 kg of fillets or pieces of fish; or
- 10 kg of fillets or pieces of fish plus one day's bag limit of whole fish; or
- two days' bag limit of whole fish.

The state-wide fillet possession limit of 20kg provides for 100 meals of fish (200gm per serve), which is extremely generous.

³ For more information about indicator species see 'Resource Assessment Framework for Finfish Resources in Western Australia'. Fisheries Occasional Publication No. 85, 2011. Department of Fisheries, Perth, Western Australia.

In some areas, people are fishing to the possession limit as a target. This has raised significant concerns in places like Coral Bay where the Shire removed a total of 98,890 litres of fish offal from a single fish cleaning station over a 12-month period (in 2009/10).

If daily bag limits were to be tightened for reasons of sustainability of fish stocks, it is appropriate the weight of the fillet possession limit should be similarly reduced, so as to avoid the situation of fishers simply fishing for a longer period (i.e. more days) to accumulate the same fillet weight possession limit. This would not only assist with sustainability, but also send a clear message about socially acceptable levels of total fish catch on fishing trips.

In proposing a modified state-wide possession limit, the Department of Fisheries recognises that the level of fishing pressure and stock abundance varies around WA. This is also reflected in different measures that have been introduced for the commercial sector in various parts of the State.

A reduction in the state-wide possession limit may have more impact and contribute in a greater way to addressing future sustainability concerns in those bioregions to the north of the Perth metropolitan area like the Gascoyne rather than in the South Coast Bioregion. In the absence of definitive catch data for those bioregions outside the West Coast Bioregion, it is important that community views and values are taken into consideration in reviewing the appropriate setting for a revised possession limit.

The Department of Fisheries recognises that simply reducing the possession limit could significantly impact on people who catch offshore pelagic fish - mainly tuna and mackerel. These species can be large and one fish can potentially produce more than 10kg of fillets. In recognition of this issue, the preferred approach is to halve the current general possession fillet for species other than offshore pelagic fish.

Under this scenario, the state-wide possession limit would apply as follows:

Proposal 2 – State-wide finfish possession limits

- 10 kg of fillets* or pieces of fish of any species (plus an additional 10kg of the 'Large Pelagic' category of fish^); or
- 7 kg of fillets or pieces of fish plus one day's bag limit of whole fish; or
- two days bag limit of whole fish.
- * Fish heads, tails and 'wings' are not included in the fillet weight possession limit.
- ^ Fillets of any 'Large Pelagic' fish (as defined in the bag limits) would need to have skin-on for identification purposes.

This possession limit, which only applies to finfish, would also apply to a person's place of residence. Separate possession limits already apply to finfish at the Abrolhos Islands, marron, rock lobster (within the Ningaloo Marine Park area and the West Coast and North Coast Bioregions only) and abalone.

The proposed state-wide possession limits are intended to allow a recreational fisher to catch a sufficient quantity of fish in a single day to feed an average family, but not allow them to 'stockpile' fish.

4.3 Unaccompanied fish

Most recreational fishers transport their own catch at the conclusion of a fishing trip, but a minority of people transport fish by commercial courier. As an example of the latter, a single

courier company reported transporting a total of 3,022kg fillets of recreationally-caught fish from Exmouth over a three-month period in 2010.

The capacity to 'consign' fish has allowed some fishers to circumvent the possession limit by transporting multiple possession limits of fish over a period of time. This situation is a particular issue in the Gascoyne and North Coast Bioregions and usually involves fishers who undertake extended trips and use commercial transport companies to freight the fish they catch down to Perth.

To close this loophole, it is proposed that using commercial courier companies to transport "unaccompanied" recreationally-caught fish be prohibited. This prohibition would not impact upon people taking a commercial airline flight and transporting fish with them. Nor would it impact on fishers driving 'in convoy' with fish stored in a single freezer or ice-box.

Proposal 3 – Unaccompanied fish

That unaccompanied recreationally-caught fish cannot be transported by commercial courier businesses.

4.4 Landing fish

The current rules relating to fish that must be landed in whole form and fish that can (or cannot) be filleted at-sea are complex and confusing.

In summary, the following rules currently apply to landing fish:

- High and medium risk fish can be filleted or trunked on trips to the sea of any duration provided the fillet/trunk length is at least 30cm and the skin and scales are attached (this is to ensure there is the capacity to enforce minimum size limits for species such as dhufish 50cm total length).
- Special-risk fish, which have both a minimum and maximum legal size length, cannot be filleted at sea.
- Lower risk fish can be filleted on trips to the sea of any duration provided the skin is left on the fillets. No minimum fillet length applies for lower risk fish.
- When legally staying overnight on islands, fillets of any length can be transported back to the mainland provided those fish have been landed on the island.

The current arrangements enable recreational fishers who undertake a lawful overnight stay on an island (this must be more than five hours including midnight) to fillet and skin all species provided the fish were landed on the island during the overnight stay. In some cases particularly in the Gascoyne and North Coast, Fisheries and Marine Officers (FMOs) have reported cases where fishers are landing up to 20kg of fillets from an overnight trip at offshore islands. This practice makes it difficult for the FMOs to tell whether these fishers have taken in excess of bag limits, what were the species of the fish taken and what were their sizes (i.e. undersize/legal size/oversize).

To address these issues and simplify management, the following new arrangements are proposed for filleting at sea.

Proposal 4 – Landing fish

Fish with a minimum size limit can be carried at sea and landed in the following forms:

- Filleted, skin and scale on; minimum fillet length of 30cm length;
- Trunked*, skin and scale on; minimum trunk length of 30cm length; or
- Whole (can be gutted and gilled)

Fish with a maximum size limit must be carried at sea and landed whole, except shark.

Fish without a size limit can be carried at sea and landed in the following forms:

- Filleted, skin on; or
- Trunked*, skin on; or
- Whole (can be gutted and gilled).

For the purpose of enforcing bag limits on day trips, the existing rule of two fillets equals one whole fish would continue to apply.

* A trunked fish is one with its head and/or tail removed. For the purpose of bag/possession limits, trunked fish are regarded as whole fish. Where there are sustainability concerns about individual species and it is thus particularly important that boat limits for them are observed, it could be specified that these species must be landed whole (i.e. for ease of identification, trunking is prohibited on-board).

4.5 Bag limits and size limits for finfish

The following proposals outline state-wide bag limits for demersal finfish (including sharks and rays), pelagic and nearshore/estuarine species. These new 'resourced-based' bag limits will reduce the number of finfish bag limit categories from 13 to three.

This will dramatically simplify the bag limits and also help position recreational fishing in WA to meet future challenges. A standardised set of bag limits for crustaceans, molluses and other invertebrates is also proposed to further simplify the existing rules.

Proposal 5 – Bag limits and size limits for finfish

Demersal finfish & sharks/rays

High vulnerability due to biological characteristics (e.g. long-lived, late maturing, large maximum size, sex change, limited distribution or small stock size, late maturing reproduction, etc) .

Individual bag limits

All species have an individual **bag limit of 2** per fisher (or licensed fisher in the case of boat fishing) unless otherwise specified – note some fish have a bag limit of 1 or 5.

South Coast, Gascoyne, North Coast Bioregions

Mixed species daily bag limit – 5 per angler

West Coast Bioregion (as per existing arrangements)

Mixed species daily bag limit – 2 per angler

Boat limit of 2 dhufish (6 on charter)

Closed season 15 October to 15 December for demersal finfish (excludes sharks and rays)

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE
Barramundi cod	Cromileptes altivelis	
Boarfish	Paristiopterus spp.	
Cods, all species (breaksea, estuary, harlequin, eightbar grouper, Chinaman, sea perch, etc)	Families Serranidae and Epinephelidae	Estuary – 400mm Fish over 1,000mm or 30kg are protected – excluding eightbar
Coral trout and coronation trout Bag limit of 1	Plectropomus spp. and Variola louti	Coral trout – 450mm
Dhufish and Pearl perch Bag limit of 1	Glaucosoma spp.	Dhufish – 500mm
Emperors and seabream (spangled emperor, grass emperor, Robinson's sea bream, etc)	Family Lethrinidae	Spangled – 410mm Grass – 320mm Other emperor – 280mm
Foxfish and pigfish	Bodianus spp.	
Baldchin groper# and tuskfish	Choerodon spp.	Baldchin and blackspot – 400mm
Hapuku, bass groper and trevalla	Polyprion spp. and Family Centrolophidae	
Redfish (bight redfish, yellow-eyed red snapper, swallowtail, etc) Bag limit of 5 on south coast	Family Berycidae	300mm
Morwong (blue (queen snapper), jackass)	Nemadactylus spp.	Queen snapper – 410mm
Dory (John and mirror)	Family Zeidae	
Knifejaw	Oplegnathus woodwardi	
Parrot fish	Family Scaridae	
Pink snapper#	Pagrus auratus	410mm 500mm (south of 31 degrees south latitude, just north of Lancelin)
Pink snapper – inner gulfs of Shark Bay* Bag limit of 1 Note, additional rules apply in Freycinet Estuary	Pagrus auratus	500mm maximum 700mm
Sharks and rays	Class Chondrichthyes	Whalers – maximum size 70cm interdorsal fin length in west and south coast bioregions
Sea sweep	Scorpis aequipinnis	
Trevally, Golden and Giant	Caranx ignobilis, Gnathanodon speciosus	

Tropical snappers and sea perch (red emperor, ruby snapper, job fish, fingermark, goldband, chinaman fish, stripey sea perch etc.)	Family Lutjanidae	Red emperor – 410mm Fingermark, and stripey sea perch – 300mm
Western blue devilfish	Paraplesiops meleagris	
Western blue groper Bag limit of 1	Achoerodus gouldii	500mm

[#] Additional closed seasons apply

Large Pelagic Finfish

Moderate/high vulnerability

State-wide

• Mixed species daily bag limit – 3 per fisher or licensed fisher when taken from a boat

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE
Barracuda	Sphyaena barracuda	
Amberjack, Samson fish and yellowtail kingfish	Seriola spp.	600mm
Marlin, sailfish, swordfish	Family Istiophoridae, Family Xiphiidae	
Cobia	Rachycentron canadum	750mm
Dogtooth tuna	Gymnosarda unicolor	
Barracouta, gemfish	Family Gempylidae	
Mahi Mahi	Coryphaena spp.	500mm
Mackerel (grey/broad barred,	Scomberomorus spp. and	Grey – 750mm
school, shark, spotted, Spanish)	Grammatorcynus bicarinatus	School, spotted and shark – 500mm
		Spanish – 900mm
Wahoo	Acanthocybium solandri	900mm
Trevally, giant and golden	Caranx ignoblis and Gnathanodon speciosus	
Tuna (Big eye, Mackerel, Northern bluefin, Skipjack, Southern bluefin, Yellowfin)	Thunnus spp., Euthynnus affinis and Katsuwonis pelamis	

^{*} Proposed new maximum size limit

Nearshore/Estuarine Finfish

Moderate vulnerability

State-wide

- Mixed species daily bag limit 8 per fisher or licensed fisher when taken from a boat.
 (Note that some species in this category have a bag limit of 1 or 2)
- Barramundi possession limit of 2

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE
Barramundi	Lates calcarifer	550mm
Bag limit of 1		Maximum size of 800mm in Ord and Fitzroy Rivers
Bream (black, silver (tarwhine),	Acanthopagrus spp.,	250mm
Northwest black, pikey,	Rhabdosargus sarba	Yellowfin – 300mm
yellowfin, etc)		Only two black bream over 400mm on the Swan- Canning Rivers
Bonito and other tunas	Family Scombridae	
Dart	Trachinotus botla, etc	
Flathead	Family Platycephalidae	300mm
Flounder	Pseudorhombus spp.	250mm
Javelinfish and sweetlips	Family Haemulidae	300mm
Leatherjacket	Family Monacathidae	250mm
Marine and estuarine catfish	Families Ariidae and Plotosidae	Cobbler (Cnidoglanis macrocephalus) – 430mm
		Cobbler – protected in Swan-Canning
Black jewfish (northern mulloway)	Protonibea diacanthus	700mm
Bag limit of 2		
Mulloway Bag limit of 2	Argyrosomus japonicus	500mm
Mangrove Jack Bag limit of 2	Lutjanus argentimaculus	300mm
Pike, long finned	Dinolestes lewini	300mm
Snook, seapike	Family Sphyraenidae	300mm
Tailor	Pomatomus saltatrix	300mm
		Only two fish over 500mm
Trevally, queenfish except needle skin queenfish and yellowtail scad	Family Carangidae	Skipjack – 250mm
Giant threadfin Bag limit of 2	Eleutheronema tetradactylum	King/giant – 450mm
Threadfin – other species	Polydactulus spp.	
Tripletail Bag limit of 2	Lobotes surinamensis	300mm

Western Australian salmon	Arripis truttaceus	300mm
Whiting - King George	Sillaginodes punctata	King George – 280mm
Wrasse and parrotfish (all species not specifically mentioned)	Family Labridae	

Freshwater Finfish

State-wide

- Mixed species bag limit of 4 of all species
- Trout, freshwater cobbler licensed fishery

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE
Trout	Salmo trutta and Oncorhynchus mykiss	300mm
Freshwater catfish/cobbler	Families Plotosidae and Ariidae	N/A
Grunter (all freshwater species)	Family Terapontidae	Sooty grunter (<i>Hephaestus</i> fuliginasus) – 250mm

All other species of Finfish

All other unlisted species of fish (except baitfish and feral fresh water species) Lower/moderate vulnerability

State-wide

- Mixed species bag limit of 30
- No size limits for species in this category

Baitfish: A combined daily bag limit of nine litres applies to baitfish of the sardine, anchovy and hardy head families (Clupeidae, Engralidae and Atherinidae – mulies whitebait, scaly mackerel, anchovies, hardy heads).

Feral freshwater species such as carp, tilapia, gold fish and redfin perch have no bag limit and should not be returned to the water and humanely dispatched.

Rock lobster

It is proposed to simplify the arrangements for rock lobster by extending the daily bag, boat and possession limits that currently apply in the West Coast Bioregion to all rock lobster species in all bioregions.

Current bag limits for rock lobster:

BIOREGION	DAILY BAG LIMIT	BOAT LIMIT	POSSESSION LIMIT
North Coast	4 (No more than 2 ornate and 2 western)	8	8
Gascoyne	8	16	N/A
(Ningaloo Marine Park)	(4)	(8)	(8)
West Coast	6	12	24
South Coast	8	16	N/A

4.6 State-wide bag limits for crustaceans

Proposal 6 – State-wide bag limits for crustaceans

Crustaceans State-wide possession limit of 24 rock lobster per person SCIENTIFIC **SPECIES BAG LIMIT BOAT LIMIT** MINIMUM NAME **LEGAL SIZE** Cherabin Macrobrachium 30 N/A N/A spp Crab, blue Portunus 127mm 10 West Coast 20 West Coast swimmer # (carapace width) pelagicus 20 other regions 40 other regions Crab, mud (all Scylla spp Green - 150mm 10 species combined) Brown – 120mm (carapace width) Marron # Cherax spp 80mm (carapace 10 length) Licensed fishery 5 - trophy waters additional rules 90mm - trophy apply. waters Prawns, school and Family N/A 9 litres N/A king (combined) # Penaeidae Redclaw N/A Cherax N/A N/A quadricarinatus 12 Rock lobster Panulirus and 76mm 6 (all species Jasus spp combined) # Licensed fishery additional rules apply. Other crustacean N/A 10 N/A species not specifically mentioned (combined)

[#] Closed seasons apply

4.7 State-wide bag limits for molluscs and other invertebrates

Proposal 7 – Statewide bag limits for mollusks and other invertebrates

Molluscs and o	ther invertebrat	es		
SPECIES	SCIENTIFIC NAME	MINIMUM SIZE LIMIT	BAG LIMIT	BOAT LIMIT
Abalone # Licensed fishery additional rules apply	Haliotis spp	Roe's - 60mm Greenlip/ Brownlip – 140mm	Roe's 20 Greenlip/ Brownlip – 5	Greenlip/Brownlip – 10
Specimen shell (cowries, volutes, clams, conch)	Families Cypraeidae, Volutidae and Strombidae	N/A	2	
Ark shells, cockles and pipis	Families Arcidae, Cardiidae and Donacidae	Trochus – 65 mm	20	
Mussels	Family Mytilidae		9 litres (shell on)	
Oysters	Family Ostreidae	N/A	20	Recreational harvesting of pearl oysters (<i>Pinctada</i> <i>maxima</i>) is prohibited
Razorshell	Family Pinnidae	N/A	20	
Scallops	Family Pectinidae	N/A	20	
Sea Urchins #	Class Echinoidea	N/A	20	
Squid, cuttlefish and octopus (combined)	Family Cephalopoda	N/A	15	30
Bloodworms			1 litre	
Other molluscs and invertebrate species not specifically mentioned (combined)			10	

[#] Closed seasons apply

SECTION 4 APPENDICES

Appendix 1 Current North Coast Bioregion bag limits

BAG AND SIZE LIMITS

HIGH RISK SPECIES

Mixed daily bag limit - 7 per angler

Species are generally long-lived, slow-growing, mature at four-plus years, form semi-resident populations, are vulnerable to localised depletion due to their life history, or are of low abundance or highly targeted (FRMR Schedules 2 and 3).

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT
Amberjack, yellowtail kingfish, samson fish – combined	Seriola spp.	600 mm	2
Barramundi – State-wide	Lates calcarifer	550 mm	2*
Barramundi – Broome (see page 14)	Lates calcarifer	550 mm	1*
Barramundi – Fitzroy River and King Sound (see page 14)	Lates calcarifer	550 mm. Maximum size 800 mm	2 *
Barramundi – Ord River (see page 14)	Lates calcarifer	550 mm. Maximum size 800 mm	1^
Billfish (sailfish, swordfish, marlins)	Families Istiophoridae and Xiphiidae	Not applicable	1
Cobia	Rachycentron canadus	750 mm	2
Cods – combined. Note: within this bag limit you may not take	Family Serranidae	Epinephelus sp. over 1,000 mm or 30 kg are protected.	
more than two estuary , Rankin or Malabar cod combined (i.e. only two of the bag limit can be made up of estuary, Rankin or Malabar species)		Estuary cod – 400 mm	4
Coral trout and coronation trout – combined when taken west of the De Grey River	Plectropomus spp. and Variola louti	Coral – 450 mm	2
Coral trout and coronation trout – combined when taken east of the De Grey River	Plectropomus spp. and Variola louti	Coral – 450 mm	1

Special risk species must be landed whole.* Possession limit – 2 per angler.^ Possession limit – 1 per angler.

4 BAG AND SIZE LIMITS Fish for the future

HIGH RISK SPECIES (Continued)			
Mixed daily bag limit - 7 po SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT
Emperors and seabream – combined (including spangled emperor/nor'west snapper and Robinson's seabream)	Family Lethrinidae	Spangled – 410 mm. Blue-lined (black snapper) – 320 mm. Other emperors – 280 mm	4
Mackerel – shark	Grammatocynus bicarinatus	500 mm	4
Mackerel, Spanish – broad-barred (grey)	Scomberomorus semifasciatus	750 mm	2
Mackerel, Spanish – narrow-barred	Scomberomorus commerson	900 mm	2
Mackerel – wahoo	Acanthocybium solandri	900 mm	2
Mahi mahi (dolphinfish)	Coryphaena hippurus	500 mm	4
Mangrove jack	Lutjanus argentimaculatus	300 mm	4
Mangrove jack – when taken between Cape Lambert and Cape Preston (Dampier Archipelago)	Lutjanus argentimaculatus	300 mm	2
Mulloway – northern	Protonibea diacanthus	700 mm	2
Parrot fish – combined	Family Scaridae	Not applicable	4
Pearl perch	Glaucosoma spp.	Not applicable	4
Pink snapper	Pagrus auratus	410 mm	4
Red emperor	Lutjanus sebae	410 mm	2
Sharks and rays – combined	Class Chondrichthyes	Not applicable	2
Scarlet (saddle tail) and crimson sea perch – combined	Lutjanus malabaricus and L. erythropterus	Not applicable	4
Threadfin salmon – giant	Polydactylus macrochir	450 mm	2
Tripletail	Lobotes surinamensis	300 mm	1
Tuna – southern & northern bluefin, yellowfin, bigeye and dogtooth	Thunnus maccoyii, T. albacares and T. obesus	Not applicable	2
Tuskfish and wrasse (including blackspot tuskfish/blue bone, blue tuskfish and baldchin groper)	Family Labridae	Baldchin groper, blackspot & blue tuskfish – 400 mm	2

Fish for the future

BAG AND SIZE LIMITS

5

MEDIUM RISK SPECIES

Mixed daily bag limit - 16 per angler

Species generally mature at two to three years, are of moderate abundance, are highly targeted, and often use estuarine and inshore habitats extensively.

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT
Barracuda	Sphyraena barracuda	Not applicable	4
Bone fish and giant herring – combined	Albula spp. and Elops hawaiiensis	Not applicable	4
Bonito and tunas (other)	Family Scombridae	Not applicable	8
Bream – north-west, black and yellowfin – combined	Acanthopagrus spp.	North-west – 250 mm. Yellowfin – 300 mm	8
Catfish – all species – combined	Families Ariidae and Plotosidae	Not applicable	8
Dart	Trachinotus spp.	Not applicable	8
Flathead and flounder – combined	Family Platycephalidae and Pseudorhombus spp.	Flathead – 300 mm. Flounder – 250 mm	8
Goatfish	Family Mullidae	Not applicable	8
Javelinfish and sweetlips – combined	Family Haemulidae	300 mm	8
Leatherjacket	Family Monacanthidae	250 mm	8
Mackerel – Queensland school and spotted – combined	Scomberomus queenslandicus and S. munroi	500 mm	4
Queenfish	Scomberoides commersonnianus	Not applicable	4
Snook and pike – combined	Sphyraena spp. and Dinolestes spp.	300 mm	8
Sooty grunter	Hephaestus fuliginasus	250 mm	8
Tarwhine	Rhabdosargus sarba	250 mm	16
Threadfin salmon – all species (including bluenose salmon) other than giant threadfin salmon.	Eleutheronema tetradactyum and other Polydactylus spp.	Not applicable	4
Trevally – combined	Family Carangidae	Not applicable	4
Tropical sea perch and snappers (other <i>Lutjanus</i> spp. including fingermark, Chinaman fish and job fish) combined	Family Lutjanidae	Stripey sea perch (Spanish flag) and fingermark – 300 mm	4

6 BAG AND SIZE LIMITS

Fish for the future

LOWEST RISK SPECIES

Mixed daily bag limit - 40 per angler

Species generally mature at one to two years, are of high abundance, distributed widely and generally pelagic. Species not listed have little known about their biology or abundance and are generally not targeted by anglers.

SPECIES	SCIENTIFIC NAME	BAG LIMIT
Garfish	Family Hemiramphidae	
Longtom	Family Belonidae	You can only take
Milkfish	Chanos chanos	a combined maximum
Mullet – sea and yellow-eye	Family Mugilidae	of 40 lowest risk fish.
Whiting	Sillago spp.	No size limits apply.
All other unlisted species of fish.		

Species with no bag limit:

Feral freshwater species including carp, tilapia, goldfish and redfin perch have no bag limit.

Baitfish species – combined: A combined daily bag limit of 9 litres applies for baitfish (Families Atherinidae, Clupeidae and Engraulidae – pilchards, scaly mackerel, whitebait, anchovies and hardyheads).

PROTECTED SPECIES

These species are totally protected and may not be taken. (FRMR Schedule 2, FRMA Section 43)

SPECIES	SCIENTIFIC NAME
Cod, potato	Epinephelus tukula
Coral and live rock	Order Scleractinia See Order No.11 of 2007
Groper, Queensland	Epinephelus lanceolatus
Sawfish – all species	Family Pristidae
Seadragon, leafy	Phycodurus eques
Seadragon, weedy NEW	Phyllopterxy taeniolatus
Shark, great white	Carcharodon carcharias
Shark, grey nurse (under DEC legislation)	Carcharias taurus
Shark, speartooth	Glyphis spp.
Shark, whale	Rhiniodon typus
Wrasse, humphead Maori	Cheilinus undulatus

Prohibitions on the take of totally protected species apply to both commercial and recreational fishers. Some species may also be protected under Commonwealth legislation – visit **www.environment.gov.au** for further information.

CRUSTACEANS AND SHELLFISH				
CRUSTACEANS	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT	BOAT LIMIT#
Cherabin	Macrobrachium spp.	N/A	9 litres	N/A
Crab, blue swimmer (manna)	Portunus pelagicus	127 mm (carapace)	20	40
Crab, mud – all species combined	Scylla spp.	Green – 150 mm Brown – 120 mm (carapace)*	5	10 20 – King Sound
Prawns, school and king	Family Penaeidae	N/A	9 litres	N/A
Redclaw, Queensland	Cherax quadricarinatus	N/A	†	
Rock lobster – all species combined.	Panulirus and Jasus spp.	See separate brochure		
All species not specifically mentioned – combined			40 [†]	
MOLLUSCS AND OTHER REEF ANIMALS	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT	BOAT LIMIT#
				BOAT LIMIT# N/A
OTHER REEF ANIMALS Ark shells, pipis, venus clams and all other species of edible molluscs not specifically mentioned –	NAME Families Arcidae, Donacidae and	LEGAL SIZE	LIMIT 2 litres	N/A
OTHER REEF ANIMALS Ark shells, pipis, venus clams and all other species of edible molluscs not specifically mentioned – combined	Families Arcidae, Donacidae and Veneridae	Trochus – 65 mm	LIMIT 2 litres (Shell on)	N/A N/A N/A
OTHER REEF ANIMALS Ark shells, pipis, venus clams and all other species of edible molluscs not specifically mentioned – combined Cockles	Families Arcidae, Donacidae and Veneridae Family Cardiidae	Trochus – 65 mm	LIMIT 2 litres (Shell on) 2 litres (Shell on) 9 litres	N/A N/A N/A
OTHER REEF ANIMALS Ark shells, pipis, venus clams and all other species of edible molluscs not specifically mentioned – combined Cockles Mussels	Families Arcidae, Donacidae and Veneridae Family Cardiidae Family Mytilidae	Trochus – 65 mm N/A N/A	2 litres (Shell on) 2 litres (Shell on) 9 litres (Shell on) 9 litres	N/A N/A
OTHER REEF ANIMALS Ark shells, pipis, venus clams and all other species of edible molluscs not specifically mentioned – combined Cockles Mussels Oysters	Family Cardiidae Family Mytilidae Family Ostreidae	Trochus – 65 mm N/A N/A N/A	LIMIT 2 litres (Shell on) 2 litres (Shell on) 9 litres (Shell on) 9 litres (Shell on)	N/A N/A N/A
OTHER REEF ANIMALS Ark shells, pipis, venus clams and all other species of edible molluscs not specifically mentioned – combined Cockles Mussels Oysters Oyster, Silver lipped pearl^	Families Arcidae, Donacidae and Veneridae Family Cardiidae Family Mytilidae Family Ostreidae Pinctada maxima	IEGAL SIZE Trochus – 65 mm N/A N/A N/A N/A	2 litres (Shell on) 2 litres (Shell on) 9 litres (Shell on) 9 litres (Shell on) 0	N/A N/A N/A N/A O

- Licence required see separate brochure for details of fishing rules.
- # Only applies when two or more fishers aboard.
- † Denotes species with a combined bag limit of 40.
- ^ Recreational fishers are not permitted to take this species.
- * See Which mud crab is which? on page 24.

N/A - Not Applicable

Appendix 2 Current Gascoyne Bioregion bag limits

BAG AND SIZE LIMITS

HIGH RISK SPECIES

Mixed daily bag limit - 7 per angler

The species in this group are generally long-lived, slow-growing, mature at four-plus years, form semi-resident populations, are vulnerable to localised depletion due to their life history, or are of low abundance or highly targeted. (FRMR Schedules 2 and 3)

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT
Barracuda	Sphyraena barracuda	Not applicable	4
Barramundi – State-wide	Lates calcarifer	550 mm	2*
Billfish (sailfish, swordfish, and marlins) – combined	Families Istiophoridae and Xiphiidae	Not applicable	1
Bonefish	Albula spp.	Not applicable	2
Cobia	Rachycentron canadus	750 mm	2
Cods – combined (including Chinaman cod or 'Charlie Court') Note: within this bag limit you may not take more than two estuary or Rankin cod combined.	Family Serranidae	Epinephelus sp. over 1,000 mm or 30 kg are protected. (except grey banded rock cod) Breaksea – 300 mm	4
		Estuary – 400 mm	
Cod, Estuary – inner gulfs of Shark Bay	Epinephelus coioides	400 mm. Maximum size 1,000 mm. Maximum weight 30 kg	1
Coral trout and coronation trout – combined	Plectropomus spp. and Variola louti	Coral – 450 mm	1
Dhufish, Western Australian and pearl perch – combined	Glaucosoma spp.	Dhufish – 500 mm	2
Emperors and seabream – combined (including spangled emperor/nor' west snapper and Robinson's seabream)	Family Lethrinidae	Spangled – 410 mm. Blue-lined (black snapper) – 320 mm. Other emperors – 280 mm	4
Groper, baldchin and tuskfish – combined	Choerodon spp.	Baldchin, blackspot & blue tuskfish – 400 mm	4
Groper, baldchin and tuskfish – combined (inner gulfs of Shark Bay)	Choerodon spp.	Baldchin, blackspot & blue tuskfish – 400 mm	2

Special risk species must be landed whole.

Note: Special filleting rules apply in Shark Bay - see page 13.

4 BAG AND SIZE LIMITS

Fish for the future

^{*} Possession limit – 2 per angler. May only be taken by line.

HIGH RISK SPECIES (C	ontinued)				
•	Mixed daily bag limit – 7 per angler				
SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT		
Mackerel – shark	Grammatocynus bicarinatus	500 mm	4		
Mackerel, Spanish – broad-barred (grey) and narrow-barred – combined	Scomberomorus semifasciatus and S. commerson	Narrow-barred – 900 mm Broad-barred – 750 mm	2		
Mackerel – wahoo	Acanthocybium solandri	900 mm	2		
Mahi mahi (dolphinfish)	Coryphaena hippurus	500 mm	4		
Mulloway and northern mulloway	Argyrosomus hololepidotus and Protonibea diacanthus	Mulloway 500 mm Northern – 700 mm	2		
Parrot fish - combined	Family Scaridae	Not applicable	4		
Pink snapper	Pagrus auratus	410 mm	4		
Pink snapper – inner gulfs of Shark Bay	Pagrus auratus	500 mm 700 mm maximum size	1		
Queenfish	Scomberoides commersonnianus	Not applicable	4		
Red emperor	Lutjanus sebae	410 mm	2		
Samson fish/amberjack/ yellowtail kingfish – combined	Seriola spp.	600 mm	2		
Sharks and rays – combined	Class Chondrichthyes	Not applicable	2		
Trevally, giant and golden – combined	Caranx ignobilis and Gnathanodon speciosus	Not applicable	2		
Tropical snappers and sea perch (mangrove jack, fingermark, job fish, stripey sea perch etc.) – combined	Family Lutjanidae	Fingermark, mangrove jack and stripey sea perch – 300 mm	4		
Tuna – southern bluefin, yellowfin, bigeye – combined	Thunnus maccoyii, T. albacares and T. obesus	Not applicable	2		

Special risk species must be landed whole.

Note: Special filleting rules apply in Shark Bay - see page 13.

Fish for the future BAG AND SIZE LIMITS 5

MEDIUM RISK SPECIES

Mixed daily bag limit - 16 per angler

Species generally mature at two to three years, are of moderate abundance, are highly targeted, and often use estuarine and inshore habitats extensively.

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT
Bonito – leaping and oriental, and other tunas – combined	Family Scombridae	Not applicable	8
Bream – north-west, black and yellowfin – combined	Acanthopagrus spp.	250 mm. Yellowfin – 300 mm	8
Flathead and flounder – combined	Family Platycephalidae and Pseudorhombus spp.	Flathead – 300 mm Flounder – 250 mm	8
Goatfish	Family Mullidae	Not applicable	8
Leatherjacket	Family Monacanthidae	250 mm	8
Mackerel – Queensland school and spotted – combined	Scomberomus queenslandicus and S. munroi	500 mm	4
Snook and pike – combined	Sphyraena spp. and Dinolestes spp.	300 mm	8
Tailor	Pomatomus saltatrix	300 mm	8
Tarwhine	Rhabdosargus sarba	250 mm	16
Threadfin salmon – giant, northern and Gunter's combined	Polydactylus and Eleutheronema spp.	Giant – 450 mm	8
Trevally - combined	Family Carangidae	Skipjack – 250 mm	8
Whiting, yellowfin	Sillago schomburgkii	Not applicable	16

LOWEST RISK SPECIES

Mixed daily bag limit - 40 per angler

Species generally mature at one to two years, are of high abundance, distributed widely and generally pelagic. Species not listed have little known about their biology or abundance and are generally not targeted by anglers.

		· -
SPECIES	SCIENTIFIC NAME	BAG LIMIT
Australian herring	Arripis georgianus	
Dart	Trachinotus spp.	
Garfish	Family Hemiramphidae	
Longtom	Family Belonidae	You can only take
Mackerel, blue (common)	Scomber australasicus	a combined maximum of 40 lowest risk fish.
Milkfish	Chanos chanos	No size limits apply.
Mullet – sea and yellow-eye	Family Mugilidae	, , ,
Whiting, sand and school	Sillago spp.	
All other unlisted species of fish		

CRUSTACEANS	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT	BOAT, LIMIT#
Crab, blue swimmer (manna)	Portunus pelagicus	127 mm (carapace)		40
Crab, mud – all species combined	Scylla spp.	Green – 150 mm Brown – 120 mm (carapace)	5	10
Crab, Champagne	Hypothalassia acerba	92 mm	†	N/A
Crab, Crystal	Chaceon spp.	120 mm	†	N/A
Crab, Giant	Pseudocarcinnus gigas	140 mm	†	N/A
Prawns, school and king	Family Penaeidae	N/A	9 litres	N/A
Rock lobster – all species combined.	Panulirus spp.	See separate brochure		
All species not specifically mentioned – combined			40 [†]	
MOLLUSCS AND OTHER REEF ANIMALS	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT	BOAT, LIMIT#
Abalone, Roe's and tropical	Haliotis spp	See separate brock	nure	
Ark shells, cockles, pipis, venus clams and	Families Arcidae,	Trochus – 65 mm	2 litres	N/A
all other species of edible molluscs not specifically mentioned – combined	Cardiidae, Donacidae and Veneridae		(Shell on)	
all other species of edible molluscs not specifically mentioned – combined	ramily Mytilidae	N/A	9 litres (Shell on)	N/A
all other species of edible molluscs not specifically mentioned – combined Mussels	and Veneridae	N/A N/A	9 litres	N/A N/A
all other species of edible molluscs not specifically mentioned – combined Mussels Oysters	and Veneridae Family Mytilidae	,	9 litres (Shell on)	ŕ
all other species of edible molluscs not specifically	and Veneridae Family Mytilidae Family Ostreidae	N/A	9 litres (Shell on) 20	N/A

Licence required – see separate brochure for details of fishing rules.

Only applies when two or more fishers aboard.

† Denotes species with a combined bag limit of 40.

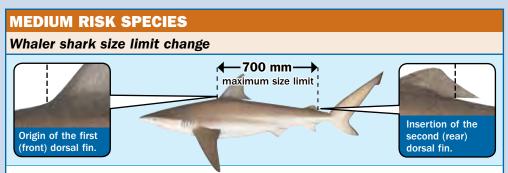
N/A – Not applicable.

Fish for the future BAG AND SIZE LIMITS 7

Appendix 3 Current West Coast Bioregion bag limits

	n this table – 15 Octo	he West Coast Scalefish (ober to 15 December (inc	
SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT
Cods (includes breaksea cod, harlequin fish, grey banded rock cod and Chinaman cod)	Family Serranidae	Epinephelus sp. (such as malabar cod and estuary cod) over 1,000 mm or 30 kg are protected (except grey banded rock cod) Breaksea – 300 mm Estuary – 400 mm	2
Coral trout and coronation trout – combined	Plectropomus spp. and Variola louti	Coral – 450 mm	1
Dhufish, Western Australian	Glaucosoma hebraicum	500 mm	1 Boat limit - 2 (6 on charter)
Emperors ("nor' west snapper")	Family Lethrinidae	Spangled – 410 mm Blue-lined (black snapper) – 320 mm Other emperors – 280 mm	2
Foxfish and pigfish	Bodianus spp.	Not applicable.	2
Groper, baldchin and tuskfish	Choerodon spp.	Baldchin, blackspot & blue tuskfish – 400 mm	2
Groper, western blue	Achoerodus gouldii	500 mm. Protected in the Rottnest Island Reserve	1
Hapuku/bass groper and trevella	Polyprion spp. and Family Centrolophidae	Not applicable.	2
Parrot fish	Family Scaridae	Not applicable.	2
Pink snapper	Pagrus auratus	410 mm 500 mm (South of 31° degrees south latitude, just north of Lancelin)	2
Queen snapper (blue morwong)	Nemadactylus valenciennesi	410 mm	2
Red snapper (includes bight redfish, nannygai and swallowtail)	Centroberyx spp.	300 mm	2
Tropical snappers and sea perch (includes red emperor, mangrove jack, ruby snapper, job fish, stripey sea perch etc.)	Family Lutjanidae	Red emperor – 410 mm Fingermark, mangrove jack and stripey sea perch – 300 mm	2

'PELAGIC' SPECIES			
Mixed daily bag limit	- <mark>2 per angler</mark>		
SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT
Barracuda	Sphyraena barracuda	Not applicable.	2
Billfish – sailfish, spearfish, swordfish, marlins – combined	Families Istiophoridae and Xiphiidae	Not applicable.	1
Cobia	Rachycentron canadus	750 mm	2
Mackerel – Wahoo, broad-barred (grey), narrow-barred Spanish and shark	Acanthocybium solandri, Scomberomorus semifasciatus, S. commerson and Grammatorcynus bicarinatus	Wahoo and narrow-barred – 900 mm Broad-barred – 750 mm Shark – 500 mm	2
Mahi mahi (dolphinfish)	Coryphaena hippurus	500 mm	2
Samson fish/amberjack and yellowtail kingfish	Seriola spp.	600 mm	2
Trevally, giant and golden	Caranx ignobilis and Gnathanodon speciosus	Not applicable.	2
Tuna – southern bluefin, yellowfin and bigeye	Thunnus maccoyii, T. albacares and T. obesus	Not applicable.	2



Due to overfishing of some whaler shark species, a maximum size limit of 700 mm (interdorsal fin length) applies to whaler sharks (Family Carcharhinidae) caught in the West Coast and South Coast Bioregions (see illustration).

This equates to a shark of about 1.8 metres total length. Importantly, sharks larger than this often have high concentrations of heavy metal compounds (including mercury) in their flesh and are not suitable for human consumption.

Common whaler sharks caught in the West Coast and South Coast bioregions include: dusky shark, bronze whaler, sandbar (thickskin) shark, bull shark, spinner shark and tiger shark.

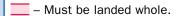
___ – Must be landed whole. New fishing rules.

MEDIUM RISK SPECIES

Mixed daily bag limit - 12 per angler

Species generally mature at two to three years, are of moderate abundance, are highly targeted, and often use estuarine and inshore habitats extensively.

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT
Bonito – leaping and oriental, and other tunas – combined	Family Scombridae	Not applicable.	8
Bream – north-west, black and yellowfin – combined	Acanthopagrus spp.	250 mm Yellowfin – 300 mm	4
Bream – black (Swan-Canning rivers)		Only 2 black bream over 400 mm	4
Cobbler	Cnidoglanis macrocephalus	430 mm. Totally protected in the Swan-Canning rivers until 2017.	4
Flathead and flounder – combined	Family Platycephalidae and Pseudorhombus spp.	Flathead – 300 mm Flounder – 250 mm	8
Goatfish	Family Mullidae	Not applicable.	8
Leatherjacket	Family Monacanthidae	250 mm	8
Mackerel, Australian spotted and Mackerel, Queensland school – combined	Scomberomorus munroi & Scomberomorus queenslandicus	500 mm	4
Mulloway	Argyrosomus hololepidotus	500 mm	2
Salmon, Australian*	Arripis truttaceus	300 mm	4
Sharks and rays – combined	Class Chondrichthyes	Whaler sharks over 700 mm interdorsal fin length are protected. (For more Information see page 6)	2
Snook and pike – combined	Sphyraena spp. & Dinolestes spp.	300 mm	8
Tailor	Pomatomus saltatrix	300 mm (Only 2 fish over 500 mm)	8
Tarwhine	Rhabdosargus sarba	250 mm	12
Trevally – silver (skippy), diamond, etc. – combined	Family Carangidae	Skipjack – 250 mm	8
Trout, brown and rainbow – combined	Salmo trutta and Oncorhynchus mykiss	See separate brochure	
Whiting – King George	Sillaginodes punctata	280 mm	8
Whiting – yellowfin	Sillago schomburgkii	Not applicable.	<u>12</u>



 Licence required – see separate brochure for details of fishing rules.

New fishing rules.

Fish for the future

BAG AND SIZE LIMITS

7

^{* -} Young salmon are sometime called 'salmon trout' by fishers.

LOW RISK SPECIES

Mixed daily bag limit - 30 per angler

Species generally mature at one to two years, are of high abundance, distributed widely and generally pelagic. Species not listed have little known about their biology or abundance and are generally not targeted by anglers.

SPECIES	SCIENTIFIC NAME	BAG LIMIT
Australian herring	Arripis georgianus	
Dart	Trachinotus spp.	
Garfish	Family Hemirhamphidae	
Longtom	Family Belonidae	You can only take
Mackerel, blue (common)	Scomber australasicus	a combined maximum of 30 low risk fish.
Milkfish	Chanos chanos	No size limits apply.
Mullet – sea and yellow-eye	Family Mugilidae	
Whiting, southern school	Sillago spp.	
All other unlisted species of fish		

PROTECTED SPECIES

These species are totally protected and may not be taken. (FRMR Schedule 2, FRMA Section 43)

SCIENTIFIC NAME			
Cnidoglanis macrocephalus (protected in the Swan- Canning rivers until 2017)			
Order Scleractinia See Order No.11 of 2007			
Carcharodon carcharias			
Carcharias taurus			
Achoerodus gouldii (protected in the Rottnest Island Reserve)			
Cheilinus undulatus			
Phycodurus eques			
Epinephelus tukula			
Epinephelus lanceolatus			
Family Pristidae			
Glyphis spp.			
Rhiniodon typus			

Species with no bag limit:

Baitfish (Families
Atherinidae, Clupeidae
and Engraulidae –
pilchards, scaly mackerel,
whitebait, anchovies
and hardyheads) and
feral freshwater species
including carp, tilapia,
goldfish and redfin perch
have no bag limit.

Prohibitions on the take of totally protected species apply to both commercial and recreational fishers. Some species may also be protected under Commonwealth legislation – visit **www.environment.gov.au** for further information.

Appendix 4 Current South Coast Bioregion bag limits

BAG AND SIZE LIMITS

HIGH RISK SPECIES

Mixed daily bag limit - 7 per angler

Species are generally long-lived, slow-growing, mature at four-plus years, form semi-resident populations, are vulnerable to localised depletion due to their life history, or are of low abundance or highly targeted. (FRMR Schedules 2 and 3)

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT
Billfish (sailfish, spearfish and marlins) and Swordfish – combined	Families Istiophoridae and Xiphiidae	N/A	1
Boarfish	Family Pentacerotidae	N/A	4
Cobbler	Cnidoglanis macrocephalus	430 mm	4
Cods – combined (including breaksea and harlequin fish)	Family Serranidae	Epinephelus sp. over 1,000 mm or 30 kg are protected. Breaksea – 300 mm	4
Dhufish, Western Australian	Glaucosoma hebraicum	500 mm	2
Groper, western blue	Achoerodus gouldii	500 mm	1
Hapuku/bass groper/ trevalla and grey-banded rock cod – combined	Polyprion spp. Family Centrolophidae and Hyporthodus octofasciatus	N/A	2
Mahi mahi (dolphinfish)	Coryphaena hippurus	500 mm	2
Mulloway	Argyrosomus hololepidotus	500 mm	2
Pink snapper	Pagrus auratus	410 mm	4
Queen snapper (blue morwong)	Nemadactylus valenciennesi	410 mm	4
Samson fish/amberjack and yellowtail kingfish – combined	Seriola spp.	600 mm	2
Sharks and rays – combined	Class Chondrichthyes	Whalers over 700 mm interdorsal fin length are protected (See page 5)	2
Trout, brown and rainbow – combined	Salmo trutta and Oncorhynchus mykiss	300 mm	4
Tuna – southern bluefin, yellowfin and bigeye – combined	Thunnus maccoyii, T. albacares and T. obesus	N/A	2

N/A - Not Applicable

Licence required – see separate brochure for details of fishing rules.

4 BAG AND SIZE LIMITS

Fish for the future

MEDIUM RISK SPECIES

Mixed daily bag limit - 16 per angler

Species generally mature at two to three years, are of moderate abundance, are highly targeted, and often use estuarine and inshore habitats extensively.

SPECIES	SCIENTIFIC NAME	MINIMUM LEGAL SIZE	BAG LIMIT
Black bream	Acanthopagrus butcheri	250 mm	8
Dory, John and mirror – combined	Family Zeidae	N/A	8
Flathead and flounder – combined	Family Platycephalidae and Pseudorhombus spp.	Flathead – 300 mm Flounder – 250 mm	8
Goatfish	Family Mullidae	N/A	8
Leatherjacket	Family Monacanthidae	250 mm	8
Red snapper (bight redfish/nannygai)	Centroberyx spp.	300 mm	8
Salmon, Australian*	Arripis truttaceus	300 mm	4
Snook and pike – combined	Sphyraena spp. and Dinolestes spp.	300 mm	8
Swallowtail	Centroberyx lineatus	300 mm	8
Sweep, banded and sea – combined	Scorpis spp.	N/A	8
Tailor	Pomatomus saltatrix	300 mm	8 (only 2 fish over 600 mm)
Tarwhine	Rhabdosargus sarba	250 mm	8
Trevally, silver (skippy), sand, etc. – combined	Family Carangidae	Skipjack – 250 mm	12
Tunas – all other including bonito – combined	Family Scombridae	N/A	8
Whiting, King George	Sillaginodes punctata	280 mm	12
Whiting, yellowfin	Sillago schomburgkii	N/A	16
Wrasse – combined (inc. western king wrasse and western foxfish)	Family Labridae	N/A	8

Must be landed whole.

6 BAG AND SIZE LIMITS

Fish for the future

^{*} Young salmon are sometimes called 'salmon trout' by fishers.

LOW RISK SPECIES

Mixed daily bag limit - 40 per angler

Species generally mature at one to two years, are of high abundance, distributed widely and generally pelagic. Species not listed have little known about their biology or abundance and are generally not targeted by anglers.

SPECIES	SCIENTIFIC NAME	BAG LIMIT	
Australian herring	Arripis georgianus		
Garfish	Family Hemirhamphidae	Vou oon only take	
Mackerel, blue (common)	Scomber australasicus	You can only take a combined maximum	
Mullet, sea and yellow-eye	Family Mugilidae	of 40 low risk fish.	
Whiting, sand and school	Sillago spp.	No size limits apply.	
All other unlisted species of fish			

Species with no bag limit:

Baitfish (Families Atherinidae, Clupeidae and Engraulidae – pilchards, scaly mackerel, whitebait, anchovies and hardyheads) and feral freshwater species including carp, tilapia, goldfish and redfin perch have no bag limit.

PROTECTED SPECIES

These species are totally protected and may not be taken. (FRMR Schedule 2, FRMA Section 43)

SPECIES	SCIENTIFIC NAME
Cod, potato	Epinephelus tukula
Coral and live rock	Order Scleractinia See Order No.11 of 2007
Groper, Queensland	Epinephelus lanceolatus
Sawfish – all species	Family Pristidae
Seadragon, leafy	Phycodurus eques
Seadragon, weedy NEW	Phyllopterxy taeniolatus
Shark, great white	Carcharodon carcharias
Shark, grey nurse (under DEC legislation)	Carcharias taurus
Shark, speartooth	Glyphis spp.
Shark, whale	Rhiniodon typus
Wrasse, humphead Maori	Cheilinus undulatus

Prohibitions on the take of totally protected species apply to both commercial and recreational fishers. Some species may also be protected under Commonwealth legislation – visit **www.environment.gov.au** for further information.

Fish for the future BAG AND SIZE LIMITS 7

Appendix 5 Current barramundi rules



FISHING FOR BARRAMUNDI

Barramundi

The barramundi is a mighty peculiar fish – it changes sex, lives in freshwater and saltwater habitats, and thrives on flooding cyclones. Barramundi can grow up to 180 centimetres and 60 kilograms. Special fishing rules apply in WA to conserve this iconic species.

In Australia, barramundi are distributed across the tropical north, from Queensland to the Pilbara region in WA. Even though they are genetically the same, these barramundi populations are physically separated from each other and don't readily intermingle to any great extent.



Special daily bag and possession limits apply in areas 1 (Ord River), 2 (Fitzroy River and King Sound) and 3 (Broome). Maximum size limits apply in areas 1 and 2. For further details of fishing rule in areas 1, 2 and 3 and their boundaries, see the maps nearby.

In other parts of the State, there is a daily bag and possession limit of two barramundi, which must be a minimum size of 550 mm.

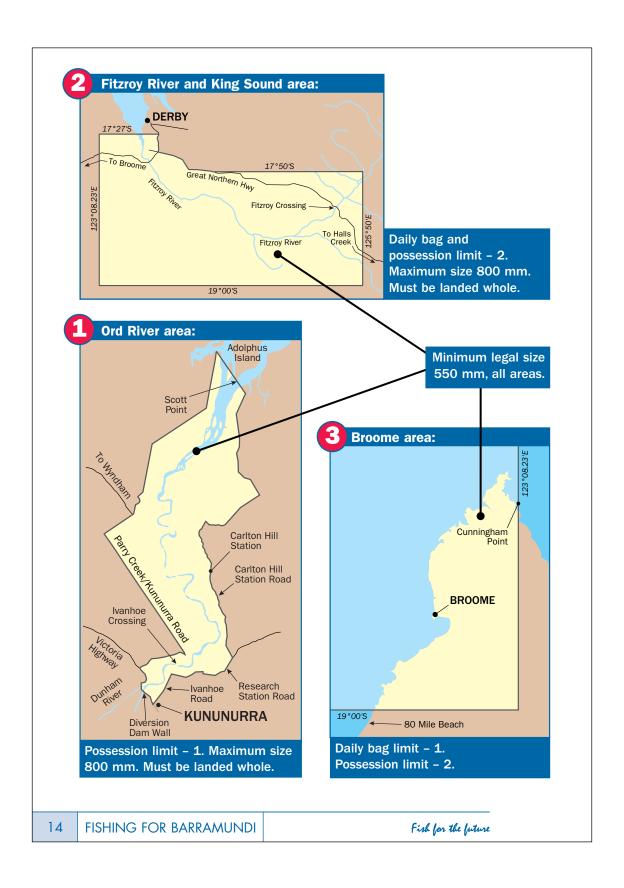
In Western Australia, major barramundi populations are associated with big river systems, such as the Fitzroy and the Ord. They are also found in nearshore waters, and smaller gulfs and creeks linked to the ocean, from Exmouth Gulf to the Northern Territory.

Barramundi are only permitted to be taken by means of a single rod, reel and line or a single line held in the hand.

Fish for the future

FISHING FOR BARRAMUNDI

1 2



Appendix 6 Summary of management controls for WA commercial fisheries taking finfish

North Coast Bioregion

Northern Demersal Scalefish Managed Fishery (NDSF)

- The NDSF is made up of two fishing zones an inshore area and an offshore area.
- Commercial fishing in the inshore area is considered low-level, with less than three tonnes caught per year by line only. There are four licencees permitted to fish in the inshore area.
- The inshore waters in the vicinity of Broome are closed to commercial fishing. This closure was introduced to reduce potential conflict between commercial fishers and recreational, charter and customary fishers.
- Commercial fishing in the offshore area can be undertaken by either trap or line, with the majority of fishing activity undertaken using traps. There are 11 licencees permitted to fish in this area.
- The landed catch in this fishery has steadily increased from 552 tonnes in 2003 to 1,010 tonnes in 2008.
- The 2008 stock assessment indicated that the goldband snapper stock could fall below the 40 per cent of virgin spawning biomass target in three to five years if the 2007 catch levels were to continue.
- In response to the 2008 stock assessment, a 15 per cent effort reduction was implemented over two years.
- Given the main area of the NDSF is well offshore and there is a closure around Broome, there is little interaction between the fishery and the recreational fishing sector.

Pilbara Trawl Fishery

- The Pilbara Trawl Fishery is situated in the Pilbara region in the north-west of Australia. It consists of two zones Zone 1 in the south-west of the fishery (which is closed to trawling) and Zone 2 in the north, which consists of six management areas (known as Areas 1 6). Areas 3 and 6 are closed to trawling.
- The fishery came under a formal management framework in 1998, with effort levels in it set to achieve the best yield while keeping exploitation rates of key indicator species at sustainable levels.
- Since the implementation of the management framework, effort in the fishery has been reduced and redistributed on the basis of annual stock assessments of the main target species.
- There are 11 fishing permits for the Pilbara Trawl Fishery, with the combined effort allocations presently being consolidated onto three full-time vessels.
- As a consequence of catch monitoring in the fishery, in the 2010/11 licensing period, the fishing industry voluntarily agreed to effort reductions in a number of key areas.

Pilbara Trap Fishery

• The Pilbara Trap Fishery operates in the waters of the Pilbara between North-West Cape and 80-Mile Beach and uses fish traps only.

- Catches mainly consist of bluespot emperor, spangled emperor, red emperor, Rankin cod, crimson snapper and goldband snapper.
- Currently there are six licences in the fishery, with the entitlement consolidated onto two vessels.
- A review of the trap fishery was undertaken in 1996 and, based on performance criteria, the number of licences in it was halved. There was a closure to part of the fishery in 1998.

Pilbara Line Fishery

- On 15 August 2006 a 'Prohibition on Fishing' Order was implemented to manage fishing effort in the Pilbara Wetline Fishery. This order permitted nine Pilbara Line fishing boat licensees to operate anywhere within 'Pilbara waters' for a five-month fishing period each year.
- Catches decreased from 217 tonnes in 2004 to 86 tonnes in 2008, but then increased to 123 tonnes in 2009
- In the Pilbara, the commercial catch of demersal scalefish caught by line is much lower than that caught by trawl or trap.
- The number of days fished by the Pilbara Line Fishery has been relatively low.

Mackerel Fishery

- The Mackerel Managed Fishery operates from the West Coast Bioregion north to the Western Australia/Northern Territory border.
- An interim management plan in the fishery commenced in 2004. It will move to 'fully-managed' status in early 2012.
- Catch is managed via a quota system and a 'Total Allowable Commercial Catch' has been determined for each area of the fishery.
- A total of 62 permits exist in the fishery.
- The majority of the commercial catch comes from waters in the Pilbara and Kimberley. In the Gascoyne and West Coast bioregions, a significant proportion of the mackerel catch is taken by the recreational sector.

Gascoyne Bioregion

Gascoyne Demersal Scalefish Fishery (GDSF)

- The Gascoyne Demersal Scalefish Fishery's management plan was implemented in November 2010.
- Minimum unit holdings apply to operate in the fishery
- In response to stock assessment advice, there have been significant reductions to the allowable commercial catch of pink snapper in this fishery.
- A 40 per cent reduction in pink snapper (*Pagrus auratus*) quota, from 563,750kg to 338,250kg, was legislated in the 2003/04 season.
- An additional quota reduction, from 338,250kg to 276,750kg, was legislated in April 2007. The quota reductions resulted in a total quota reduction of about 50 per cent since the 2003/04 season for the commercial sector.

- The quota cuts were made in order to keep the pink snapper stock on-track to recover to 40 per cent of its 1952 spawning biomass level by 2014 (i.e. 10 years from the initial quota reduction in 2004).
- In May 2004 a prohibition on fishing was implemented that prevented wetline vessels which did not hold demersal scalefish fishery licences from fishing within the waters of the GDSF, in an effort to reduce depth-related mortality of pink snapper taken as bycatch. Following the introduction of these arrangements, a 70 per cent decrease in wetline effort in the Gascoyne Bioregion was observed in 2005.
- On 1 November 2010 the GDSF Management Plan 2010 was implemented. This superseded the Shark Bay Snapper Management Plan and effectively closed the last 'open access' commercial wetlining area in the Gascoyne.
- The new GDSF Management Plan 2010 incorporates an additional 27 nautical miles of waters to the north of the old Shark Bay Snapper Managed Fishery boundary and has resulted in all commercial line fishing in the south of the Gascoyne being regulated under one Management Plan.

West Coast Bioregion

West Coast Demersal Scalefish (WCDSF) Fishery

- This fishery was implemented on 1 January 2008. In total, 61 permits were issued for this fishery on a 'days-fished' system. The target catch for this fishery is now approximately 400 tonnes, which is considerably lower than the reported catch of demersal scalefish in this area in 2005/06 of over 900 tonnes.
- Within this fishery, which runs from south of Shark Bay to Augusta, the Perth metropolitan area of the fishery that runs between latitude 31° South (Lancelin) and 33° South (south of Mandurah) is closed to the demersal Scalefish [Interim] Managed Fishery and the West Coast Demersal Gillnet and Demersal Longline [Interim] Managed Fishery.

West Coast Demersal Gillnet and Demersal Longline (Interim) Fishery

- This fishery operates off the west coast in waters between 26°S (south of Shark Bay) and 33°S (south of Mandurah).
- Demersal gillnets and demersal longlines are used to target sharks (primarily gummy sharks, and juvenile dusky and sandbar sharks) for human consumption. The fishing methods used also legitimately take other sharks and scalefish.
- Management is carried out via input controls in the form of transferable time/gear units, with additional restrictions on net mesh, hook sizes and net height. Permitted fishing effort has been reduced by more than 50 per cent since the early 1990s.
- The key management strategy for the fishery is to manage fishing effort at or below 2001/02 effort levels. These levels are considered likely to deliver sustainable harvests of the fisheries' key target shark species and byproduct species, and acceptably low levels of bycatch and protected species interactions.
- The fishery is also being monitored against demersal scalefish sustainability objectives (i.e. to reduce catches of demersal scalefish by at least 50 per cent of 2005/06 levels), in addition to shark sustainability objectives.

• A seasonal closure of inshore waters of the fishery to 200 metres depth applies between 16 August and 15 October each licensing year, for the purpose of recovering historically-overfished whiskery sharks.

West Coast Estuary Fishery

- The Leschenault estuary closed to commercial fishing in 2001. Previously this estuary supported six licensed commercial fishers.
- The fishing effort in the Swan/Canning estuary was reduced from four operators in 2001 to one operator presently. This fisher mainly targets crabs, with finfish a minor component.
- The fishing effort in Mandurah (Peel/Harvey estuary) is stable with nine operators. Commercial fishers in this system target crabs and finfish.

South Coast Bioregion

The Herring Trap Fishery

- Operates on the south coast and is responsible for over 90 per cent of the herring catch in the South Coast Bioregion. Trap netting is allowed on 10 designated south coast beaches.
- Herring trap netting is permitted via a licence condition on a Fishing Boat Licence. In recent years, only a small number of the teams have been active.
- The total commercial catch of herring on the south coast (including estuaries and nearshore fishing) has decreased from 700 tonnes in 2000 to 151 tonnes in 2009.
- Declining catches are due to lower market demand.

Salmon Fishery

- 18 managed fishery licenses exist, but, in recent years, only a small number of the teams have been active.
- The total WA salmon catch fell from 4,046 tonnes in 1995 to 258 tonnes in 2009. The majority of the salmon catch is taken on the south coast.
- Declining catches are due to lower market demand and poorer catchability.

Wetline fishing

- There is no specific authorisation required to use wetline gear on the south coast other than a Fishing Boat Licence and a commercial fishing licence for the fisher.
- Total landings in 2009 were 105 tonnes.
- Consideration is currently being given to longer-term management arrangements.

South Coast Estuaries

- Approximately 25 major estuaries exist in the South Coast Bioregion, of which 13 are conditionally open to commercial fishing.
- The number of commercial fishing licenses has reduced from 66 in 1987 to 25 in 2002.
- The target catch range is 200 500 tonnes, with key species being black bream and cobbler.
- In 2010 a total of 223 tonnes of finfish was landed from south coast estuaries.