

INTRODUCTORY COMMENTS BY WESTERN AUSTRALIA (Draft)

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Aquatic Resources and Fisheries in WA

Western Australia has the longest coastline with a diverse set of aquatic resources and fisheries.

Under the Offshore Constitutional Settlement, WA effectively has jurisdiction over the management of all fisheries off WA out to 200nm except for a few 'straddling stocks' such as tuna.

The key fish resources managed by WA include rock lobster, abalone, prawn, scallop, nearshore and deepwater crabs, pearls, herring, tropical and temperate snappers, shark, small pelagic, octopus.

There are over 40 commercial fisheries, about half of these access resources that have significant recreational catches

Commercial sector – generates \$500 mill annual GVP plus an estimated > \$1 billion in annual turnover based on export and domestic sales and estimated >\$4 billion in access entitlements.

Recreational sector - over 600,000 people go recreational fishing each year generating significant economic turnover and high social amenity values.

Aboriginal sector - culturally important for coastal based aboriginal communities.

Management Policy and Legislative Systems

WA also has a strong history of innovative fisheries management

- First limited entry fishery in 1960s (all commercial fisheries are now "limited entry")
- First MSC certified fishery in 2000 (there are now 12)
- One of the first to begin an Integrated Fisheries Management policy (establishing Commercial and Recreational catch allocations) in 2000
- First risk based ESD management policy adopted in 2002
- First whole of resource-based EBFM policy adopted in 2010.
- The new Aquatic Resource Management Act (ARMA) provides the updated legislation to implement EBFM which requires setting specific outcome-based objectives for the use of the resource, clear sectoral allocations, plus priority allocations for customary fishing. This will be proclaimed in Nov 2023.

EBFM Approach

EBFM takes a 'whole of resource' approach to ensure coordinated management of all fishing activities on a resource.

It requires assessments of risk to all ecological (captured species, habitat and ecosystem), social, economic and governance elements at the resource level.

For multi-species resources, an 'indicator species (which are the most vulnerable in the suite) approach' is used to assess risk status of the entire resource/suite to determine overall management.

The level and complexity of management activities for a resource are based on a combination of these risks, plus the relative economic and social value of the resource to the community.

Current Sustainability Outcomes

The status of all resources and their fisheries are assessed annually and reported to Parliament as a KPI. Currently 98% of WA fishery resources are assessed as not being at risk from fishing.

12 commercial fisheries, representing about 90% of WA's GVP and one recreational fishery, now have certification under the MSC third party, independent assessment process.

The main sustainability risks being addressed are generated from environmental/climate impacts.

The key management issues to be addressed are setting appropriate inter and intra sectoral access allocations.

Managing Sectoral Catch Levels

A fundamental requirement of fisheries management is to effectively manage the catches of each sector to sustainable levels – noting that these levels will always vary through time.

For commercial fisheries this must involve limiting overall capacity through some combination of 'input/effort controls' such as the number of entrants, the amount and type of gear that can be used, the length of time this gear can be used, the location where it can be used, and the seasons when it can be used;

Plus, (for some fisheries) by also imposing output controls that specify the maximum level of catch they may take per 'licence' or 'unit' (quota) using the allowable gear in the allowable locations etc.

The choice of whether a resource/fishery is best managed solely using gear/effort/time/space, or if a catch quota may also assist, is best determined by assessing a range of criteria:

- Complexity of the resource (single to multi species),
- Survivability of discards (high to low)
- Targeting ability of the gear (selective to non-selective),
- Precision and predictability of stock size prior to season (high to low)
- Age structure of stock (multiyear to just recruits)
- Proportion of fishing on schools or local aggregations (High to low)*
- Relative cost of compliance, stock assessment and quota monitoring *cf* GVP (low to high)

The more each of the criteria score for a fishery is on the left side of the range, the more appropriate it may be to consider use of quota management and vice-versa.

*If a fishery targets local aggregations this can be sufficient by itself to require quota-based management because this behaviour can make effort controls less effective (catch rate does not directly reflect abundance).

Application of ITE and ITQ Approaches within WA

Based on the above criteria, of the 34 major managed fisheries in WA, 22 are effort-based and 12 are quota-based.

The key quota fisheries are all essentially single species fisheries including those that target individual species of lobster, abalone, pearls, crabs, small (sardines) and large (Spanish mackerel) pelagic fish; plus one that targets spawning aggregations of snapper.

The key effort-controlled fisheries cover the numerous multispecies resources we have in WA, which are often taken by multiple methods and multiple sectors. This includes several separate multispecies prawn fisheries, suites of tropical and temperate demersal finfish plus various mixed, small scale nearshore/coastal finfish and invertebrate fisheries.

Assessing Management Performance

The success of the current management arrangements for each fishery in controlling catch to the levels determined by its harvest strategy, is assessed annually and reported as a KPI in the Annual Report.

For effort-based fisheries, success is assessed by whether the annual catch fell within its current acceptable range.

For quota-based fisheries, this is assessed by whether the current quota was taken and whether the level of effort to do this was within the acceptable range.

For the most recent reporting year, 91% of commercial fisheries had acceptable catch or effort levels

Of those that require adjustment, there were similar proportions of quota-based and effort-based fisheries now having appropriate adjustments made to their management settings.

Implications of Unitisation for Social and Economic Outcomes

Having some form of tradable 'access right' is now considered a fundamental requirement for the effective management of commercial fisheries.

Determining which commercial fishers are granted access into each managed fishery within WA, plus the relative number of units they were allocated in that fishery, was based on some form of catch history.

Each of the managed commercial fisheries in WA are now unitised using either an Individual Transferable Effort (ITE) or Individual Transferable Quota (ITQs) to enable each Managed Fishery Licence (MFL) holder in that fishery to trade their entire MFL, or some level of their effort or quota units to other MFL holders either on a fishing season or permanent basis.

The level of access (quota or effort) assigned per unit each season can go up and down as determined by the harvest control rules in line with changes in stock abundance. Our new ARMA based harvest strategy also requires consideration of the social and economic outcomes and we have already examined how moving the management target used to set lobster TACCs can significantly affect triple bottom line outcomes.

The smaller the scale of the fishery the more likely it is for an owner operator to still be the MFL/unit holder. The greater the level of division of units and the higher the value of the resource, the more separation there may now be between the owners of the units (MFL owners) and those who now undertake the actual fishing operations (skippers, other MFL holders).

Consolidation of the units in a fishery has occurred both for high value quota fisheries (e.g. lobster) and high value effort-controlled fisheries (e.g. prawns). This has been most obvious where vertical integration efficiencies from catching to processing to marketing can be obtained. This trend is consistent with all agricultural sectors.

It is generally not been practical to try and develop regulations that limit the level of ownership of units in a specific fishery.

Conclusion

The current sustainability outcomes for target stocks and other ecological elements, plus the management success in effectively controlling catch levels for WA resources demonstrates that quota and effort controls can each be highly effective where they have been applied appropriately.

The decision to consider use of quotas for a fishery should first be based on whether this is an effective and efficient method for not only for managing the risks to all target species but also risks to byproduct, discard and other impacted species.

Where these conditions are met, the next consideration is to what extent having quotas will improve the economic efficiencies for the catching sector and/or the processing sector and any likely flow on market, employment etc implications.

Any form of unitised access can lead to consolidation of ownership and generate flow on social and employment effects. Quotas are, however, more likely to result in non-fishing 'investor' owners.

A key element of the new WA legislation is that the Minister must define an explicit main objective for the uses of the resource on behalf of the community, this will assist determine the most appropriate management settings (performance levels) and fishing arrangements (quotas/effort/time, space etc) to deliver the desired overall outcomes.

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