

Resource Sharing Challenges in the WTBF

A Practitioners View of the Resource Sharing Process

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ABSTRACT

At the heart of resource sharing decisions are choices about resource sustainability and private access to public assets. Decisions must ensure resource integrity, and balance recreational enjoyment against commercial return. Good decisions follow when choices are participative, grounded in fact, and enable equitable outcomes going forward.

But the real world is dynamic, comprising marine, economic and social sciences – there are demographic and urban social pressures, fluctuating market prices and input costs, jurisdictional policy collisions, risk capital seeking a return, jobs in regional towns, etc. Getting to a resource sharing agreement is challenging.

Australia's Western Tuna and Billfish Fishery was the testing ground to develop workable resource sharing approaches;

- *the resource - key tuna and tuna-like species in waters bordering half of the continent;*
- *the claimants – commercial, and recreational fishers (predominantly game and charter fishers).*
- *the timeframe – four years*

From October 2001 stakeholders discussed issues and collated worthwhile research. In November 2004 a stalemate had been reached. An independently facilitated process then consulted, reviewed and collated data, and developed options for Ministerial decision in October 2005.

This paper brings a practitioner's view of the inputs to establishing viable resource sharing, key aspects of the negotiation process, outcomes achieved, and what selected learnings would be in a resource sharing toolkit. It does not dwell on the appropriateness of the options developed or the subsequent Ministerial decision.

Experience confirms resource sharing is a dynamic journey, not a destination. Going forward, resource access agreements must be periodically refreshed through strident renegotiation. How else will the Australian community ensure public assets are efficiently managed for their optimum environmental, social and economic return?

Keywords: resource sustainability, resource sharing, independent facilitation

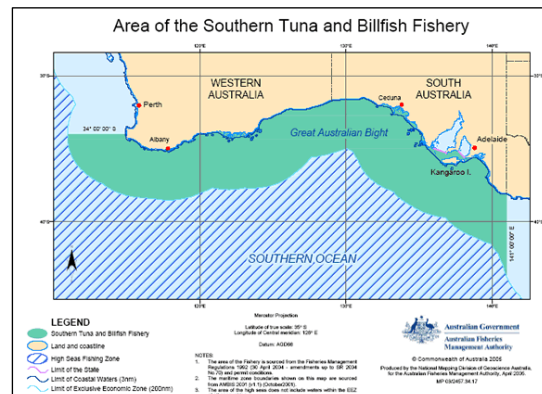
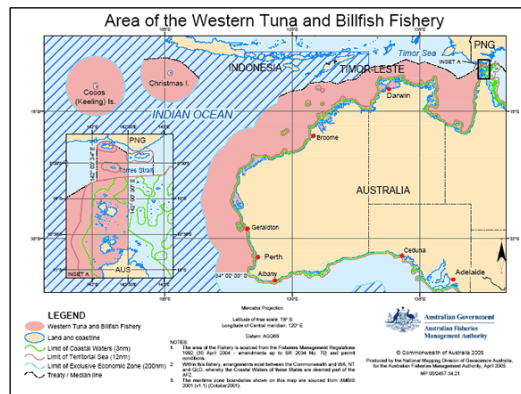
WHAT IS AVAILABLE TO WORK WITH

Effective independent facilitation is a human process, equally at home in dispute resolution as it is in resource sharing negotiations. Trust in process relies on transparency of process, empathy with credible arguments, honesty regarding expectations and fair dealing with facts.

This section will deal as efficiently as possible with the key facts of the case.

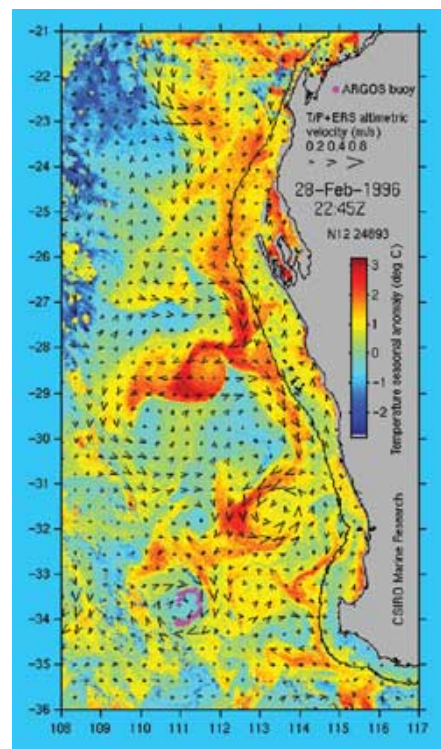
Oceanography

The Western Tuna and Billfish Fishery (WTBF) is Commonwealth managed with day to day management tasks performed by the Australian Fisheries Management Authority (AFMA). The 2 parts of the fishery comprise more than 50% of the coastal waters of the continent. The key waters of interest for Resource Sharing involve tuna and tuna-like species in a range from Broome to Albany, a coastline of some 2000 klms.



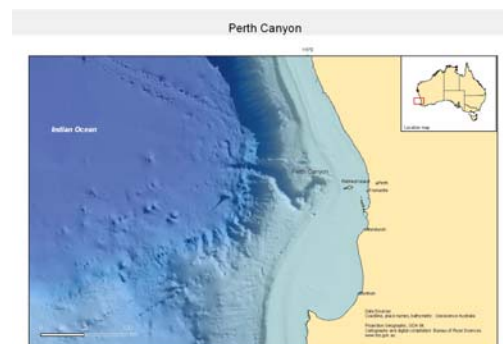
Map courtesy of AFMA

Under an Offshore Constitutional Settlement Fisheries Arrangement (OCS) between the State of Western Australia, and the Commonwealth, for tuna and tuna-like species, species fished in the WTBF are managed under Australian Government law from the shore to the outer edge of the Australian Fishing Zone (AFZ). Scientists agree the two dominant ocean influences impacting on the catch of pelagic species in these waters are the seasonal south flowing Leeuwin Current, and the continental shelf. The warm southerly current in summer and autumn brings tropical pelagic species with it. The attendant eddies along the edge of the current and its confluence with the edge of the continental shelf and sea-bed topographic features, are the major driver for localised uprisings of cool nutrient rich waters that are important aggregation sites for pelagic species. These hotspots of localised fish abundance are targeted by fishers from both sectors. Effectively 100% of the “beneficial impact” of the Leeuwin Current would fall within the corridor of the 200m isobath plus 25nm.



Map courtesy of CSIRO

The shelf varies from 30klms wide in the south to more than 150klms wide in the north, but at Exmouth is only 10 klms wide. Bathymetric features also include islands (Rowley Shoals, Abrolhos Islands, Rottnest Island) and trenches (Rottnest Trench / Perth Canyon) that are fish aggregation hotspots.



Species and Seasonality

Resource sharing negotiations involve all commercial fishing methods, but the predominant issues relate to access for longline fishing. Key species of common interest to commercial longline fishers and recreational fishers are striped marlin and yellowfin tuna, with lesser overlap regarding bigeye tuna and broadbill swordfish.

Blue and black marlin are declared recreational only species.

Commercial fishing occurs all year round, but with a northern focus in summer from September – April. Recreational fishing is highly seasonal with peaks in the south in summer, and the north in winter.

Longline shark bycatch, a significant issue, was excluded from the resource sharing discussions and addressed jointly by Commonwealth commercial fishers, State commercial fishers and the WA Department of Fisheries.

Fishery Management Theory

Commercial fishers target investment capital where expected revenues from fish sales in excess of expected fixed and variable costs, will be maximised. Recreational fishers pursue recreation and the fishing experience.

Fishery management theory suggests that recreational fishers seek to maintain biomass at 70-80% where strike rates of trophy sized fish are greatest. However, commercial fishers seek to harvest the fishery to maintain maximum sustainable yield in the range 40-60%. Fishery managers consider a fishery may be over-exploited if biomass falls below 50%. Therefore the potential theoretical biomass range for mutually acceptable resolutions of negotiations between commercial and recreational fishers is therefore in the range of 50-70%. However the interaction of highly pelagic species with this theory makes predictable biomass and strike outcomes less certain.

Organisations

Recreational interests were represented in the negotiation by the WA Game Fishing Association. The recreational fishing sector comprises private game/sport fishers, charter operators providing recreational fishing platforms on commercial terms, and private fishers. WAGFA (a chapter of the GFA of Australia) is relatively small with an active membership of around 1000 members targetting tuna and tuna-like species, from an estimated claimed total statewide recreational participation (all species, all methods) of about 658,000 people. WAGFA also represented the interests of the peak recreational body, Recfish Australia. Seventeen WAGFA affiliated clubs are spread along the WA coast from Busselton in the south to Broome in the north. Twelve clubs specifically target billfish and manage game fishing competitions, while 5 clubs undertake some game fishing. Game fishing anglers may also hold membership of the Australian National Sport Fishing Association (ANSA), or the Australian Fishing Clubs Association (AFCA), or be non-club anglers.

The commercial sector was represented by Tuna West, an established lobby group representing 124 longline permits in the fishery. The number of active longliners increased from 5 in 1997 to 46 in 2001, but decreased to 27 in 2003. In 2005 only 2 vessels were operating due to poor financial returns. Indigenous fishers are not significant in the WTBF.

Relevant History

History is important to the interpretation of access rights in the fishery. Did either party have a pre-existing right to fish based on historical usage? Was resource sharing going to allocate rights or was this going to be a reallocation of rights and therefore trigger some level of compensation?

The WA Game Fishing Association was formed in 1949. The Australian domestic commercial tuna fishery began in the 1950s as a pole-and-live-bait fishery, progressing to pole-and-line and purse seine vessels. The catch was small. The Japanese longline fishery for tuna and tuna-like species in the Indian Ocean began in 1952. Australian concern over southern bluefin tuna stock status in the early 1970s lead to withdrawal of fishing rights for this species for Japanese vessels. Since the declaration of the 200nm Australian Fishing Zone in 1979, access to Australian waters has been negotiated annually with Japanese vessels under a bilateral agreement. Japanese longliners were excluded from the AFZ in 1997. In 1998 the commercial catch and retention of black and blue marlin (alive or dead) taken anywhere in the AFZ was banned.

The Australian Government began the fishery resource sharing policy development process by convening a national workshop between stakeholders in Coolangatta in October 2002. At the conclusion of the event a number of principles had been agreed as a framework for the development of resource sharing negotiations in commonwealth fisheries.

A further matter was the disagreement between the WA State Government and the Australian Government regarding the commercial landing of commonwealth striped marlin. Legal jousting shifted the resource negotiation from a notional divide between fishing sectors, to a legal and inter-jurisdictional matter. This matter has since been resolved.

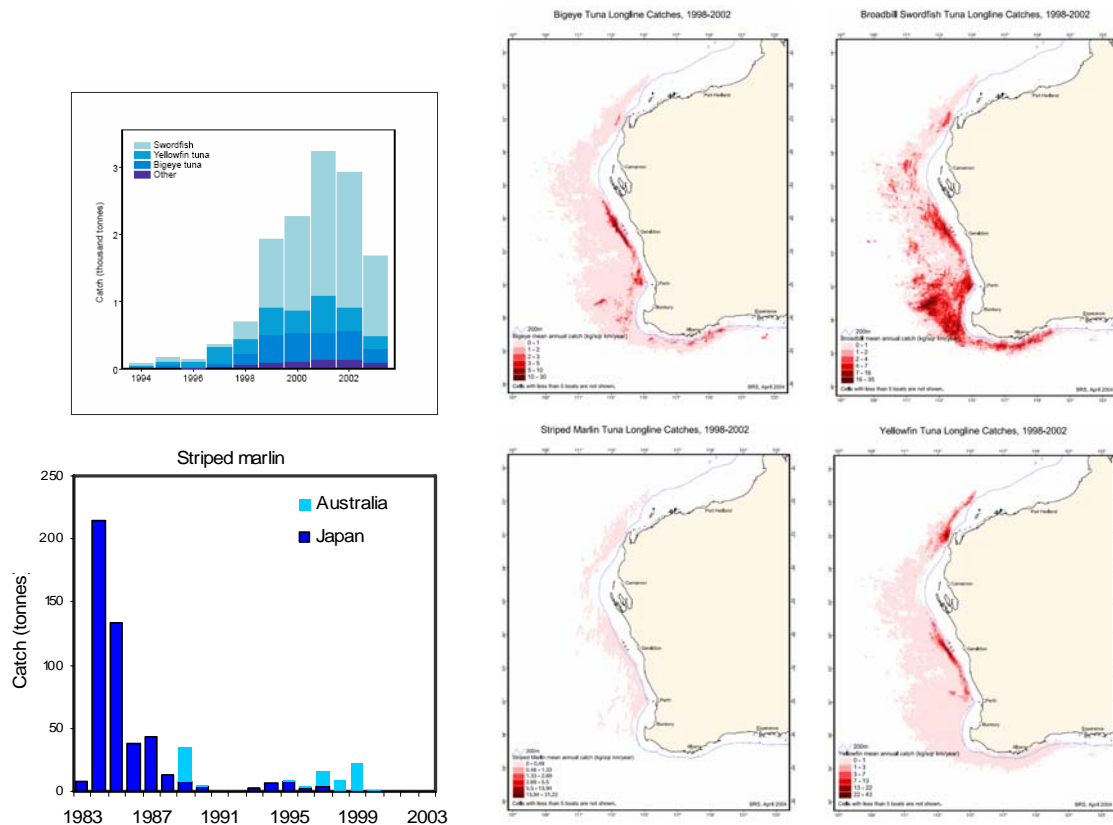
Relevant Data

Three data components are relevant – status of the fishery from an ESD stock basis; data from recreational sector and commercial sector data.

Data regarding the sustainability of the fishery was available, including some indication of the impact of assessment by the the Indian Ocean Tuna Commission of open ocean fishery status. But the quality of the subsequent interpretations is open to assumptions regarding the degree of stock mixing for highly pelagic species.

Good recreational fishing data was severely limited. WAGFA hold some data from 2002 by season, by species for tournaments and club activities, however there is limited indication by species of the finescale volume of catch, viability of release, or location of effort. Regions with high urban intensity and growth around Perth and coastal cities (especially Exmouth) exhibit the greatest demand for access to recreational fisheries. A combination of factors drive this growth for game fishing in particular, including increased leisure time available across the community, wealthier retirees, increased motivation for and participation in outdoor challenges, sports and life experiences, the cost effectiveness of improved marine technologies and vessel capabilities, improved fisheries management, and an increased desire to eat fresh seafood. Limited demographic status or trend data relevant to resource sharing negotiations has been collated by the recreational sector. The economic contribution of the recreational game fishing activities to the regional and state economies had not been documented.

The commercial sector (including foreign vessels up to 1997) has been required to collect fine scale data by location, by species by date since 1984. Extensive electronic data sets are held by AFMA. The figures shown below drawn from fine scale commercial records illustrate the level of data collated by AFMA. The recorded commercial value of the WTBF has declined from \$34 million in 2001 to \$8 million in 2003/4 due to both reduced effort and lower prices. However there is no detailed analysis available of the value of the WTBF to regional and state economies.



Data courtesy of BRS and AFMA

The business investment case for commercial fishers was also impacted by negative economic forecasts in late 2004:

- high global oil prices unlikely to return to the low levels of mid 2004. Fuel is a very large component of the cost of running a commercial vessel.
- global market prices for tuna will increasingly come under threat from the rising aquaculture tuna production. Over one third of the Japanese sushi and sashimi market is now supplied from tuna farms. Some WA longliners have announced new investment in yellowtail tuna farming near Geraldton.
- lack of Australian crews willing to spend extended periods at sea. Strong competition for regional employment from mining sector.

In the absence of credible data, the facilitator adopted a precautionary approach to the preservation of the marine environment where independent scientific opinion supported this approach. Ecologically sustainable development is a central tenant of all resource sharing agreements. Where the marine environment was not under threat, the approach taken was to give weight in decisions to social and economic drivers. The lack of data was a significant argument for limiting the initial resource sharing agreement in the WTBF to just 5 years. A longer period may have lead to overfishing or unfairly penalised one or more parties to the agreement.

Human Relations

From the first round of meetings between sectors initiated by the tuna fishing industry in 23 October 2001, a considerable level of goodwill had developed between parties. This was due to the desire by negotiators and scientists from both sides to find mutually acceptable solutions.

The Commonwealth policy development process (evidenced by the Coolangatta Workshop in Oct. 2002) overtook the local stakeholder collaborative initiative. The outcomes from this workshop were slow in coming forward and little progress was achieved in 2003. From March 2004 the Australian Government played a role as facilitator, with additional support provided by the WA Government, but the process did not move forward and parties were lost confidence outcomes would be achieved. It was clear in December 2005 that an independent process was necessary to overcome the stalemate. The early shared goodwill and process momentum achieved by the parties has dissipated and relations had become strained between the parties, and to some extent with the process.

Record of Negotiation

The parties, especially the commercial sector, had kept a well documented trail of the negotiation process. Some collated data and joint analysis were also made available. These were essential records to enable the momentum of the process to be quickly picked up by the independent facilitator.

THE FACILITATED PROCESS

Consultation

The facilitator adopted an open door approach to consultation, travelling to meet with stakeholders, researchers and government officers to ensure an inclusive approach. While this added to the cost of the process it was essential to quickly and independently assess the worth of existing data, and to put energy back into the process. All parties were positive disposed in their consultations with the facilitator. It was also important to discuss and agree with all stakeholders a pathway forward for the negotiation process to achieve a resolution of the negotiations within an acceptable timeframe.

The facilitator faced competing claims (many unsubstantiated) regarding the facts of the case and the impact on positions. While some of this was simply posturing by both sides and generally amounted to negotiation tactics, it proved hard to determine their merit where science was not able to establish the facts. For example,

- the proposition that the north – south flowing Leeuwin Current in El Nino years has a primary impact on the availability of pelagic species in southern waters could not be verified beyond doubt
- the extent of east – west long line drift in shelf waters that were eddying
- the mortality of recreational catch and release practices on targeted species.

Consultation was designed to meet and develop trust, identify the key players, enable easy and efficient data exchange, pick up existing research and points of agreement, provide insights to the facilitator regarding the way forward to reach agreeable solutions, provide an independent reference point for data and research or external reference to experts, throw up opportunities for additional useful research, explore and test the edges of negotiation positions, enable a forum for documentation of the progress of the negotiation, and provide the basis for closer discussions by representatives from all stakeholder groups.

The Australian Government provided support for the process at arms length.

Data Management

The integrity of prior catch and effort data is critical to resource sharing negotiations. The commercial sector had maintains detailed and credible databases recording its effort and catch since 1984. There was very limited good quality data available from the recreational sector. Data regarding the economic and social contribution of the recreational and commercial fisheries to the state and national economies and

community was also not available. In the end the lack of sufficient credible data precluded any decisive long term recommendations on Resource Sharing.

Negotiation Positions

The recreational sector focussed their expectation of the resource on a higher localised abundance of game fish to ensure that strike rates stayed high. Their interpretation of the oceanographic model assumed a stream of biological activity following the Leeuwin Current flowing north to south off the coast of WA. High levels of commercial fishing within the current would deplete fish abundances within the so called “river of fish”, with significant impact on breeding fish in the north. The central recreational sector claim was for a “corridor closure” down the coasts of WA, at least from North West Cape. Such closure would need to be well beyond (> 25nm) the shelf edge to minimise the impact of long line drift. Seasonal access would be permitted for commercial vessels to waters not used by the recreational sector in winter.

The commercial sector considered the southward flowing “river of fish” assessment of the oceanography to be simplistic. Rather they considered biological activity was driven by upwellings random eddies arising from interplay between the Leeuwin Current and the variable edge of the shelf. On this basis, it was the contention of the commercial sector that there was no benefit to be obtained from a “corridor closure” as the fish movement was not a linear north-south stream. Furthermore, the commercial sector expressed an expectation of the resource that they be allowed to fish as efficiently as possible within the laws of the land. As a result, any exclusion from the more efficient shelf top region would directly undermine their expectations, especially if this exclusion was (as it appeared to the commercial sector) not delivering a resource benefit for the recreational sector. Their proposed resource sharing option was based on long line exclusion “bubbles” around key recreational fishing ports out to a distance beyond the range of most game fishing boats (25nm permanently and 50nm during prescribed game fishing tournaments). All recreational vessels would be allowed to access any waters of the ETBF as desired.

Development of Options

A key task for the facilitator was to independently collate, document and disseminate the key issues, negotiation status and positions, facts, options and comments to the key negotiators and stakeholders. A initial report was released in April 2005 with stakeholders providing responses to this draft before these options were presented to the Minister in May 2005.

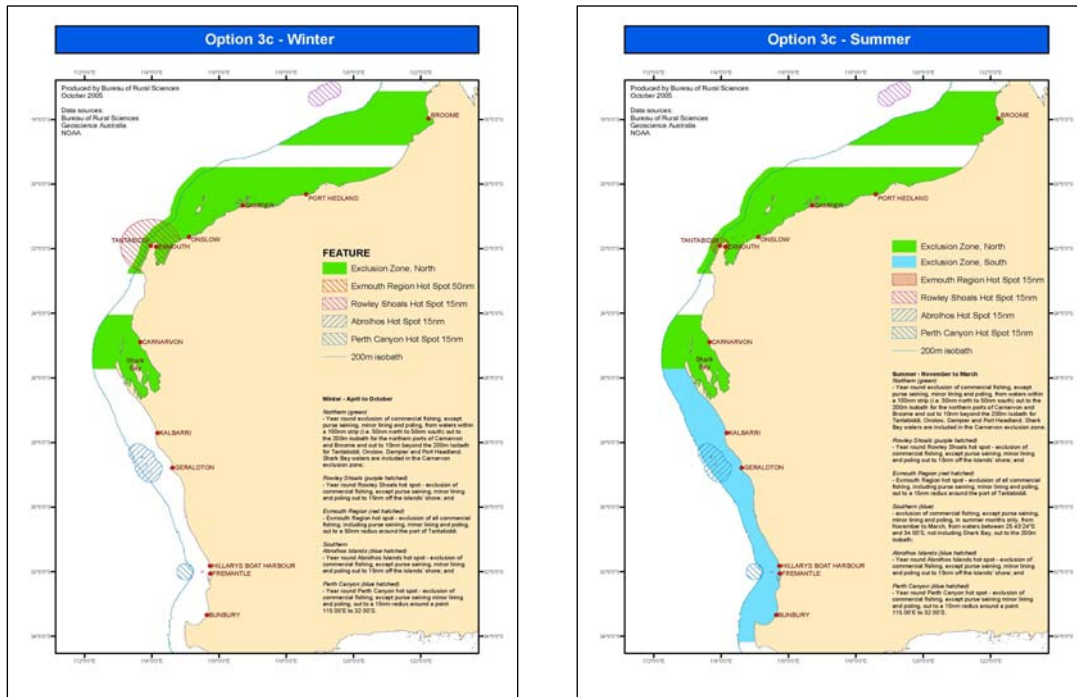
Six options were defined in the final report submitted in August 2005. These ranged from the complete closure of the commercial fishery, through to exclusion of the longline fleet from waters 25nm beyond the shelf. A preferred option was recommended to the Minister by the independent facilitator which proposed:

- an initial 5 year (2005-2010) agreement period, allowing the parties to develop further data prior to reassessment of the agreement
- joint contributions by recreational and commercial sectors to a defined research program during this initial period. The aim of this program was to fill significant data gaps that currently exist.
- the recreational sector establishes a fishery research and management funding mechanism, to enable the recreational sector to equitably fund its share of joint contributions to research and, where appropriate, fishery management.
- clearly defined spatial and temporal separation arrangements be established in the WTBF as a proxy mechanism to achieve resource sharing. Purse seine and minor line exclusions were far less restrictive than for long lining.

- hot spots for both sectors were identified and equitable exclusions for commercial vessels recommended where recreational use was proven. Hot spots were established at Exmouth, Rowley Shoals, the Abrolhos Islands, and Perth Canyon / Rottnest Trench.

Decision

The Minister for Fisheries, Forestry, and Conservation then took final comments from both the commercial and recreational sectors, modified the preferred option and released his final decision (detailed below) on 13 October 2005.



At the end of the day, the recreational sector saw insufficient application of spatial separation as a failure to return what was rightfully theirs, while the commercial sector saw the extent of the spatial solution as an erosion of an existing property right.

REQUIREMENTS FOR AN EFFECTIVE RESOURCE SHARING PROCESS

The first 5 year resource sharing agreement for the WTBF has not pleased many people. As a practitioner, I take some solace from the fact that both sides appear to be equally unhappy. But the essence of a successful facilitation is not to make people happy but to provide the skills, resources and leadership that motivate the protagonists to reassess their positions, move forward with certainty, and invest in new approaches that will be more acceptable to the community. Seven components of successful resource sharing have been identified.

1. Defined policy framework

Resource sharing agreements that involve multiple jurisdictions, and multiple user sectors suffer increased policy complexity. The initial goodwill and significant resources allocated by stakeholders will be wasted if the policy framework is not clearly defined by relevant government agencies. Ideally the framework would be developed jointly with stakeholder representatives to ensure the correct interpretation of the framework was clearly understood by all parties to the subsequent resource sharing negotiation.

2. Clarity on any Pre-existing Rights

Rights arise from both formal and informal sources. Over time, both sources build fisher expectations regarding access rights beyond legal limits. The pre-existing rights of the users must be considered and clarified at the outset of the negotiation process. This will define the negotiable resource space, clarify the nature of potential compensation arising for loss of rights, and dampen any false or spurious expectations.

In the WTBF the recreational position was encapsulated as “before you guys showed up with tuna boats we had 100% of this fishery”. The commercial counter point was “before we established a limited entry fishery with a management plan the resource was unregulated and anyone could have taken as much as they wanted”. The upshot was confusion over whether the resource sharing process would be an initial allocation of fishery access rights, or a reallocation of rights, thereby attracting possible compensation. Failure to explicitly discuss and agree on existing property rights led to a round of disagreement at the start of the process which tended to poison the analytical framework carried forward during the process.

3. Good Data

Good statistics and analysis are the nuts and bolts of resource sharing negotiations. In a dynamic biological environment such as a marine fishery, credible analytical data needs to be able to demonstrate resource usage in temporal and spatial terms, trends in key variables, and status for the fishery at a number of levels:

- the marine environment,
- the biomass for target and bycatch species,
- catch and effort by all users for all methods and gear configurations,
- social and demographic access costs and benefits accruing to the community from the fishing experience and the consumption of fish, and
- economic contribution, both directly from sales of products and purchase of labour etc, or indirectly from transactions with input suppliers that create regional wealth through regional multipliers.

Gaining access to data is the first step. While the commercial sector have compliance requirements that force comprehensive data creation, data requirements will always prove difficult for the recreational industry. By its nature recreational fishing is enjoyment driven, be it private enjoyment of the seascapes of remote Australia, or seasonal club tournaments at key ports. But the fact remains that a lack of data will continue to discount the arguments of recreational fishers in resource sharing negotiations. This problem needs to be resolved for everybody’s benefit.

Developing and retaining the capacity to analyse and interpret the data accessed is a second problem. This requires organisational capacities and access to specific professional and analytical expertise at commercial rates.

4. Organisational cohesion and capacity

The capacity of a stakeholder organisation and its related leadership has a direct bearing on its ability to negotiate. Both the recreational and commercial sectors suffer from organisational fragmentation from time to time. However strong organisational leadership (generally evident for both sectors in the WTBF), enables the negotiation process to proceed on a professional footing. Leadership will identify sectoral objectives, allocate human and financial resources, confirm the necessary representatives and identify the networks necessary to support its negotiation.

Organisations participating in the negotiation must be clearly defined at the outset, with chief negotiators and spokespersons nominated.

Where organisations must rely of voluntary membership, have limited funds and are geographically disparate, the relevant government agencies must ensure that all

stakeholders potentially impacted by the outcomes of the resource sharing negotiation are invited to contribute to the process through an organisation or directly to the independent facilitator.

5. Independent Facilitation

Independent facilitation is an important, but not essential, component of the resource sharing process. Where the resource sharing policy framework is clear, the organisations and data sets are mature, and the negotiation landscape is well defined, external independent facilitation may not be necessary or cost effective. But as has been seen in the WTBF, the good intentions of the parties compounded by a lack of in-house sectoral resources and delays in the process have resulted in appointment of an independent driver of the process. The role of the facilitator is:

- to establish and maintain the integrity of and trust in the negotiation process
- to consult widely among stakeholders regarding their expectations, capacities, objectives, and preferences
- to work with stakeholders to access, review, analyse, test and independently challenge confidential and publicly available data and reports
- to work with agencies to determine when and what independent expert opinion is required to assist the process
- to arrange and facilitate discussion between the stakeholders, experts, agencies and community as necessary, either individually or in subgroups
- to document and report principles, facts, status, progressive outcomes, options and recommendations for resolution of the resource sharing process, and
- to disseminate relevant information to representatives, agencies and the community in a timely manner.

But the independent facilitator must also make sure the process is robust and pushing the envelope in terms of its outputs and outcomes into the future. The facilitator must ensure that global knowledge in marine resource sharing is brought to bear where relevant.

In a dynamic marine fishery environment resource sharing is a journey, not a destination. While there will be short stops on the way to renegotiate specific terms of the agreement in the light of changing fishery circumstance, the agreement must provide the flexibility and motivation to users to place a long term value on their access to the resource.

6. Resources

Resource sharing agreements provide certainty to users, to community and to government agencies. The resources to develop and provide ongoing support for resource sharing agreements should therefore be shouldered by all parties not just the commercial and recreational users. There is a central role for Australian, State and Territory Governments to define the policy framework, and shoulder a large share of the resource costs. In the WTBF the parties considered the resources allocated were insufficient to allow for rigorous pursuit of the Coolangatta principles.

7. Timing

User conflict in fisheries is becoming more prevalent in Australian and overseas fisheries. This trend will continue. The development of a resource sharing template is a necessary first step in establishing secure and equitable access to fishery resources for all users with credible claims. While the development of a resource sharing template would logically take longer than subsequent negotiations, the 4 years period taken to complete the first 5 year agreement for the WTBF has been too slow and expensive for participants.

The process for a relevant fishery should be planned to take 1-2 years.