



**Government
of South Australia**

Primary Industries
and Regions SA

Fisheries Management Act 2007

ALLOCATION POLICY

ALLOCATION OF ACCESS TO FISHERIES RESOURCES BETWEEN FISHING SECTORS

Final July 2011

PART A

POLICY TO BE APPLIED

INTRODUCTION

Who has issued this policy?

This document is a policy directive issued by the Minister for Agriculture, Food and Fisheries.

What is the duration of this policy?

This policy commences on 27 July 2011. The policy will be reviewed in 2015.

What is the purpose of the policy?

This policy is intended as guidance for the Fisheries Council in the development of management plans under the *Fisheries Management Act 2007* (the Act) and as a source of information for members of the fishing sectors and the wider community about the approach that will be taken in the administration of the Act.

The policy addresses the question of *allocation* of access to aquatic resources between **extractive user groups** – the commercial, recreational and Aboriginal traditional fishing sectors. It does not apply to the related question of determining the size of the available pool of aquatic resources. It also does not apply to the allocation of entitlements *within* a commercial fishery such as the allocation of individual transferable quota entitlements.

Decision on aquatic resource allocation between the fishing sectors, aquaculture and conservation interests are high level government policy decisions [This policy does not address allocation issues associated with marine parks or aquaculture. These issues are to be dealt with under the respective legislation regulating those activities. However, this policy should be taken into account in considering decisions under those Acts (*Marine Parkes Act 2007* and *Aquaculture Act 2001*).

What is the relationship between this policy and the Act?

This policy supplements the Act and any regulations made under the Act. It does not replace them or in any way affect the operation or significance of the legislation and should be read subject to them.

Some of the provisions contained in this policy are set, or partly set, by the legislation. All such provisions reference the relevant section of the Act.

Where there is any (unintended) inconsistency then the legislation will apply.

When is this policy to be applied?

This policy is to be applied when making decisions about allocation of access to aquatic resources between extractive user groups under the Act.

This policy is to be applied by the Council when preparing fishery management plans. It relates to both the setting of initial shares and the processes for adjusting shares.

OPERATION OF THE FISHERIES MANAGEMENT ACT 2007

When does the question of allocation of resources between sectors arise?

The taking of aquatic resources in South Australia is regulated by the *Fisheries Management Act 2007*.

The objects of the Act are set out in section 7. In broad terms, the objects of the Act are that –

- aquatic resources are to be protected, managed, used and developed in a manner consistent with ecologically sustainable development; and
- aquatic resources are to be managed in an efficient, equitable and cost effective way.

Meeting these objects means, amongst other things, deciding how to best share the available aquatic resources amongst users for the benefit of the community.

The Act approaches the sharing of resources in the following way:

- Regulations declare certain fishing activities to be a fishery (for example, the taking of specified species in specified waters).
- A management plan is made for that fishery (or a number of fisheries may be covered by one management plan).
- The fisheries are managed in accordance with the management plan. Regulations may also be made that reflect the management plan. For commercial fishing, licences and permits are always managed under the regulations.
- Fishery management plans developed under the Act must include specific provisions relating to allocation of access to the resource between fishing sectors. The fishing sectors are commercial, Aboriginal traditional and recreational fishing (including recreational fishing conducted as part of charter operations).
- Any overlapping arrangements aimed at managing broader biodiversity conservation interests (such as marine parks) are not addressed in fishery management plans. Biodiversity conservation interests and objectives will be addressed in marine park management plans in accordance with the *Marine Parks Act 2007*.

What is a fishery?

The Act defines a fishery as a 'class of fishing activities' that is declared by the regulations to constitute a fishery/

A fishery may include both commercial and non-commercial fishing activities, or may include only commercial, or only non-commercial fishing activities.

To what does a management plan apply?

A fishery management plan may cover –

- only one fishery (which may comprise both commercial and recreational fishing activities); or
- more than one fishery.

A management plan for a fishery must specify, for each species that forms part of the fishery, both –

- the shares that are allocated to the particular activities that makes up the fishery; and
- the shares that are set aside for extractive use by other fishing sectors, even though the management of other fishing activities in relation to those species might be dealt with under a different management plan.

This means that management plans are closely interrelated, and must be consistent in the way they deal with species that are dealt with under more than one fishery or management plan.

POLICY STATEMENT

The following policies are to be applied in relation to allocation of access to aquatic resources:

1. Management plans will allocate a share of the resource to one or more of the Aboriginal traditional, commercial and recreational sectors.
2. Where relevant, management plans will further allocate shares of the resource to the various component sectors of the commercial sector.
3. Catch by weight (tonnes or kilograms – whichever is more appropriate) will be used as the preferred unit for estimating shares. However, where reliable catch data are not available, shares may need to be estimated by other means, such as the existing level of access to fishing areas or fishing periods.
4. Existing shares will be calculated from estimates of the total tonnage of the species taken by a sector divided by the total tonnage taken by all sectors combined.
5. Data used in this calculation will be no more than 5 years old, a requirement of the *Fisheries Management Act 2007*
6. Commercial fishery data will be taken from catch and effort logbooks submitted in accordance with regulations.
7. Recreational fishery data will be taken from formal scientific surveys, determined by PIRSA that are no more than 5 years old.
8. Management plans will identify indicators to be measured and trigger limits which, if reached, will trigger a review process. The indicators and triggers will be designed to indicate a change in relative value of the shares of the fishery or a possible change in the relative shares.
9. The review process will be set out in the management plan and will include two steps:
 - a) Criteria for determining whether a full review of shares is required; and
 - b) A process for undertaking the full review if it is required.
10. An adjustment of shares may be triggered during the life of a management plan by:
 - Reaching trigger limits and meeting criteria for a review; or
 - A major change in management of the fishery/species.
11. Adjustments to the commercial sector share will be implemented within 2 years.

12. Adjustments to the shares will, in the first instance, be implemented through a voluntary process. However, a process of compulsory acquisition may occur (through regulations) if necessary to meet the 2 year timeframe.
13. Where possible, market mechanisms will be used to give effect to adjustments in shares. When considering new management arrangements in a fishery, management arrangements that facilitate market-based mechanisms for the transfer of shares should be given preference (subject to sustainability and cost considerations).
14. Where required by an adjustment process, the value of commercial authorities will be determined by a method prescribed in the regulations.
15. Adjustments to the recreational sector share will be implemented within 2 years.
16. In the first management plan for each fishery, a nominal share to be allocated for the purpose of resolving native title claims and providing access for Aboriginal traditional fishing. This nominal amount to be deducted from the recreational share. At the five year review for each fishery, the difference between the nominal share put aside for this purpose and the actual share described in Aboriginal traditional management plans, is to be calculated and re-allocated to the recreational sector.
17. An adjustment in favour of the Aboriginal traditional sector will be funded by the Crown.
18. An adjustment in favour of the commercial sector will be funded by the commercial sector.
19. An adjustment in share in favour of the recreational sector will be funded by the Crown.

PART B

BACKGROUND INFORMATION AND FURTHER DISCUSSION

PRINCIPLES FOR DETERMINING AND ADJUSTING SHARES

The central principle to be applied in determining and adjusting the allocation of aquatic resources between fishing sectors is that aquatic resources are to be managed consistently with the principles of ecologically sustainable development.

The following additional principles are to guide the interpretation and application of the principles of ecologically sustainable development as it relates to determining and adjusting the allocation of resources. (Most of the principles below are indicated by the Act either expressly or by implication.)

Optimum utilisation

Allocation of aquatic resources is to achieve optimum utilisation of those resources for the benefit of the community (section 7(1)(b) of the Act). This means that resources are to be allocated in a way that achieves the best use of the resources for the community at large, not just best for a particular sector.

The determination of what is the 'optimal' or 'best' use of a resource will usually involve trade-offs between different uses and values. The aim of this policy is to provide some guidance about how to 'value' fishing activities so that these values can be determined using objective information, and to provide a framework so that any trade offs are explicit. Ultimately choices will still need to be made in allocation decisions. Nevertheless, this policy is intended to provide a framework so that these choices are informed and transparent.

Equitable distribution

Allocation of aquatic resources is also to achieve an equitable distribution of those resources for the benefit of the community (section 7(1)(b) of the Act). This means that resources are to be allocated in a way that distributes the benefits of use fairly amongst users and serves the community at large.

The issue of equitable distribution between sectors is a separate issue to the allocation of shares within a sector, such as the allocation of individual transferable quotas in a commercial fishery. This policy does not cover that type of allocation.

Fishing to be fostered

Fishing activities by all sectors are valuable to the State in both economic and social terms, and are to be fostered for the benefit of the whole community (section 7(1)(d) of the Act).

Certainty for users

Aquatic resources are to be managed in a way that is respectful of the needs of users of the resource, particularly those who rely on it for their livelihood. To that end, the Act requires –

- A management plan must state its terms, which are to be ten years unless an earlier date is specified in the plan or three years for an exploratory or developmental fishery (section 47(2)).
- A replacement plan is to be developed and adopted by the Minister within six months of the expiry of the plan, unless the Minister extends the term of the plan (section 47(3)).
- A plan must be reviewed at its 5-year mark, to determine whether there is any need to change the plan when it expires (section 49). This gives people who are affected by the plan notice of whether their rights and obligations are to change when the plan expires and is replaced.
- A plan cannot be altered during its term, unless the plan itself has specifically allowed for a particular type of amendment to be made, or to make a minor change (section 46).
- A plan must set out the mechanism to be used to adjust shares during the term of the plan (section 43(3)).

Opportunity to be heard

A person with an interest in a fishery has the opportunity to participate in developing the management regime for that fishery, through the open, public processes prescribed by the Act for the plan preparation and review (sections 44, 49).

Rights of existing users to be recognised

The first management plan for an existing fishery is to allocate shares of the resources taking account of the shares to which each different sector had access at the time the Minister asked for the plan to be prepared (section 43(3)).

No acquisition of licence or entitlements without compensation

A management plan that reduces shares of a commercial fishing sector by compulsory acquisition, so as to increase the share of another sector, must

provide for compensation to be paid to the holders of licences or licensed entitlements (sections 43(2) and 58).

No reduction of other rights without compensation

A management plan that reduces the shares of any sector in favour of another sector must provide for a form of recompense for those whose fishing activities are curtailed. The same principles apply for the commercial sector to the non-commercial sectors.

(This is government policy, not a legal requirement under the Act. However section 43(2)(j) touches on this issue vis a vis the commercial sector.)

Use best available information / science

Aquatic resources are to be managed on the basis of the best available information (section 43(3)).

A management plan is to describe the biological, economic and social characteristics of the fishery, and to include research needs and priorities. Information on which first shares to the resources must be based will be the most recent information that is available (sections 43(1), (2) and (3)).

A second recreational fishing survey was undertaken in 2007/08 for the purposes of collecting information to inform allocation processes, and for other fisheries management purposes. The survey measured current access by the recreational fishing sector. The results of the survey were released in 2009.

This survey should be undertaken periodically to provide information for reviews of allocations in the future.

WHEN AND HOW WILL PLANS BE MADE AND WHAT WILL THEY ADDRESS?

Timing for making of plans

There are three prerequisites to making a management plan –

- that a species based resource assessment is available;
- that information about the extent of use by existing users is available; and
- that the Minister has requested that a plan be prepared.

Fishery management plans are to allocate the first shares of resources taking into account the share to which each fishing sector had access at the time the Minister requested the Council to prepare the plan.

In order to ensure a level playing field for all sectors, the Minister will request the preparation of all management plans for existing fisheries on the same day (for those fisheries that have not already been requested).

Process for preparing plans

The Act sets the procedure for preparing management plans (section 44).

Matters to be addressed during plan development

In developing the plan, the following matters need to be addressed in accordance with this policy –

- Determination of initial shares;
- Identification of indicators to be monitored through the life of the plan;
- Trigger limits in relation to these indicators which, if reached, would trigger a review process;
- A two step review process involving:
 - a) an initial assessment against specified criteria to determine whether a full review is warranted; and
 - b) criteria and process for undertaking a full review to be applied in the event that the initial assessment leads to a full review.
- Method for adjustment of shares.

These matters are discussed in the following parts of this policy.

Aboriginal traditional fishing

Access to South Australia's fisheries resources by Aboriginal communities under the *Fisheries Management Act 2007* will be provided through Aboriginal traditional fishing management plans. These plans may be developed when an Indigenous Land Use Agreement (ILUA), agreed to resolve a native title claim, is in place in relation to a native title claim area. The State is currently engaged in ILUA negotiations with native title claimants and other stakeholder groups including the commercial fishing industry. The agreements arising from these negotiation processes will inform the way that access to fisheries resources by Aboriginal communities is defined and implemented. Aboriginal traditional fishing under the Act only relates to fishing agreed through the ILUA process. Aboriginal people are also recreational fishers outside of these arrangements.

It is proposed that, in the first management plans for each fishery, a share of access be allocated and set aside for the purpose of resolving these native title claims. The small number of claims with fishery-related interests and negotiations to date can inform the share that should be put aside for this purpose. This will be a nominal share depending on the species (for example 1%) and will be deducted from the recreational share. This is because Aboriginal traditional fishing is non-commercial fishing.

It is anticipated that all fishery-related ILUAs will be negotiated within five years. Therefore, at the five year review for each fishery, any difference between the nominal share put aside and the actual share agreed through the ILUA can be calculated. Any difference will then be re-allocated to the recreational sector.

SHARING RESOURCES OF A FISHERY AMONG FISHING SECTORS

A fishery management plan must specify –

- the share of aquatic resources to be allocated to each fishing sector under the plan (section 43(2)(h)); and
- the method, or a process for determining the method, for adjusting allocations of aquatic resources between sectors during the term of the plan so as to achieve the desired allocation (section 43(2)(i)).

Amongst whom are the shares to be made?

Each fishery management plan must consider both the commercial and non-commercial (recreational and Aboriginal) sectors. (Fish taken as part of charter fishing is considered recreational catch.)

Which aquatic resources will be shared?

Each fishing sector that accesses a particular species managed under the plan must have an allocation for that species set in the plan.

There are a number of cases where a particular species is managed under more than one fishery. For example, access to snapper is managed under a number of different fisheries including the marine scalefish and rock lobster fisheries. Species of this type are referred to in this policy as shared stocks. The main shared stocks are snapper, garfish, whiting and calamari, but there are others.

Each management plan that deals with shared stocks will have corresponding provisions to ensure that all allocations to the shared stocks are accounted for, and that adjustments to shares are dealt with in consistent identical ways in each plan.

How should shares be expressed?

Shares to aquatic resources should be expressed explicitly, as the proportional share of each fishing sector to the sustainable yield of the aquatic resources the subject of the management plan. For example, rock lobster is presently shared 95.5% to the commercial sector and 4.5% to the recreational sector.

A 'proxy' for the share may need to be set for the recreational sector in order to track or estimate the shares actually taken. In the rock lobster example, the recreational share has previously been estimated as being equivalent to 21,000 pot registrations.

DETERMINING FIRST SHARES

In determining the share to be allocated to a particular fishing sector under the first management plan for an existing fishery the share to which that sector had access at the time the Minister requested the Council to prepare the plan (based on the most recent information available to the Minister) must be taken into account (section 43(3)).

All fisheries that existed under the former *Fisheries Act 1982* immediately before 1 December 2007 are 'existing fisheries' (section 43(5)).

What does 'take into account' existing shares mean?

First shares shall equate to the best estimate of shares as they exist at the time the plan was requested by the Minister.

How will current shares be worked out?

Quantifying current shares will be based on the best available information on the current level of use of all sectors.

Information about current use by sectors must be –

- Real – that is, data must be available – it must have been collected and published.
- Recent – data on which the information is based should be the most recent available, and in any case no more than five years old.
- Reliable – the data on which the information is based should have been obtained, and the information or report collated or prepared, in a way that is verifiable. The process for obtaining the data and preparing the information should be properly documented.

To ensure that the first shares of shared stocks are preserved at current levels, the Minister will request that all fisheries management plans be prepared at the same time, thus triggering the same date for the determination of first shares for all species.

What about new fisheries?

The establishment of a new fishery is not common in South Australia. If a new fishery is to be developed, it will be in accordance with the Exploratory and Developmental Fishing policy, which will guide allocations for that fishery.

PROVISIONS FOR ADJUSTING SHARES

A management plan must prescribe a method, or establish an open and transparent process for determining the method, for adjusting allocations of aquatic resources between the different fishing sectors during the term of the plan (section 43(2)(i)).

Even a fishery whose species are accessed by one sector only will still need to include mechanisms for review, and possible reallocation of shares to other sectors, should they emerge. These arrangements may be general or specific in nature.

Plan content

When setting out provisions about adjustment, the management plan is to specify –

- what conditions will trigger the adjustment;
- which sectors will be affected by the adjustment;
- how the adjustment will occur – whether through a voluntary process or a compulsory process, and whether through tender or other scheme (the process adopted might be affected by the timeframe within which an adjustment is to be occur); and
- the timeframe within which the adjustment is to occur (for example, will reduction be phased in or will it occur at a specific point?).

Trigger for adjustment

There are three scenarios that will lead to a potential adjustment in shares:

- Following an evaluation undertaken in accordance with the process outlined in a management plan.
- Outcomes of resource assessment – outcomes of a resource assessment could trigger a fisheries management decision that is made primarily to ensure sustainability of the fishery. The starting point for working through a solution to a sustainability issue is that shares for each relevant sector should be reduced proportionately. However, it is possible that a solution could include a shift in shares between sectors. For example, a stock assessment may raise sustainability concerns about a species that is targeted by both commercial and recreational fishers. A solution may involve reducing the share of one sector by limiting the use of a commercial or recreational gear type because the gear type has the greatest impact on the species. In that scenario, if the solution involves a shift in shares, this should be explicit and compensated. It should not be implicit or ‘hidden’ within the sustainability issue.

- The declaration of a marine park and associated closure of areas may have the effect of displacing fishing effort. This will be implemented and compensated under the *Marine Parks Act 2007*. These actions will be undertaken for biodiversity conservation purposes, however, an assessment will then need to be made of the impact on the management of the fishery. In particular, if effort from one sector has been removed from the fishery under the marine parks legislation, this may also have the effect of adjusting shares. For example, if an area is closed to commercial fishing only, or there has only ever been commercial fishing in an area that becomes closed, the affect may be that the commercial share has been reduced in favour of the other sectors (or vice versa). In this case, the fishery management plan should be reviewed to reflect that there has been an adjustment in shares through actions outside of the fisheries legislation. Compensation will not be paid twice for the same action.

An adjustment in shares will not automatically be triggered by one or more sectors exceeding their allocated share. It is a fisheries management responsibility to ensure that sectors are managed within their allocated share. The options for reducing catch or effort of a sector to keep catch or effort within an allocated share will be developed at the time. This may include the option of ‘purchasing’ a greater share from the other sector, in negotiation with that other sector.

Adjustments in share or compensation for adjustments will not be retrospective.

Prescribe a method or establish a process to determine the method

The Act gives a choice as to whether the plan will –

- set out the method which will be used to adjust allocations during the life of the plan; OR
- set out the process that will be followed to determine the method to be used for adjusting allocations.

It is preferable for a management plan to specify the method for adjustment. Specifying the method in the management plan helps to manage change in an orderly way through –

- providing certainty to the commercial sector;
- ensuring that people who will be affected by the change have the opportunity to make submissions about the change and the method, during development of the management plan;
- where adjustment is to occur through the acquisition of any licences or entitlements, allowing time for the development of the regulations that are needed to give effect to the acquisition.

IDENTIFYING A CHANGE IN RELATIVE VALUE OF SHARES

In making provision for adjusting allocations of resource shares, the management plan must be consistent with the objects of the Act.

Objects of particular relevance to determining the right shares for each sector are –

- access to resources is to be allocated “in a manner that achieves optimum utilisation and equitable distribution of those resources to the benefit of the community”, and
- “recreational fishing and commercial fishing activities are to be fostered for the benefit of the whole community” (section 7(1)(b)).

To meet these objectives, this policy provides that management plans will outline criteria and processes for identifying changes in the relative value of each sector and determining when and how it is appropriate to respond to those changes. Value is considered in terms of both economic and social value.

This is distinct from the approach set out in an earlier draft of this policy (November 2009) which proposed that the value of a fishery and its sector shares should be calculated through a 5-year periodic review process. Expert advice on that approach was that:

- Potentially the regime proposed in the draft could be costly as it required a comprehensive review of each fishery every five years. Instead, a more efficient approach would be to only review a fishery when defined triggers are reached.
- That the proposal to ‘value’ a fishery using economic and social criteria was problematic. Expert advice in this valuation exercise was unlikely to provide a clear defensible ‘value’ and therefore the process would be prone to legal or political challenge.
- In this context, market-based mechanisms should be preferred and there should be a clear policy statement about this.

Indicators of value of a sector

Each management plan will specify the indicators which reflect the economic and social value of the sectors within a fishery or reflect on a possible change in relative value of the sectors within a fishery. Indicators need to be designed in relation to the fishery and its component sectors. However, core indicators should include measures in relation to:

- trends in catch and/or effort and/or catch rate
- trends in economic value
- trends in social value

Catch and/or catch rate and/or effort

For all commercial fisheries, long term data sets are available to monitor trends in total catch and effort. These data sets also provide a time series in relation to catch rate and in fisheries where catch rate is a reliable indicator of abundance this may be a useful indicator.

For recreational species classified as 'primary or secondary species' a time series of catch, effort and catch rate data are available in the recreational fishery survey reports of 2003 and 2009. For the rock lobster fisheries, periodic 2-year report are available in relation to estimated recreational catch and effort information.

For the species for which these data are available, management plans should set out simple catch and/or catch rate and/or effort measures to be monitored as an indicator of possible change in relative value of the fishery's sectors.

Economic value

Identifying indicators in relation to economic value should reflect on the value of the relevant aquatic resources and the relevant sector to the South Australian economy.

For commercial fisheries, a time-series of data are available in the Economic Indicator reports. Indicators that are measured in these reports should be identified for the purpose of tracking changes in value of the commercial sector and included in the management plan.

It is more difficult to identify indicators of the value of the recreational sector because economic inputs and outputs are less direct and more difficult to measure. Examples of indicators of the economic value of the recreational fishery that may be useful are:

- Participation rates
- Value of recreational fishing industry as measured by turnover of business directly related to recreational fishing
- Employment in the recreational fishing industry
- Level of use of infrastructure (eg. jetties and boat ramps)
- Contribution to Gross State Product
- Contribution to tourism
- other?

When identifying indicators in relation to the recreational sector consideration needs to be given to whether it is possible and cost effective to measure the indicator.

Social values

Social valuation of natural resources is an evolving area.

A project to identify social performance indicators, to measure the performance of a fishery in terms of social measures, has been developed and supported through the Fisheries Council. A funding application is under consideration by the Fisheries Research and Development Corporation. Outcomes from that project will be used to identify other social measures that may be used to measure the social value of a fishery.

Trigger limits in relation to indicators

Each management plan will identify trigger limits in relation to the indicators which, if reached, will initiate a review process. Trigger limits need to be designed in relation to the fishery and its component sectors. However, in general terms triggers are likely to include the following examples:

- opposite trends in catch, effort and/or catch rate between sectors (for example, increasing commercial catches and decreasing recreational catches);
- trends in catch, effort and/or catch rate diverge by a significant percentage between sectors even if trends for each sector are going in the same direction (for example, recreational catch rates increasing rapidly and commercial catch rates increasing moderately);
- total economic value of a component sector increases or decreases significantly;
- trends in an economic indicator increases or decreases significantly for one or more sectors;
- trends in a social indicator increases or decreases significantly for one or more sectors.

Data collection needs

Monitoring of fishery value as described above will require economic and social data to be available to inform these valuations. Currently, good data sets exist in relation to economic indicators in the commercial fisheries. This information should continue to be collected.

As discussed above, social indicators need to be identified for the commercial fisheries. A program for collecting data in relation to these indicators, once identified, should be implemented to complement the economic indicators program as soon as possible.

Some data are available from the recreational fishing surveys in relation to the economic and social indicators for the recreational fishing sector. Further work is required to use this baseline information and identify social and economic indicators for the recreational fishery, and to implement a program for collecting these data. Projects are currently being developed to address this need.

The economic and social data that will be available from these proposed programs will inform the valuation of a fishery for allocation purposes.

REVIEW OF SHARES

A review of shares may be triggered in one of three ways:

- *Category 1.* The trigger limits defined in the management plan are reached; or
- *Category 2.* There is a significant change to the management arrangements in the fishery in response to a stock sustainability risk and that change has the effect or potential effect of adjusting shares from one sector in favour of another.

A response to a stock sustainability risk in category 2 does not include a response in relation to the protection of threatened, endangered or protected species (TEPS). TEPS issues are core fishery management issues in an ecosystem-based approach that need to be dealt with by the sector that has the impact on the TEPS. This is an important policy position because it maintains the incentive for the sector to take a stewardship approach to use of the resource. If compensation is offered for impacts on TEPS, any incentives for the sector to manage these issues are removed and sectors that do take responsibility for managing these impacts are unfairly disadvantaged; or

- *Category 3.* There is a significant change to the management arrangements in the fishery as a result of the impact of marine parks.

The management plan will set out the criteria and the process to be followed in the event of a review being triggered. This should be a two step process involving an initial assessment and a full assessment.

Initial assessment

If a review is triggered the initial assessment will be undertaken to determine whether a full review of shares is necessary or appropriate. The management plans will set out criteria for making this assessment. These criteria will include the following considerations:

- 1) If the trigger falls under category 1 above, has the trigger resulted from a change in one indicator trend, or more than one? If the trigger relates to only one indicator, can this be explained for reasons other than a change in relative value? If the trigger relates to more than one indicator, this may also be explainable but is more likely to reflect a change in the relative value of shares.
- 2) If the trigger falls under category 3 above, has any impact on commercial fishing rights already been compensated under the marine parks legislation? If so, a full evaluation is not necessary.
- 3) Is the potential change in shares significant? If the potential change in shares is unlikely to reach a minimum threshold of one management

unit (for example, one licence, one quota unit or one gear entitlement) then a full review is not necessary.

The management plan will outline the process for undertaking this initial assessment. This process must include the following elements:

- Process overseen by the Fisheries Council
- Assessment committee established involving relevant fishing sectors, PIRSA Fisheries and other stakeholders
- Independent chair appointed, either a member of the Fisheries Council or an external appointment
- A written report prepared for the Fisheries Council recommending a full evaluation or not
- Fisheries Council to determine whether to move to a full evaluation. (Alternatively, the Fisheries Council may elect to make a recommendation to the Minister and ask the Minister to make this determination.)

Full evaluation

Each management plan will also include a process and criteria for undertaking a full evaluation in relation to shares of the fishery. This process will include the following steps:

1. An evaluation of how the value of one or more sectors is changing and potential future trends?
2. In the context of these changes, what options should be evaluated against the option of maintaining the status quo?
3. Evaluate the options being assessed against these criteria:
 - a. Contribution to Gross State Product
 - b. Contribution to employment
 - c. Access for consumers to fresh seafood
 - d. Maintenance and growth of regional communities
 - e. Health impacts
 - f. Sport and recreation opportunities
 - g. Consistency with tourism policies
 - h. Other criteria relevant to the fishery

The management plan will outline the process for undertaking this evaluation. This process must include the following elements:

- Process overseen by the Fisheries Council

- Evaluation panel established with membership including independent experts (economist and social scientist), representatives of each fishing sector and a fisheries manager from outside South Australia (preferably with allocation experience)
- Independent chair appointed, either a member of the Fisheries Council or an external appointment
- Where appropriate and cost effective, evaluation reports sought from independent experts
- A written report prepared for the Fisheries Council evaluating the options
- Fisheries Council to provide advice to the Minister recommending the option of a preferred option or options.

Note:

Where an adjustment to shares within a sector is envisaged, for example the adjustment of shares between sub-groups within a commercial fishery, an opportunity will first be given to the commercial sectors involved to negotiate an outcome that is acceptable to both sectors. If agreement cannot be reached, then the Fisheries Council will be responsible for determining the appropriate shares. The process that the Fisheries Council runs to make this determination should have the elements listed above (independent experts, stakeholder input and review).

Review outcomes

The outcomes of a review will be either:

- a) proceed to adjust shares (discussed further in this policy); or
- b) manage each sector within the existing allocated shares.

If shares are to be maintained it may be necessary, depending on the circumstances, to limit or reduce the catch of one sector to keep it within its existing share. For example, commercial catch or effort may need to be capped or reduced, recreational bag and boat limits may need to be reduced or area closures may be considered as a means of limiting expansion of effort for a sector. These are examples of the types of measures that may need to be considered.

If a sector has exceeded its existing share by a significant amount and the shift is long term, then management arrangements should be introduced within 2 years. Note that at times a sector may exceed its share on a seasonal basis but it may not be expected to be a permanent shift. For example, recruitment may be variable. Before management action is required to limit or reduce a sector's catch or effort, an assessment needs to confirm that the share is significantly exceeded on a long term basis.

METHOD OF ADJUSTMENT

The Act does not constrain the method that should be used to make the adjustment of shares. The appropriate method will depend on –

- the species and the management technique (input or quota, or a mix);
- whether the adjustment is in favour of the commercial or non-commercial sector, or between commercial sectors; and
- the time within which the adjustment must be completed.

Because of the necessary interaction between management plans for shared stocks, the method used must be consistent across all related plans.

If a market mechanism can be applied to give effect to adjustments in shares, this mechanism should be preferred to other mechanisms. An example of a market mechanism is the purchase of quota entitlements.

Available methods vary depending on management approach

Commercial fisheries are managed as ‘quota’ or ‘input’ fisheries. Most fisheries use elements of both management approaches.

Quota fishery - Under a quota system, a Total Allowable Commercial Catch (TACC) is determined for the target species within the fishery for each quota period. Fishery licences are issued with quota entitlements, which specify the quantity of the target species that may be taken under the licence. In a quota-managed fishery, quantities of resources that may be taken are controlled directly.

Shares in a quota fishery could be reduced, for example, by -

- reducing the TACC (commercial only);
- reducing both quota units and the TACC (commercial only);
- closing areas and reducing quota units (commercial and recreational);
- reducing individual catch limits (recreational).

Input-control fishery – Those fisheries that are managed using controls on the amount of effort that goes in to catching the fish (eg. the amount of fishing gear used, the amount of time spent fishing, etc.). Under an input-managed fishery, the means of fishing is controlled so as to control, in an indirect way, the quantity of resources that may be taken.

Shares in an input fishery could be reduced by -

- closing an area (commercial and recreational);

- reducing the amount of fishing gear that can be used (commercial and recreational)
- if the fishery has transferable effort units, reduce the value of a unit or remove units (commercial only);
- reducing the number of licences (commercial only);
- de-register or prohibit devices, or prohibit particular fishing methods (commercial and recreational).

Recreational fisheries are managed through a combination of input and output controls. For example, seasonal closures and restrictions on permitted fishing devices are input controls. Bag, boat and size limits are, in technical terms, output controls because they restrict what can be taken out of the fishery. However, unlike the use of output controls in commercial fisheries, the use of these instruments in recreational fisheries results in less direct and precise management than in commercial fisheries because of the number of participants. Adjustments to the recreational sector are harder to implement and measure as they relate to an unspecified number of participants with varying skills, interests and participation levels. Commercial fisheries, on the other hand, have limited entry provisions in place that restrict the number of participants to a specified number of licences. This means that adjustments in the commercial sector can be designed to have a more direct effect on catch and/or effort levels.

In contrast, changes to the recreational sector are less direct. Changes to the recreational sector catch need to be implemented to influence the fishing effort of the sector as a whole, not just individuals. It is therefore critical to understand fishing behaviour and changes in fishing behaviour when implementing management changes in the recreational sector.

Recreational fishing is also undertaken from charter vessel platforms. Whilst charter fishing operators run commercial businesses, the fishing activity undertaken from their vessels is recreational. The catch taken from charter fishing vessels cannot be sold, as with all recreational catches. Therefore, for the purposes of allocation, the charter fishing sector is treated as a component of the recreational fishing sector.

In determining and managing the share of a resource for the recreational sector, it is not only the number of fish taken that is relevant but the opportunity to take fish. This reflects the nature of recreational fishing, which relates to the experience as much as the number of fish removed from the water. Therefore, in the context of a healthy stock it may be possible for recreational anglers to increase their 'share' of a resource without changing the bag or boat limits. For example, more people may take the existing personal limit and/or it may be easier to take the existing personal limit. Alternatively, it may be appropriate to allocate exclusive access to the recreational sector for a specified area. This arrangement may reflect a

'share' by allowing opportunity to take fish without localised competition from the commercial sector.

Recreational shares may be reduced by –

- closing an area;
- reducing individual limits (daily limits or trip limits);
- restricting the use of fishing devices or methods;
- creating closed seasons or restricted fishing periods.

Adjustments to bag and boat limits are not the preferred method as these changes require legislative change, broad education and changes in community behaviour. They are therefore only appropriate for significant and long term changes.

Is the reduction an 'acquisition' of entitlements?

The Act does not specify that the reduction of shares of one sector in favour of another sector is necessarily an 'acquisition' of entitlements.

A reduction of shares by the acquisition of licences or reduction of licence entitlements (gear entitlement, quota entitlement or other entitlement specified in the regulations) is clearly an acquisition of the licence or entitlements. However, a reduction of TACC or the variation of conditions of licence (eg, so as to close an area), is not.

The Minister has determined that as a matter of policy, any reduction of share will be treated in the same way as an acquisition, for the purposes of the payment of compensation.

Any acquisition must be in accordance with regulations

The Act states that if shares are adjusted so as to reduce the commercial sector in favour of the non-commercial sector, the Minister may acquire licences or entitlements under licences, in order to give effect to that adjustment.

If the adjustment is to take place by acquisition of any licences – either voluntary or compulsory - the acquisition must be made in accordance with regulations made for that purposeⁱ. The regulations will give effect to the method of acquisition specified in the management plan.

Temporary share adjustments to manage changing sectoral uses

It is not considered that there will be instances where temporary adjustments will be appropriate.

VOLUNTARY OR COMPULSORY ACQUISITION?

Voluntary means of adjustment preferred

Voluntary surrender or sale of entitlements is the preferred means for adjustment. Voluntary schemes ensure that only those who are willing and ready to reduce their participation in the sector, or leave it altogether, do so.

Compulsory acquisition of shares may be used when voluntary measures have failed or are likely to fail to deliver the adjustment sought in the time frame required.

Specify trigger for use of compulsory acquisition

If the management plan is to use a compulsory process, the triggers for use of that process must be set in the plan. For example, a management plan might identify that voluntary means are likely to fail, and compulsory means will commence, if the two year target is reached and only 60% of the required change has occurred.

Voluntary adjustment transactions

A range of approaches may be used to ensure voluntary adjustment transactions are undertaken in an equitable, open and transparent manner. The following approaches could be used: tender processes; calls for expressions of interest; use of brokers; direct negotiations; or any other approaches as determined by the Minister.

Compulsory acquisition should affect all participants equally

Where compulsory acquisition is to be used, all entitlement holders are to be affected equally by the acquisition, as far as this is practicable. This means that where entitlements under licences are acquired, the same proportion of entitlement units should be acquired from each entitlement holder (for example, ten percent of entitlement units held).

In a quota fishery, a proportionate reduction is straight forward. In an input fishery, or where licences, rather than entitlements under licences, are to be acquired, equal distribution of the acquisition can be harder to achieve.

Where adjustment is by closure of an area – consistency with Marine Parks policy

Where the method of adjustment is to close an area to the commercial sector, the method by which the adjustment will be shared amongst fishers and compensated is to be consistent with that used where an area is closed to fishing under the Marine Parks Act.

Generally speaking, this will mean adopting the following process -

- relocate fishing activities if possible, with the Government meeting reasonable relocation expenses and some solatium;
- if relocation is not compatible with the share adjustment, the Government may acquire entitlements relevant to the extent of operations affected by closure – ie, purchase portion of the quota or gear entitlements;
- If a significant area is closed such that it is necessary to purchase licences, develop a formula covering all relevant aspects of the entitlements lost.

When closing an area, fishers most affected should be invited to apply for displacement payment. Where the invitation does not yield sufficient response, the invitation may be extended to other fishers. Compulsory acquisition may be required as a last resort.

COMPENSATION AND DISPLACEMENT PAYMENTS

A management plan is to provide that compensation will be paid to persons whose licences or licence entitlements are compulsorily acquired in order to reduce the share held by the commercial sector in favour of another sector (section 43(20)(j)).

It is Government policy that –

- compensation in some form will also be paid to commercial sector fishers whose shares are reduced without any formal acquisition of licences or entitlements under licence (for example, by reduction of the TACC); and
- where the share of a non-commercial sector is reduced, the principle of compensation will still be applied. In other words, if the commercial sector seeks to increase its share relative to the recreational share, it will be required to effectively ‘purchase’ this share through compensation to the recreational sector.

In this part of the policy, the term ‘displacement payment’ is used to describe any payment made in respect of acquired or surrendered entitlements or fishing activity, whether the payment is as compensation or as a purchase price for formally acquired entitlements.

This part of the policy discusses –

- how the quantity of displacement payments will be determined; and
- to whom and by whom the payment should be made.

Determining appropriate quantity of payment

If the Minister is to purchase or extinguish fishing rights, or retire fishing effort through some other method in order to adjust shares between sectors, the Minister needs to determine what will be a fair displacement payment in respect of that share.

Where shares are reduced voluntarily through sale of licences or entitlements (eg, device endorsement or gear or quota entitlement) to the Minister through the market place, the value of the share will be reflected in the sale price.

Where shares are reduced through a process of compulsory acquisition of licences or entitlements, or through compulsory retirement of effort, a value of the foregone right will need to be determined through a process other than the market. Where shares to resources are acquired compulsorily, factors like impact on lifestyle, choice and forgone income are additional things to consider.

Methods which may be recommended by the management plan for determining the amount of payment are –

Market value

Market value should be used whenever possible. Market value is determined by entering the market, such as through an open tender or private sale.

Estimated market value

An estimate of market value will be required if the process for acquisition is by closed tender, or where the market is so small that it is difficult to determine market value. The management plan might leave determination of market value to the Minister, or require the advice of the Valuer-General or a private valuer.

Other determination of equitable payment

Where there is no market to give a readily determined economic value, or where acquisition is compulsory, other factors must be taken into account in determining the appropriate displacement payment.

Other factors include lost income, loss of vocation/choice, relocation and displacement costs. Displacement payments can take these matters into account by including amounts for income support, solatium or payment to offset increased costs.

A determination of appropriate value taking these things into account should be made by the Minister after seeking the advice of the Valuer-General and the Fisheries Council.

If shares are to be reduced through any form of acquisition (compulsory or voluntary), the regulations will set out the method by which compensation will be calculated (section 58(3)(b)). The management plan should specify the desired method, to guide the making of the regulations.

To whom and by who should compensation be paid?

Reducing commercial sector in favour of non-commercial sector

Where the commercial sector is reduced in favour of the non-commercial sector, the Minister will make the relevant payments directly to affected commercial fishers.

Adjusting between commercial sectors

In the first instance, an opportunity will be provided to commercial sectors to negotiate any adjustment between commercial sectors. This negotiation should include consideration of the mechanism for adjustment.

Where agreement cannot be reached and an adjustment decision is made by the Minister, the Minister will acquire the necessary entitlements and

compensate for that acquisition, and levy the participants of the benefiting sector to cover the costs of scheme whereby that will occur. Such a scheme is treated under the Act as the rationalisation or restructuring of a fishery. Appropriate regulations would need to be made (section 128(2)(b)).

Reducing recreational sector in favour of commercial sector

The principle of fair recompense for those whose fishing activities are limited or reduced because of an adjustment in shares should be applied to the limitation or reduction of the recreational fishing sector share.

It is not practicable for any payments to be made to individual recreational fishers. Payments will be made by way of 'proxy' displacement payment to be held in the Fisheries Fund for expenditure on programs that benefit recreational fishing. (Note: The Act restricts the monies that may be paid into the Fund. Parliamentary appropriation would need to specifically state that a proxy displacement payment were to be made to the Fund.)

There are no mechanisms under the Act by which the commercial sector can be obliged to contribute directly to compensation payments made by the Government in respect of a reduction in the recreational sector's share. However, the amount of the proxy will be included as a component of the annual licence fee for the fishery. (Annual fees are paid into the Fisheries Fund: section 21.). The fee component will be calculated as a proportion of the usual annual fee.

For example, if a total allowable commercial catch limit (TACC) was increased for the commercial sector - under a Management Plan where an allocation between the commercial and recreational sector had been determined - and the TACC increase has the effect of reducing the recreational sector share of the resource, or the opportunity to access the resource - a fee could be charged to the commercial sector to effectively 'purchase' that share from the recreational sector. This approach would only be adopted where management measures were not desirable or not possible.

FORMAT FOR MANAGEMENT PLANS

This policy guides the development of the resource sharing aspects of fishery management plans. To meet the requirements set out in this policy, each management plan should address the issues outlined in this policy under the headings provided:

Determination of initial shares

Indicators

- Indicators of change in relative value
- Data needs

Triggers

- Reference levels

Review process

- Initial review
- Full review
- Outcomes of review

Method for adjustment of shares

IMPLEMENTATION OF THIS POLICY

The implementation of this policy has the following resources implications:

- In relation to the process of developing management plans, the content of plans may require expert advice to be provided in the development of the plan or through the consultation process. This requirement will depend on the complexity of the fishery.
- Progress of a number of research projects, particularly in relation to the identification of indicators of economic and social value for the recreational fishery and for the social indicators relevant to commercial fisheries.
- The ongoing maintenance of the collection of economic indicators data and reporting.
- The design and ongoing implementation of the collection of social indicators data and reporting.
- The future establishment of assessment committees and evaluation panels including the funding of independent chairs, independent experts and expert reports.
- Resource implications for PIRSA Fisheries in the development of management plans consistently with this policy.

DEFINITIONS

These terms are intended to be used for the purposes of this policy only and are not intended to be inconsistent with fisheries legislation.

Allocation Distribution of the opportunity or rights to access fisheries resources, within and between stakeholder groups.

Aquatic reserve An area of water, or land and water, established as an aquatic reserve by proclamation under the *Fisheries Management Act 2007*.

Bag limit The maximum number of a species that can be legally taken by a person per day or per fishing trip, as specified.

Biodiversity The variability among living organisms from all sources (including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part) and includes: (a) diversity within species and between species; and (b) diversity of ecosystems.

Biomass The total weight or volume of individuals in a fish stock.

Boat limit The maximum number of a species that can be legally taken by persons on a boat per day or per fishing trip, as specified.

By-catch At a broad level, fisheries by-catch includes all material, living and non-living, other than targeted species which is caught while fishing. It includes discards (that part of the catch returned to the water) and also that part of the catch that is not landed but is killed as a result of interaction with fishing gear.

By-product Non-targeted catch that is commercially valuable and retained by fishers.

Catch The total amount (weight or number) of a species captured from within a specified area over a given period of time. The catch includes any animals that are released or returned to the water.

Catch per unit effort (CPUE) The weight or number of a species caught by a specified amount of effort. Typically, effort units are defined using a combination of the following factors: gear type; gear size; the amount of gear; the amount of time the gear is used ; and the number of people operating the gear. CPUE is often used as an index of relative abundance in fisheries stock assessment. In modern assessments, CPUE is standardised to account for the diverse range of factors that can affect CPUE.

Closures Prohibition of fishing during particular times or seasons (temporal closures) or in particular areas (spatial closures), or a combination of both.

Co-management Arrangements between governments and stakeholder groups to allow joint responsibility for managing fisheries resources on a cooperative basis. Co-management arrangements can range from a consultative model, where stakeholders have an advisory role to government, to an informative model where co-managers have decision-making powers.

Commercial fishing Fishing undertaken for the purposes of trade or business.

Common property resource A resource that is determined to be owned by the community, or by the State on behalf of the community, and to which no individuals or user groups have exclusive access rights.

Critical habitats Habitats that are crucial in at least part of the life cycle of a species, which typically includes nurseries such as estuaries, mangroves, seagrass beds, reefs and defined spawning areas.

Data poor fishery A fishery where limited data are available to inform management. For example, fisheries for species where baseline biological data such as size at maturity, fishing mortality and growth rates are unknown.

Ecologically sustainable development Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.

Economic efficiency The maximisation of the value of the net benefits derived from fishery resources.

Ecosystem A dynamic complex of plant, animal, fungal, and micro-organism communities and the associated non-living environment interacting as an ecological unit.

Effort Amount of fishing taking place, usually described in terms of gear type and frequency or period during which the gear is in use; for example, 'hook-sets', 'trawl-hours', 'searching hours'.

Fishery A term used to describe the collective enterprise of taking fish. A fishery is usually defined by a combination of the species caught (one or several), the gear and/or fishing methods used, and the area of operation.

Fishery dependent data Information collected about a fishery or fish stock by the participants of a fishery, eg. catch and effort information from fishery log sheets.

Fishery independent data Information collected about a fishery or fish stock by researchers, independent of the fishery, eg. scientific surveys, observer reports.

Fishing capacity The amount of fishing effort that a fishing boat, or a fleet of fishing boats, could exert if utilised to its/their full potential.

Fully exploited This describes a fish stock for which current catches and fishing pressure are close to optimum (the definition of which may vary between fisheries; for example, catches are close to maximum sustainable yield). Categorising a species as 'fully fished' suggests that increasing fishing pressure or catches above optimum (allowing for annual variability) may lead to overfishing.

Gear restriction A type of input control used as a management tool to restrict the amount and/or type of fishing gear that can be used by fishers in a particular fishery.

Habitat The place or type of site in which an organism naturally occurs.

Individually transferable quota A management tool by which portions of the total allowable catch are allocated among licence holders (individual fishers or companies) as units of quota. Quota entitlements can be made to be temporarily or permanently transferable between these licence holders.

Input controls Limitations on the amount of fishing effort; restrictions on the number, type, and size of fishing vessels or fishing gear, or on the fishing areas or fishing times in a fishery.

Latent effort The potential for effective effort within a fishery to increase over time (i.e. inactive fishing licences that may be used in the future).

Limited entry Fishing effort is controlled by restricting the number of operators. It usually requires controlling the number of licences in a fishery. It can also include restrictions on the number and size of vessels, the transfer of fishing rights, and the replacement of vessels

Logbook An official record of catch and effort data made by fishers.

Marine protected area An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity and of natural and associated cultural resources, and managed through legal or other effective means.

Marine park An area of water, or land and water, considered to be of national significance because of the aquatic flora or fauna of those waters or the aquatic habitat, and established as a marine park by proclamation under the *Fisheries Management Act 2007* and/or the *National Parks and Wildlife Act 1972*.

Non-target species Any part of the catch, except the target species, and including by-catch and by-product.

Non-retained species Species that are taken as part of the catch but are subsequently discarded, usually because they have low market value or because regulations preclude them being retained.

Offshore Constitutional Settlement (OCS) An agreement between the State(s) and the Commonwealth whereby the State or the Commonwealth (or in some cases a Joint Authority) is given jurisdiction for a particular fishery occurring in both coastal waters and the Australian Fishing Zone. When no OCS agreement has been reached, the fishery remains under the jurisdiction of the State out to 3 nm, and the Commonwealth from 3 to 200 nm.

Output controls Limitations on the weight of the catch (quota), or the allowable size, sex or reproductive condition of individuals in the catch.

Over-exploited or overfished A fish stock in which the amount of fishing is excessive or for which the catch depletes the biomass too much; or a stock that still reflects the effects of previous excessive fishing.

Parental stock The weight of the adult population of a species.

Population A group of individuals of the same species, forming a breeding unit and sharing a habitat.

Possession limit A possession limit under the *Fisheries Act 1982* is a prescribed number of fish for a species that represents what is considered a commercial quantity of that species. If a person has the prescribed amount of fish in their possession, then the onus of proof is reversed in any prosecution relating to taking those fish illegally.

Precautionary principle This concept asserts that where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decision-making should be guided by: (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment; and (ii) an assessment of the risk-weighted consequences of various options.

Proxy A figure used to represent the value of something in a calculation

Quota A limit on the weight or number of fish that may be caught of a particular stock or from specified waters.

Quota entitlement The proportion of a quota that is allocated to a particular licence, which limits the total amount of a species that is permitted to be taken pursuant to that licence during a specified time period.

Recreational fishing Fishing for a purpose other than trade or business, where the catch is released or used for personal consumption or taken for sport.

Retained species The species within the catch that are not discarded.

Sample A proportion or a segment of a fish stock which is removed for study, and is assumed to be representative of the whole. The greater the effort, in terms of both numbers and magnitude of the samples, the greater the confidence that the information obtained is a true reflection of the status of a stock (level of abundance in terms of numbers or weight, age composition, etc.).

Seasonal closure The closure of a fishing ground for a defined period of time, usually used to protect a stock during a spawning season.

Selectivity The ability of a type of gear to target and catch a certain size or species of fish.

Socio-economic Relating to both social and economic considerations.

Spatial Of or relating to space.

Species A group of organisms capable of interbreeding freely with each other but not with members of other species.

Size limits A minimum or maximum size limit determines the legal size at which a given species can be retained.

Size of maturity Length or weight of the fish when it attains reproductive maturity.

Slot size limit Refers to a situation where both a minimum and maximum size limit has been determined for a given species.

Stakeholder An individual or a group with an interest in the conservation, management and use of a resource.

Stock A group of individuals of a species occupying a well defined spatial range independent of other groups of the same species, which can be regarded as an entity for management or assessment purposes.

Stock assessment A detailed analysis of stock status (abundance, distribution, age structure, etc.) to support the management of the species/fishery.

Target species The most highly sought component of the catch taken by fishers.

Target effort Effort that is directed at a particular species.

Traditional fishing Fishing for the purposes of satisfying personal, domestic or non-commercial communal needs, including ceremonial, spiritual and

educational needs and utilising fish and other natural marine and freshwater products according to relevant indigenous custom.

Temporal Of or relating to time.

Threatened A species or community that is vulnerable, endangered or presumed extinct.

Total allowable catch (TAC) For a fishery, a catch limit set as an output control on fishing. The total amount of a species that may be taken during a specified time period.

Total allowable commercial catch (TACC) For a fishery, a catch limit set as an output control specifically on commercial fishing. The total amount of species that may be taken by commercial fishing during a specified time period.

Trigger points Specified level of an indicator or measure that, if reached, signifies the need for some form of response. Not usually used as a criterion for overfishing, but to indicate the need for review of management.

Uncertain A fish stock that may be underfished, fully fished or overfished, but for which there is inadequate or inappropriate information to make a reliable assessment of its status.

Under-exploited or underfished A fish stock that has potential to sustain catches higher than those currently taken.

Vulnerable species Under endangered species protection legislation, a species that within 25 years will become endangered unless mitigating action is taken.

Yield Total weight of fish harvested from a fishery
