Draft Management Proposals for the Metropolitan Recreational Fishery

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Extract from the Minutes of the AAA Delegates' Meeting 16 August 2005.

Fisheries Management Perth Metro Area Proposals.

A discussion paper titled "Zone 5" has been prepared by two keen and experienced recreational anglers Wally Parkin and Garry Lilley. A copy was received on Monday. A better title might be "Fisheries Management Perth Metro Area."

Terry Fuller said it was extremely important to look at the background to this paper and the reason for its preparation, and not just look at some of the details in isolation. The people who wrote the paper now realise that it could have had a lot more work and different approaches before such a wide release, but now it is too late to call it back.

He gave some of the background to the paper, and said he would write up this extra background for AAA people even though not all of this had been discussed at this meeting.

Fisheries management is based on a large region, which for the West Coast region goes from north of Kalbarri to east of Augusta. What might be OK to manage the total fishing in the entire region might mean that areas near large human populations are allowed to be over fished.

Fishing in the metro area has changed a lot over the past 20 to 30 years, and not for the better. Fish are harder to find and people have to travel much further to find them.

What is sustainable?

Fish populations and the quality of fishing in areas around population centres and areas of heavy use will be changed, compared to what they would have been like if humans didn't exist. Some of that change is inevitable due to our human activities.

If people can come back in 5, 10, 20, 30, 50 years and find the situation is not significantly changed compared to the present, than whatever is being done is **sustainable**, even if the fishing and fish stocks have been changed using the idea of "compared to what it would have been like if humans didn't exist".

The metro population has increased to something like 1.5 million people, and the fishing pressure is increasing with the increasing population.

Improved boats, GPS, echo sounders, fishing equipment, access to information, are all increasing the pressure on the fish.

What is likely if we continue as at present?

People who remember what the fishing was like 20 to 30 years ago see the current situation and ask "what is likely in future and what do we want for the future?".

Draw a line between what the fishing quality was like 20 or 30 years ago and what it is now, then extend that line the same distance forward into the future.

Will we, in 20 or 30 years time or longer, and our children and grandchildren, still be able to go fishing in Perth metro waters and be able to catch enough fish of the type we could catch in the past for it to be a worthwhile pastime?

Of course there are fisheries management processes in place to try to alleviate this. But will the fishing continue to decline at the rate it has in the last 20 to 30 years?. Will it decline even faster as more and more people compete for fewer and fewer fish?. **Think about that.**

For many species it means that they will be very hard to catch, which means the fish will have been heavily depleted in the metro area, and that means the fishing pressure is **unsustainable**.

What do we want for the future?

Where will it end? Will future generations (and ourselves in 20 years time) thank us for what we have handed on to them? Or will **they criticise us** for not using some restraint so they could experience at least some of what we and earlier generations could?

Or will it be like blue groper which used to be common around Rottnest, and are now very rare. Do **WE criticise** those people of 30 or 40 years ago, some of whom took more than they needed, even allowing for *"forgive them, because at the time they didn't know what they were doing"*?

Will your grandson ask you *"Grandad, what's a Dhufish?"*, or *"what's a Mulloway?"*, just as today's metro fisherman ask *"what's a Blue Groper?"*

We can't use the excuse of "we don't know what we are doing," because it is plain for everyone to see that the fishing is changing.

Who is responsible?

Everyone has some impact. No one, commercial, recreational, or charter, who goes fishing can say *"I'm not doing very much, so I don't have any impact."* They cannot say *"It's up to other people to change, not me."*

A lot of people having *"not very much impact"* can add up to a lot of impact in total, and the individual bits might need to be just slightly smaller, so that the total is smaller.

Just a small number of *"really big impacts"* can have a lot of impact in total, and it's much more important that the people who are doing a lot change what they are doing.

No one who eats commercially caught local wild fish can say:- *"Someone else caught this - I'm not responsible."* The fish would not have been caught if the market demand wasn't there. Catches must be managed for sustainability. **Everyone has some impact.**

What has already been started?

What is already started or been changed which might stop or change the downward spiral? This is an enormous topic. Some include:-

1. West Coast Recreational fishing rules changes October 2003.
2. Commercial Wetline Fishing Review – in progress. Yes, it should have happened long ago.
3. Cockburn Sound and nearby Pink Snapper closure during the spawning period. Championed by concerned recreational anglers who are concerned for fish for the future. Announced 19 August.
4. Integrated Fisheries Management.
5. Government Election Policy promises and statements, including:-

Government understands that our fish resources and marine environments are coming under increasing pressure from human population growth, increased coastal urbanisation and advances in technology. In order for our fisheries to remain managed at sustainable levels increased investment in fisheries management, research, community education and compliance is required.

Government recognises that fish stocks are limited and marine environments can be damaged by unwise use. Growing populations are placing increasing pressure on fish stocks and the environment, highlighting the need for a new integrated approach to management that takes into account the requirements and aspirations of the commercial, charter, recreational, Indigenous and conservation sectors.

Ensure that ….. management of commercial and recreational fisheries in Western Australia continues to be based on a strong principle of sustainability or "Fish for the Future".

Continue to work with recreational fishers and the wider community to ensure that recreational fishing experiences can continue to be enjoyed by present and future generations of Western Australians.

Continue to work with local communities to identify and develop management plans for fish habitats in need of special protection.

Significantly enhance the State's capacity to undertake research into fish species of importance to the recreational sector, such as Western Australian dhufish, rock lobster, tailor, herring, snapper, blue groper, blue manna crabs, abalone and marron.

Ensure there are adequate funds to undertake recreational catch and effort research to support recreational fisheries management and Integrated Fisheries Management.

Continue to protect snapper breeding aggregations in Shark Bay and Cockburn Sound and prohibit commercial snapper fishing in Cockburn Sound.

Use the provisions of the Fisheries Adjustment Schemes Act to phase out commercial fishing in the Swan and Canning Rivers.

Are these enough?

Some people say NO, these are only a start, and the situation needs more changes and needs them VERY soon. Some will take years to have enough effect on the fish and sustainability.

Will some amazing thing happen and will fishing get better than it is at present without more changes? Will it get better so that it goes back to what it was like 20 or 30 years ago? Not likely.

Are these opportunities to do the right thing – for the fish and for the fishing experience of future generations? Many people will say "Yes" if they think about it.

What is possible if we decide to do things differently?

That's where the "Zone 5" paper comes in:-

1. To get support for the CONCEPT of the need for special management for the metro area..
2. To get people thinking and talking about what things need to change.
3. To get the information about what is known, and what is not known, so that information gathering and fisheries research can be directed to the right things.
4. To consider some of the changes which are possible or necessary to make metro fishing sustainable.
5. To get organisations and individuals who have the skills and responsibilities to take this further and make the changes.

Introduction

Cumulative pressure on the metropolitan fishery increases daily as a result of Perth's expanding population. The metropolitan fishery is generally considered to extend from Two Rocks in the North to Dawesville in the South.

This paper recognises that increasing fishing pressure applied to this region, by all sectors, will require some new management initiatives to sustain it and take it forward over the next 50 years. It is our duty as responsible fishers to ensure a healthy, sustainable fishery is available for future generations, and it is the intent of this paper to put forward management concepts that can deliver this.

The metropolitan fishery is part of the West Coast Bioregion that extends from Kalbarri in the North to Augusta in the South. It is recognised that a large portion of the State's fishing activity occurs in this zone and is centred around the metropolitan area. We therefore believe it is imperative that the management for this fishery recognises this salient fact and is accordingly managed at a higher, more stringent level. In order to achieve this the metropolitan waters should be managed as a zone within the West Coast Bioregion.

Continuing advances in fishing technology, for both sectors, equipped with faster longer range vessels means that the fishing efficiency of both fleets has reached new levels. This paper recognises that many of the significant technological improvements in fishing practises have occurred over the last ten years. The metropolitan fishery cannot possibly withstand the cumulative increase in effort that is occurring, in addition to increased fishing efficiencies, and this paper identifies some of the major issues and puts forward some solutions based upon common sense and co-operation between both fishing sectors and Government.

Serial depletion is already taking place in the Metropolitan fishery. Where once charter operators and commercial operators fished waters up to 50m in depth they are often fishing past Rottnest in water depths of over 100m. Previously this water depth provided respite for some species that have inshore/offshore movements, but no longer. Both sectors are now starting to encounter previously unheard of species like the hapuka, grey banded cod and several other species for which we have absolutely no research data. It is likely that many of these deep water species are vulnerable eg. *hapuka stocks are not considered resilient with a minimum population doubling time of 14 years* (Fishbase website).

Inshore species that have been heavily impacted in the metropolitan waters include the blue groper, baldchin groper, and the iconic Western Australian dhufish.

Blue Groper are now rarely found in the metropolitan waters, even though they were prolific only 30 years ago .The Western Australian dhufish is the most sought after and prized species for both sectors. This species is under threat and documented in many of the Department of Fisheries reports from the previous 10 years. The lack of big breeding stock for this slow growing species especially with females is very concerning and maybe heading the same way as the Blue Groper. Many species including the ones mentioned through this region can not withstand this kind of fishing pressure for much longer without stricter management controls (Stages)[*we need the correct scientific current assessment to go inhere. You shouldn't just use broad sweeping statements as they will open the paper to criticism* (Stages)] .Research Required

Given the recently identified biological differences identified in dhufish it is imperative adaptive management strategies for this fishery are introduced ahead of Integrated Fisheries Management. Concessions will need to be made by both sectors as a priority as short-term economic benefit will inevitably result in tighter management controls being applied in the future. It would seem far more responsible to offer up some responsible options now rather that wait until both sectors are squabbling over what's left. The fishery must be brought back to sustainable levels within a reasonable time-frame.

The Fisheries management framework, of the 21st century must not only be able to manage the level of exploitation by commercial and recreational fisheries, But also provide and agreed basis and process for changes in the way fish and aquatic resources are used and shared by this community There is a clear need to counter inevitable pressure on stocks from the impact of a growing population, increasing coastal development and the demands of various key user groups. Unless we are proactive in dealing the growing exploitation of fisheries along our states vast 12,000km coast line, it will be difficult to sustain it for the future. (Protecting and sharing Western Australia's coastal fish resources. The path to Integrated Management – FMP 135)

ZONE 5 The Metropolitan Bioregion

Zone 5 is a proposed management strategy that will ensure a healthy fishery that all fishing sectors and the wider community can enjoy over the next 50 years.

For the purposes of this paper metropolitan waters extend from Two Rocks in the North to Dawesville in the South, out to the 200m isobath and includes all rivers, estuaries and lakes in the catchment.

These management proposals encompass a range of recommendations for all species and user groups. Recreational Fisherman. Commercial Sector. Indigenous groups the general public and the State Government of Western Australia.

Recommendations For Zone 5

Initiatives from the recreational sector;

1) Cockburn Sound pink snapper closure to extend to whole of Zone 5 during the period set by the Department of Fisheries in the new management plan for the species to be announced soon.

2) Pink snapper minimum legal size increased to 450mm immediately for all sectors. More research needs to be applied for this species. It is widely known that Cockburn/Warnbro sounds are the only breeding/spawning grounds for this species in this region, and maybe others. There for we have no data to confirm that the Pink Snapper caught out of these spawning grounds are not the future spawning fish for this region. A precautionary principle approach should be applied.

3) Determine whether FHPAs would be an effective management tool in sustaining slow growing residential demersal species in Zone 5. An example would be in the likes of a 3 nautical mile no take zone around Rottnest. But still allow shore based angling and trolling for pelagic species within the 3 nautical miles .This would protect the demersal species. And still allow recreational fisherman to target different species without having little or no impact on the slow growing dermersal species.

Recent data released on the effectiveness of MPA's at the Abrolhos islands indicates a significant benefit to resident species such as Coral Trout. there is know evidence to suggest this strategy would not be successful for species such as West Australian Jewfish and Break sea Cod. The Westag Tagging program is showing that West Australian Jewfish are residential, especially with younger or smaller sizes of this species

4) Maximum legal size of Western Australian Jewfish to be 850mm for all sectors. Research needed here
How important such females can be is illustrated by the example of a single ripe Female red snapper, Lutjanus campechanus, of 61 cm and 12.5 kg, which contains the same number of eggs (9,300,000) as 212 females of 42 cm and 1.1 kg each (The Fisheries Centre, British Columbia Canada)

5) Ban drag-netting in all estuaries in Zone 5. Bycatch is a major issue especially in the Peel/Harvey Inlets that this measure would combat. Since the early nineties the Swan River Prawn has been nonexistent and environmental impacts have severely reduced this species in numbers, Therefore it is recommended that participating in this practice is having more of an environmental impact on other species in the means of by catch for very little or no reward of Swan River Prawns.

6) No recreational gillnetting allowed in Zone 5

7) Reduce the Category 1 mixed daily bag limit from seven down to four, These Species are generally long-lived, slow growing, mature at four years plus. form semi-resident populations, are vulnerable to localized depletion due to their life history, or are of low abundance or highly targeted.

This is becoming more and more apparent where the fishing pressure is applied in the most populated metropolitan area, mainly due to the fact that category 1 fish are generally the highest quality for consumption. There for, it is suggested that the category 1 fish limit to be reduced to 4, which is ample enough for one person or a family to consume. High grading with this category may be an issue, so compliance laws would have to be sufficient to deter fisherman from participating in this practice. i.e. confiscation laws. Hefty fines. Research needed here

8) Category 3 fish, 20 per species and a combined bag limit of 40.This category includes the species that are highly targeted by recreational fisherman ,Australian Herring, Garfish, Sand Whiting and the like. Most responsible recreational fisherman wouldn't dare take 40 of any of these species, opting to take enough for a feed only (20) fishing for the future. Research needed

9) Increase the minimum size of the blue swimmer crab to 130mm across carapace Further reductions in bag limits may need to be implemented pending further stock analysis.

Research needed here

Data from the volunteer fisheries liaison officer monitoring program in 1997 reaffirms that crabs are the main recreational targeted crustacean species. Quote Data from the volunteer fisheries liaison officer monitoring program in 1997

10) Increase King George whiting minimum size to 350mm so this species has at least spawned once to help with future recruitments. Taking any species from the environment to please a select few(recreational fisherman) when they haven't had a chance to spawn is not sustainable management, ***The current minimum size limit stands at 280mm well before the age of a spawning female***.

Sexual maturity is attained at 3 or 4 years of age, when males are between 27 cm and 32 cm long and females are between 32 cm and 36 cm long. The sex ratio at that time is even, but with age (greater than 50 cm total length), females are 4 times more numerous than males.[2]

Source / The information on this species was originally provided by Keith Jones. Additional contributions were made by (in alphabetical order) Albert Caton, Rod Lenanton and Murray MacDonald.

11) Maximum legal size of black bream to be 400mm in Zone 5 to protect mature spawning fish. Environmental changes have taken its toll on this species over the past 10 years, with fish kills in the Swan /Canning/Murray/Serpentine rivers becoming an all too worrying occurrence each year. It is there for recommended for the no take of this species during spawning times to help balance the natural/unnatural changes that are frequently occurring and hindering recruitments for this species.

Size
A 2.98kg specimen was taken in the Swan River in 1998 but black bream are reported to attain 4kg, and that's an absolute monster. A 1kg bream is a good fish for most anglers and a 2kg specimen is a thumper. Recreational and commercial fishing tends to keep the average size down in our estuary systems. Interestingly the largest black bream netted by Murdoch University researchers in the Swan River during research work was a 2.29kg female, 48.5cm long and aged at 21 years.

Breeding and migration
Spawning normally occurs between November and January in most south-west estuaries and the Swan. Black bream are multiple spawners, which means they release eggs on more than one occasion during a spawning season. Females can release between 96,000 and in excess of 7,000,000 eggs in a season, depending on the size of the fish, ***which is why keeping good numbers of big bream in our rivers is vital.***

Source Western Angler fish identity

13) A total ban of take of cobbler in the Swan & Canning Rivers until this species recovers to acceptable agreed levels. Bag & Size limits and fishing methods were reviewed in 1994 to protect and hopefully boost breeding stocks. Since the new management controls in 1994 the biomass of this species in the Swan & Canning systems haven't boosted levels at all, and are still a major concern. This may also be caused through environmental changes and this species needs further protection.

In recent years commercial catches of cobbler have declined dramatically, and large breeding-size fish are making rarer appearances in recreational catches. Cobbler usually reach maturity around 3 years, when they are just over 400mm long, but in past years many where caught before they spawned.

Source Fisheries Department of Western Australia. Cobbler at risk

14) All recreational fisherman, traveling offshore carrying an EPIRB must also equip the boat with a release weight to ensure a higher % of survival rate for undersize or unwanted fish.
There is compelling scientific evidence to suggest the release weight method is a far superior method of releasing dermersal fish suffering from barotraumas. quoted by Fisheries WA at the Dhufish Workshop held in June 2004

Source Westag program injunction with ANSAWA and Fisheries WA

15) A Recreational fishing license to be implemented for Zone 5 to fund research, management and compliance
The overall consensus in the recreational fishing community is, they would adopt this approach, providing it was based on a Recreational Fishing License Trust, and wasn't directed back into state government revenue. Where a board/committee was set up to represent recreational fisherman on where money collected from the Trust was allocated, Therefore benefiting their favorite pastime and the benefit of our fishery. Based on the NSW Recreational Fishing LicenceTrust Scheme.

Specific licences for recreational fishing activities have mainly been used to improve compliance with rules for high value species, but have also increased community awareness of fishing rules and resource conservation, and assisted with the collection of research information. Licences also provide some revenue towards management cost for the recreational fishing sector and fish stocking programs for freshwater fisheries.
(Protecting and sharing Western Australia's coastal fish resources. The Path to Integrated Management – FMP 135)

16) Failing this a pre-purchased category 1 finfish tags should be introduced. This would benefit research in the way of data on captured numbers and participation of recreational anglers targeting prized species in the category 1 class.

It is therefore essential that the question of securing adequate funding for ongoing research, education and management is the subject of widespread community consideration and debate. Fresh ideas on alternative financial strategies and new funding sources will be welcome.
(Protecting and Sharing Western Australia's Coastal Fish Resources

The Path to Integrated Management – FMP 135)

17) Compulsory log book system for all recreational fishers in Zone 5 to provide accurate catch data for researchers and management. This is also

recommended to assist with the future management plan FMP 135 to ensure when the recreational sector has reached its TAC or allocation quota.

The commercial sector and Fishing Charter fleet already record their catch by law. This gives fisheries researcher's data that is used for a sustainable fishery for all user groups. It is therefore recommended that recreational fisherman be obligated by law to provide the same data for a more accurate assessment of the total overall take from the resource.

The log book should be in the form of a signed statuary declaration that is submitted either electronically or by mail every quarter and made public knowledge. Log books should also be filled out with current catch. i.e. before retrieving boat from ramp or leaving fishing place, so compliance officers can cross check with catch and log books, to ensure the participant has entered their data correctly.
Category 1 fish should be measured for total length and species recorded.
Category 2/ 3 fish to be recorded by species only.

Despite these shortcomings, and often only with poor quality data, scientists and managers did have access to long time series of commercial catch and effort data to enable determination of the status of exploited target species, and access to a commercial catch from which to gather regular and representative biological samples. However the demise of many of these fisheries as the result of voluntary 'buy-back' of commercial access has rendered these catch and effort data sets far less useful for assessing the status of these stocks today. This means that there is now a far greater reliance on the recreational sector and/or independent surveys to provide the data that is needed to satisfy the reporting needs of Ecologically Sustainable Development

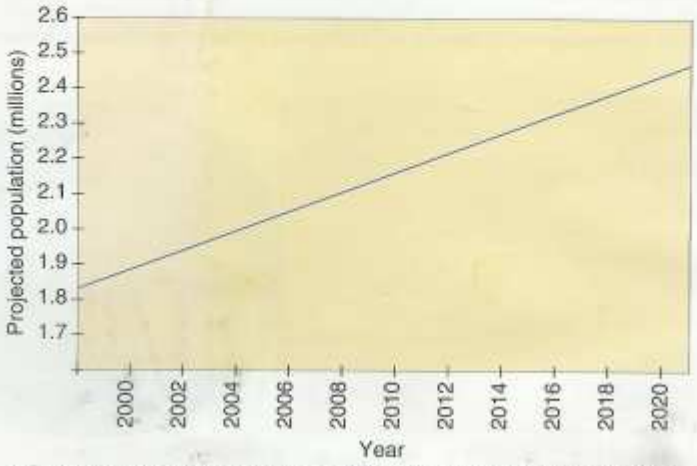
Source. Historical fishery attributes and changing management expectations - a mismatch?
R.C. Lenanton

The allocation of fish resources between users is a difficult task. The task is made more difficult by a lack of definitive information on the abundance of many coastal fish stocks and natural environmental variations. In addition, a lack of time series data on the recreational fishery, and uncertainty around the level of accuracy in commercial fishing returns, also means that scientific research can't not provide a robust analysis of actual resource shares.
(Protecting and Sharing Western Australia's Coastal Fish Resources

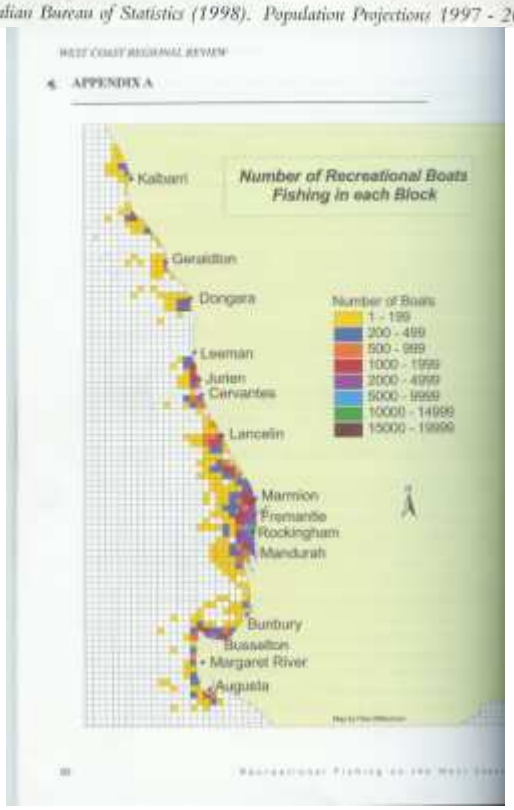
The Path to Integrated Management – FMP 135)

Figure 7: Trends in recreational fishing participation rate and fishing effort against predicted population growth 1987 - 2020.

Figure 7(a): Population projection for Western Australia (ABS Series II).



References: Australian Bureau of Statistics (1998). Population Projections 1997 - 2051.



Initiatives from the commercial sector

1) Immediate suspension of all commercial demersal finfish take in Zone 5 until the fishery has recovered to agreed levels. But still allow a recreational bag limit for personal consumption. All new proposed rules/ regulations must apply to commercial licence holders wishing to participate as recreational anglers.

2) No commercial take of tuna or billfish in Zone 5.

3) Immediate suspension of all Swan River/Canning River commercial crabbing /gillnetting including the wet licence in Cockburn Sound as recommended in the Labor Governments Election Policy 2005

Initiatives from charter vessels

1) The total take on Fishing Tour Operators for a days fishing needs to be seriously addressed. Personal Recreational fishing Bag limits should not apply on a fishing tour. Bag limits for a group of recreational fisherman fishing off one vessel should be restricted by number of fishers on board a Fishing tour. i.e. **This is an example only**

.....*Number of People in Boat*. .....*Number of bag limits in boat limit.*

.....1.....-3
.....2 1
.....3 2
.....5 – 9 3
.....10 - 16 4
.....17 – 25 5

2) All charter vessels must carry and use a release weight.

3) No new Fishing Tour Operator licenses to be issued in Zone 5, and existing licenses to be rationalized.
There is now a moratorium on the issue of any further fishing tour licences in fully exploited fisheries until there is sufficient data for an assessment of the sectors relative impact on the states fish stocks.

(State Of fisheries Report 2002/03)

4) Only one Fishing tour operation within a 24 hour period in Zone 5 (0001am-2359pm

Recommendations to the government of Western Australia

1) Undertake serious evaluation of stocking fresh/salt water impoundments to take pressure off wild fisheries. This will need to include translocation of eastern state species i.e. Murray cod, Golden Perch and Australian bass. Evidence now indicates that this has already happened in an unmanaged way

NSW / VIC and QLD have embraced this concept in a managed way from small dams to large bodies of water that include water catchments/ lakes and private dams (NSW has 96). These impoundments are attracting Recreational Fisherman from around the country and the world. Thus creating regional employment and economic activity

2) State government to buyout all existing river and estuarine commercial net licenses in Zone 5
In 1996 the Western Australian government set aside $8M over 4 years for a resource sharing initiative, in line with the 1996 coalition fisheries policy. By the end of August 1999 the process had bought out 46 commercial fishing licenses at a cost of $3.2M and successfully removed both real and latent commercial effort in may targeted fisheries these included 3 from the Swan River estuarine system and 9 from the Mandurah system. However, given the potential ability of remaining commercial operators to increase their catches the simple removal of some commercial fishing licenses in these areas may not ultimately make a larger share of the resource available to the recreational sector, and will need to be complemented by other measures to ensure a reduction in total commercial catch over time.

Source (Protecting and Sharing Western Australia's Coastal Fish Resources. The path to Integrated Management – FMP 135)

3) Establish artificial reefs by way of environmentally sound wrecks in inshore waters and off shore waters deeper than 100 meters of Zone 5. *Recfishwest is has ongoing efforts to obtain HMAS Orion for this purpose.*

4) Actively promote catch and release fisheries and low impact eco-tourism in Zone 5

5) All non-listed deepwater species to be classed as Category 1 immediately. This would include hapuka, blue eyed trevella, grey banded cod etc. Other non-listed species such as western fox fish also needs to be placed in the Category 2 class, due to initial data showing these species maybe long lived.

6) Compliance is a key issue for management. Raising fines substantially for non-compliance and rigorously applying confiscation laws already in place will ensure most people adhere to the regulations. Monies collected from illegal activities to fund more fisheries compliance officers.

Conclusion

There can be no argument that the metropolitan waters are under increasing pressure from all sectors, with corresponding impacts on many target species.

The Metropolitan fishery needs management/Government to seriously consider implementing a zone for this bioregion.

This draft proposal is open for serious debate and comment. The issue is more the concept of a Zone for the metropolitan waters that would provide a sustainable fishery for the metropolitan waters for the foreseeable future.