COMMERCIAL FISHERY ALLOCATION PROCESSES AND MECHANISMS
THE WESTERN AUSTRALIAN PERSPECTIVE

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ABSTRACT

Few issues in commercial fisheries management are as emotive as the determination of which operators should gain access to a new fishery, and the allocation of each access holder's entitlement.

Over the past four decades in Western Australia, commercial fisheries management processes, as well as the implementation of access and allocation mechanisms have become more sophisticated. Some of the issues associated with such processes and allocation mechanisms are illustrated with Western Australia’s experience in three fisheries - the Northern Demersal Scalefish Fishery, the Mackerel Fishery, and the proposed West Coast Demersal Scalefish Fishery. The development of these three fisheries has been the key to the State’s progressive improvement of management processes, and the mechanisms used for determining access and allocation.

Management processes have become increasingly independent, transparent and consultative and this has resulted in the development of access criteria and allocation mechanisms that have increasingly attempted to address fairness and equity issues as well as sustainability.

Despite the positive outcomes, the operation of independent panels and the extensive consultation required in order for them to fully consider all relevant issues can greatly extend the timeframe of a review process and the implementation of management change. This in itself can raise further equity issues. Striking the balance and setting realistic timeframes for action should maximise the opportunity for stakeholder participation and the resolution of equity issues, without compromising sustainability or Government credibility.

Keywords: commercial, access, allocation, processes, mechanisms.

INTRODUCTION

Few issues in commercial fisheries management are as emotive as determining who should gain (or retain) access to a fishery when management arrangements change, and how much entitlement they should be granted.

Over the past four decades, commercial fisheries management in Western Australia (WA) has primarily focused on the implementation of limited entry management regimes for individual fisheries. The vast majority of WA's commercial fisheries are now covered by these management arrangements. As such, the WA Department of
Fisheries (the Department) has extensive experience in management processes as well as the implementation of mechanisms for determining access and allocating entitlement.

In this paper, we will examine issues associated with determining access and levels of entitlement in commercial fisheries from a WA perspective. This will include discussion around the evolution of consultation processes and allocation mechanisms. Specific reference will be made to three State-managed fisheries, which are illustrative of this progression - the Northern Demersal Scalefish Fishery (NDSF), the Mackerel Fishery (MF), and the proposed West Coast Demersal Scalefish Fishery (WCDSF).

A Brief Background to the Fisheries

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![Map of Western Australia showing the locations of the Northern Demersal, Mackerel, and West Coast Scalefish Fisheries.](image)

**Figure 1.** The location of the Northern Demersal, Mackerel and West Coast Scalefish Fisheries.

**NDSF**

The NDSF is a trap and line fishery off WA’s Kimberley coast targeting demersal scalefish species such as snappers, emperors and cods. It is remote, widespread and fished by only a small number of participants (Figure 1).

**MF**

The MF is a troll and handline fishery operating from the WA/Northern Territory border south to Cape Leeuwin. The fishery is divided into three management zones (Area 1 – Kimberley, Area 2 - Pilbara, Area 3 - Gascoyne and West Coast). More so than many other commercial fisheries, the mackerel fleet has historically involved a
diverse range of fishers: those whose main source of income is derived from mackerel fishing; those who have consistently taken small quantities of mackerel as part of diversified fishing operations; and those who opportunistically take mackerel (Figure 1).

**WCDSF**
The WCDSF is primarily a handline and dropline fishery for demersal scalefish species such as WA dhufish, pink snapper and baldchin groper. The fishery operates between Kalbarri and Augusta. Like the MF it has historically involved a diverse range of fishers from those who exclusively target demersal scalefish to those who do so only opportunistically or occasionally (Figure 1).

**PROCESS**
The development of management plans for the NDSF; the MF and the WCDSF demonstrate the shifts that have occurred in management processes over time.

**Northern Demersal Scalefish Fishery**
The history of the NDSF is long, arduous and sometimes acrimonious. It was formed by the amalgamation of two existing fisheries – a State trap fishery and a Commonwealth line fishery (which was transferred to the State’s jurisdiction in 1995).

The continuation of this dual management approach rather than the immediate introduction of a single managed fishery (upon the change in jurisdiction of the line fishery) was arguably the first major flaw in the development of the NDSF.

Shortly after taking over responsibility for managing the line fishery, the Department advised relevant operators that they would be granted line fishing endorsements and only days later decided against proceeding with management on that basis. This had unfortunate consequences including:

- some fishermen acted promptly on initially hearing they would be granted line endorsements and incurred significant financial losses when the “approvals” were rescinded;
- suspicion persisted (incorrectly) among some fishermen that some people were granted special line authorisations which they used to later gain access to the NDSF; and
- the events throughout 1995 conveyed an impression of lack of foresight, changeability and poor communication within the Department that complicated later dealings with commercial fishermen.

In attempting to improve the transparency of the process the Department published a paper in 1995 anticipating the creation of the NDSF from the separate line and trap fisheries. The Minister established a working group, including commercial fishermen and other representatives, to make proposals for a management plan. Unlike in subsequent processes, the participants were drawn from groups who were to be directly impacted by the outcomes of the process. This lead to claims and counter-claims of vested interests and from the outset the operation of the working group was the subject of complaints about its membership, lack of access to key information and the way business was conducted and recorded.
Even within the working group, there was a lack of cohesion and its ‘final’ report included various dissenting and qualifying remarks. The most contentious issues were the access criteria (who and how many fishermen would qualify) and the fishing effort that would be allocated to permit holders. Because of continuing discussion and argument, the interim management plan for the NDSF was not introduced until more than two years after the first working group meeting.

By this time, fishermen were repeatedly raising questions and complaints about the Department’s handling of the process (including the transparency of catch history records, independence of the working group, and Departmental processes) and they pressed for enquiries via Parliament and other channels.

Perhaps the most influential of these enquiries was that of the Auditor General of WA, in his 1998 Public Sector Performance Report. He found that “some of the problems [of the NDSF process] might have been avoided” and that “some matters could have been better managed by the Fisheries Department”. He noted “some of the complaints and much of the consequent management effort might have been avoided by better planning, improved communication and tighter administrative practices”.

As a result, the Department sought to improve subsequent management processes by:

1. implementing pre-management catch history validation which involved providing fishers with statements of the data held by the Department, requiring them to confirm the record as reasonable and correct, and reminding them that catch history might be used to determine access to future managed fisheries;

2. removing the Department, and stakeholders with vested interests, from having control over the community consultation process by shifting this responsibility to Ministerially appointed independent panels; and

3. clarifying the roles of Department officers (and independent panels) and the processes for providing advice in different capacities (e.g. as Department members on panels and Executive Officers of these committees).

**Mackerel**

Noting the outcomes of the NDSF process, and following calls from industry for greater independent scrutiny, the Mackerel Independent Advisory Panel (MIAP) was formed by the then Minister to recommend:

1. criteria for access to the commercial MF;

2. criteria for allocation of entitlement within the fishery; and

3. an appropriate management regime.

The Western Australian Fishing Industry Council (WAFIC) as the commercial fishing industry’s peak body and Recfishwest (the recreational sector’s peak body) were provided with the opportunity to comment on the terms of reference for the MIAP. The MIAP consisted of an independent chairman and four members (two industry members – with fishing expertise but with no interest in the MF, a member with legal qualifications and a Departmental member).

The creation of the MIAP was an important step forward for the Department. It essentially put the above processes at arms length from the Department (although the Department was represented) and the mackerel industry and therefore, effectively removed vested interests from the process.
The MIAP conducted its own consultation processes, through which the Department, like all other stakeholders, submitted its views for the panel’s consideration. Further, as described above there was a ‘validation’ of the catch history records used to determine access and allocation.

Thus the development of management arrangements for the MF was a significant improvement on the NDSF process. However, in doing so new issues were created, including:

- The MIAP’s role was confounded by the need to determine access to, and allocation within, the MF (which probably benefited from the legal expertise employed and the independence of the MIAP) and operational management arrangements (which may have been better determined by fishermen with expertise directly related to the fishery); and
- Key groups of fishermen lobbied the Minister outside the formal process, which may or may not have been avoided with more thorough consultation.

There was clearly room for further improvement in the process before the Department embarked on the biggest development process so far – the WCDSF.

**The West Coast Demersal Scalefish Fishery**

In 2003 two independent panels were established to conduct a review of the WCDSF. The Management Planning Panel (MPP) was appointed to develop management arrangements for the fishery while the Commercial Access Panel (CAP) was put in place to recommend criteria for access to, and the means for allocating entitlement within, the WCDSF.

This was the first time a two-Panel system had been used in a fishery management review in WA. It was employed to separate the task of determining management arrangements (which requires extensive input from commercial fishers) from access and allocation (which benefits from an independent analysis of fairness and equity issues).

As in the MF process, WAFIC and Recfishwest were involved in suggesting appropriate persons to be included on these panels. This reduced the risk of complaints about the credibility or independence of each Panel.

The MPP consisted of an independent chairman and six members (three fishermen, one fish processor, one recreational fishing representative and a Departmental representative, all of whom had interests in the management outcomes). The CAP consisted of only three members - an independent chairperson (a Magistrate of the State Law Courts), one person with extensive fishing background and a former senior public servant. None of the CAP members had a direct interest in the WCDSF.

The Panels conducted their own consultation processes. In particular the CAP initiated four rounds of public consultation. As part of these processes, the Department submitted its views, along with all other stakeholders, for the Panel’s consideration.
As in the MF process, there was a ‘validation’ of the catch returns, which in time, are likely to be used to determine access and allocation to the fishery. However, unlike in the MF, this validation process occurred at the start of the review. This ensured that fishers could participate in the review process having agreed their catch history with the Department.

It is interesting to note however, that the issues raised in the NDSF and MF processes that were addressed as part of the WCDSF review, actually created some issues of their own. In particular, it has been suggested that the WCDSF process involved too much consultation which may be responsible for the proposed timeframes not being met. The WCDSF development process began in an environment of urgency and was positively driven by both the commercial and recreational stakeholders. However, as timeframes were extended with each round of consultation and detailed deliberations around fairness and equity issues, urgency led to necessity. ‘Band aid’ management may now be required in some areas ahead of the delivery of the long-term management package. Furthermore, the longer the process took, the greater the level of distrust from stakeholders who had growing concerns about outcomes being achieved.

**ALLOCATION MECHANISMS**

Just as there has been an evolution in the processes used by Government to consult with stakeholders and develop advice on allocation issues, so too has there been a shift in the nature of the mechanisms used to determine access and allocate entitlement in WA’s commercial fisheries.

**Determination of Access to Fisheries**

The first step in bringing a commercial fishery under management is to determine who should have access to the available entitlement.

There are potentially many ways of doing this, but the approach that has traditionally been used in WA is to base access determinations on catch history alone. The extent of ‘history’ taken into account is generally influenced by publicised investment warnings otherwise known as benchmark dates (beyond which catch history may/will not be taken into account in future management processes). The MIAP and CAP did consider a number of alternative methods (including investment, financial reliance) but ruled most out on the grounds that they were too difficult to assess and objectively verify.

In WA, entry criteria have traditionally been based on achievement of a relatively high level of catch history, thus resulting in only a small number of larger-scale, often single-fishery focused operators retaining access. For example, in the NDSF, those wishing to operate in the offshore zone by line were required to either demonstrate catch history of at least 5 tonnes of demersal scalefish by line in the area of the fishery in three out of the four criteria years, or to have had access to both the pre-existing limited entry trap and line fisheries. As a result, just two operators were permitted to fish by line in the offshore zone of the NDSF.

For those who gain access to a fishery, this approach increases the likelihood that the level of entitlement issued to them will approximate their pre-management level of
fishing activity. There are also distinct advantages for Government including reduced costs of management and compliance.

However, this mechanism fails to recognise the circumstances of smaller or diversified operations, making the implicit assumption that their more modest catch levels are not integral to their business.

With this in mind, industry was concerned that by setting entry criteria for the MF that catered only for those whose operations were based exclusively on mackerel, smaller (and diversified) operators would be deprived of an important source of income. This was in fact one of the key factors which resulted in the formation of the MIAP.

The MIAP’s desire to address these concerns, as well as its recommendation for a sophisticated unitised management system ultimately resulted in the adoption of access criteria which provided scope to recognise a broad range of fishing operators. For example, it was possible for an operator to gain access to Area 1 of the MF (the area where the highest catches are achieved) having recorded as little four tonnes in total of mackerel over a seven-year criteria period.

It should be acknowledged that the leniency of the criteria was countered by a minimum operating holding (i.e. the minimum level of entitlement that must be held in order to operate in the fishery). This requirement was put in place to encourage rationalisation of the MF. However, the salient point of this approach is that even if an operator does not obtain a level of entitlement which permits them to fish, they have a choice of whether to use their initial allocation as a base for re-investing in the fishery, or to realise a financial benefit from their past fishing history by selling their entitlement.

The greatest potential failing of the MF process was the extensive time lag between the end of the criteria period (which coincided with an investment warning - known as the “1997 benchmark date” - applying to all remaining unmanaged fisheries) and the date on which the MF management plan came into effect (approximately seven years). In particular, it created an environment where those who had not fished for mackerel in a number of years could qualify for access, but those who were mackerel fishing at the time the management plan was introduced could be denied a permit.

In recognition of this possible scenario the MIAP actively considered whether the 1997 benchmark date represented a fair and equitable basis for determining access criteria. In so doing, it was noted that a specific warning against investing in the MF off the Pilbara and Kimberley coasts had in fact originally been published almost two years before the 1997 benchmark date. The MIAP ultimately adopted the view that decisions made despite the investment warnings were made at an operator’s own risk.

The CAP also recognised the significance of the 1997 benchmark date, when developing recommendations for access to, and allocation of entitlement within, the WCDSF. However, it found it impossible not to acknowledge the length of time (eight years) that had elapsed since. Therefore, the CAP has recommended that while pre-benchmark date history should play a key role in determining access to the WCDSF, post-benchmark catch history must also be recognised.
Regarding the benchmark date, the CAP formed the view that priority access should be given to long-term fishers (that is, those who have catch history both before and after the benchmark date) but recognition should also be given to operators who met a minimum catch threshold in either the pre- or the post-benchmark criteria periods. As in the MF, the CAP’s recommended access criteria are generous enough to recognise the diversity in the scale of demersal scalefish operators (i.e. operators whose business is based exclusively in the WCDSF as well as small and diversified operators).

**Allocation of Entitlement**

Once the pool of eligible operators has been determined, the available entitlement can be allocated amongst them. There are two broad allocation mechanisms, based on:

1. allocating an equal level of entitlement to each participant; or
2. allocating different levels of entitlement to each participant according to specified criteria or formulae.

The Department has employed both types of allocation mechanism in the management of the State's fisheries.

For example, in the NDSF, the total allowable entitlement for each method (trap and line) was divided equally between operators who gained access by each method. While such allocation regimes are relatively simple to administer, and are easily understood and transparent, they can only realistically be applied where there are a small number of operators or the degree to which each operator accessed the fishery (prior to management) was similar.

For instance, when considering allocation mechanisms for the WCDSF, the CAP observed that if the target catch were divided equally amongst all potential fishers, each would receive an allocation equivalent to 600 kg. This would seriously disadvantage those long term operators who consistently catch around 30 tonnes per annum, while giving a bonus to those who rarely, or even never, fished.

As the above illustrates, in circumstances where the number of access holders is large and or diverse in nature, an allocation model that allows different levels of entitlement to be granted to each operator is far more equitable.

In the MF a simple proportional access model was implemented. This involved allocating entitlement based on an operator’s proportion of the total mackerel catch (of eligible operators) in the relevant management area during the criteria period. In other words, if an operator’s mackerel catch in Area 1 during the criteria period was equal to 20% of the total mackerel catch (by all access holders), that operator received 20% of the available entitlement under the new management arrangements. As such, the largest operators received the largest level of entitlement, while the smaller ones received proportionately less.

While this system has the potential to be highly equitable, its validity diminishes as the length of time between the end of the criteria period and the implementation of management increases.

The CAP has sought to overcome this problem in the WCDSF by recognising both pre- and post-benchmark date catch history for both access and allocation. Further,
recognition of the importance of benchmark date announcements, it suggests the pre-
benchmark date catch history be weighted over the post at a ratio of 60:40. Although
this is likely to be welcomed by industry, it too has disadvantages in that initial
investment warnings did not specify that catch history had to be in the area in which
operators intended to operate. Operators who bought licences directly before the
benchmark date announcement, or operators who have moved towns within the 12
year criteria period, may not receive an allocation (or an allocation reflective of
current activity) in the town that they are currently operating.

CONCLUSION
This paper has attempted to illustrate the progressive development of management
consultation processes, and the mechanisms used for determining access and
allocation in WA.

Management processes have become increasingly independent, transparent and
consultative. This has resulted in the development of access criteria and allocation
mechanisms that have increasingly attempted to address fairness and equity issues as
well as sustainability.

However, despite these positive outcomes, the operation of independent panels and
the extensive consultation required in order for them to fully consider all relevant
issues can greatly extend the timeframe of a review process and the implementation of
management change. This in itself can raise further equity issues and questions of
credibility.

There is clearly a need for balance – between independent scrutiny and Government
action, between too little and too much consultation and between the needs of small
and large operators. There also needs to be recognition by both Government and
industry of the time and resources needed to review and implement management
change within this new paradigm.

Striking this balance and setting realistic timeframes for action should maximise the
opportunity for stakeholder participation and the resolution of equity issues, without
compromising sustainability or outcomes.

REFERENCES

Auditor General of Western Australia. 1998. Report Number 12 Public Sector
Performance Report 1998. E-mail: info@audit.wa.gov.au,

Constitutional Settlement, Western Australia. Department Of Fisheries (WA).

Allocation Arrangements for the Commercial ‘Wetline’ Fisheries - Proposals for
discussion. Department of Fisheries (WA).


