**FISHERIES MANAGEMENT PLAN**

**TEMPLATE and GUIDANCE**

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**Version 1.0**

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# FISHERIES MANAGEMENT PLAN TEMPLATE

## BACKGROUND

### Background and Purpose

One of the issues that limits the ability of some fisheries to successfully engage in the Marine Stewardship Council (MSC) program is the absence of fishery management plans to support the sustainable management of the fishery. In these situations, stakeholders supporting such fisheries may benefit from the availability of a management plan template designed specifically around the MSC standard.

The objective of this tool is to support the development of a fishery management plan for pre-certification or pathway fisheries working to meet MSC Fishery Standard requirements.

The template and guide is based on the MSC Standard (specifically, the Fisheries Certification requirements version 2.1) and is designed to be a user-friendly and easily adaptable. Stakeholders working with pre-certified fisheries and their partners can use it on a voluntary basis to develop management plans, thus supporting the progress towards sustainable management of their fisheries and meeting the MSC requirements. The tool will be updated with any new versions of the standard as appropriate.

This Fishery Management Plan template and guidance is part of the MSC Pathway Tools, which comprises a whole suite of tools aimed at supporting pre-certification fisheries. The main users are likely to be those fisheries transitioning to MSC certification, in particular through a Fisheries Improvement Project (FIP) and including fisheries in Pathway Projects. However, it is also expected that it will continue to be used once MSC certification has been achieved, as it will aid managers to be explicit about the aims, approach, and operational processes for their fisheries, thus supporting annual surveillance assessments and subsequent re-certification. The template could also be used by fisheries outside the MSC program with minimal revision.

### Fisheries Management Plans

Fisheries Management Plans (FMPs) are not new. FAO (1997) describes them as “*an explicit arrangement between a fishery management authority and the recognized interested parties. It should identify these parties and clarify their respective roles, rights and responsibilities. It should list the objectives agreed on for the fishery and the harvesting strategy, rules and regulations applied to realize those objectives. It should also describe the mechanisms for on-going consultations, the arrangements to ensure compliance and any other information relevant to the management of the fishery*”. FAO (2002) also provide detailed guidance on preparing FMPs in FAO (2002 – see Chapter 9: Design and Implementation of Management Plans), which includes examples of FMPs from around the world. The United Kingdom Department for International Development (DFID) funded the groundwork of a detailed guide to prepare FMPs in 2005 (Hindson *et al*, 2005), which focused particularly on developing goals, objectives, and performance indicators.

A number of countries now endorse and facilitate the use of FMPs to manage their fisheries. Canada has for some time used “Integrated FMPs” and has 62 species and sea basin specific FMPs for a wide range of finfish, crustacean, and marine mammals[[1]](#footnote-2). These are “evergreen” plans with no set expiry dates, although they are reviewed and updated annually by the Canadian Department of Fisheries and Oceans (DFO). As other Australian states, the State of South Australia also requires the preparation of FMPs under its Fisheries Management Act (2007, South Australia), and these have been important sources of information and verification for MSC assessments, such as the Spencer Gulf Prawn Fishery (Primary Industries and Regions South Australia, 2014). The USA regional fisheries councils also have management plans for key species (including multi-species FMPs). One example is the New England Monkfish Fishery Management Plan (NEFMC, 19098) which is now in its eighth amendment for 2019. Many comprehensive FIPs have developed FMPs specifically to assist managers prepare for a full assessment, such as Blue Swimming Crab FMP for Kien Giang Province in Vietnam (Richard Banks, pers. comm., 2019). The pilot version of this tool has been used to draft FMPs for a freshwater crayfish fishery in China and a few fisheries in the United Kingdom.

## GENERAL GUIDANCE

### Guidance to the Template

#### How the template is structured

* The FMP template is divided into sections and sub-sections, each with their own headers.
* Each section has a guidance in angle brackets e.g. <….> which highlights the likely areas to be covered. The guidance is only an indication of what you might need to include, as the amount of information and exact detail you provide will depend on the scale and complexity of the fishery itself.
* To use the template, fill in the text in the grey boxes below the guidance.
* Once you have completed the template, all guidance notes (summary boxes and guidance text), introductory text and unused sections should be deleted.
* The image and text on the front page can be replaced with text and/or images that are appropriate to the fishery.
* The *references* in Appendix A show the sources of external information in this template and provides linkages to some examples. Appendix B provides a *glossary* of the main terms used in this document.

#### General Principles

* This is a generic template. Whilst designed to be applicable to most fisheries, the amount of detail to be included will depend upon the scale and complexity of the fishery. It is suggested that additional detail can be added as the plan is implemented and reviewed.
* Following on from the point above, a plan can be considered a ‘living document’ that develops over time as experience with the fishery is gained.
* The FMP can cover a single stock, a number of similar stocks (e.g. of species within the same genus) or can be multi-species in nature.
* Likewise, it can cover a single gear type, different gear types, or a specific fishing sector.
* The term of the plan may vary. In most cases, it is open-ended without an end date, whilst others may have a fixed term.

### Preparation of a Fisheries Management Plan

Fisheries Management Plans (FMPs) are normally developed by the management authority responsible for the fishery or, in some cases, a fisheries organisation that wishes to provide a management framework for its members. In any case, inputs from both statutory management and industry are essential, as FMPs must be pragmatic, based on scientific evidence and coherent with wider fisheries and wider development policy.

In the MSC context, the need for and adequacy of a FMP is usually identified at the pre-assessment stage. If the fishery will enter a FIP, then the development of a FMP will be an important contribution and allow future assessors to have concrete evidence of objectives, strategies, and mechanisms behind the MSC Fisheries Certification Requirements.

A suggested FMP development process is provided in **Figure 1** below. This is based on the premise that most FMPs will be developed via the implementation of a FIP.



Figure 1. FMP development process (in a FIP). This is an iterative process where the steps of agreeing on the scope, the structure and preparing the draft may have a few cycles before finalising the FMP.

#### Planning and stakeholder engagement

Participation is key to ensuring that the outcome of the process will reflect the priorities and interests of all major groups and that they will be committed to their role within the FMP. The development of the FMP needs to involve strong collaboration with the organisations and stakeholder groups that have roles and responsibilities within the fishery (research organisations, management, industry, fishers, etc) and it may be challenging to coordinate the effort to fill in each section efficiently. It may be useful to create a team to take on the responsibility of developing the FMP. In some cases, it may be useful to contract a third-party consultant whose responsibility is to coordinate the FMP development using the template, including assigning sections to the relevant members of the FMP development team, organizing the timeline, and putting together the final FMP. To facilitate the coordination of the FMP, the **Fishery Management Plan Action Tracker** found in the following section can be used.

Ideally, the person or persons responsible for developing the FMP should be trained in the MSC program so there is an understanding of the Fisheries Standard’s language and requirements. If needed, the MSC may be able to support stakeholders with either a short online training focused on the template and guidance or a more technical training about the Fisheries Standard and Fishery Improvement Tools ([Capacity Building](https://www.msc.org/for-business/fisheries/developing-world-and-small-scale-fisheries/our-capacity-building-program) Level 1+ or Level 2). If the person responsible for developing the FMP is a third-party consultant, it would also be expected that they work closely with the fisheries organisations to fill in each of the template’s sections.

#### Planning team and any advisory committees

This section is to define who the different interest groups are. Before starting the development of the FMP, it would be useful to have a clear idea of who is participating, including who is in the team directly overseeing drafting the FMP, who is leading its development and who is part of advisory or any other committees created to support the development of the FMP. By using the table below, the FMP lead would ideally have a better understanding of participants and roles before moving to the **Fishery Management Plan Action Tracker**.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Institution** | **Email** | **Role (lead, team, advisory, etc)** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

#### Fishery Management Plan Action Tracker

This table has all components of the template for the FMP leader to assign sections to the most appropriate person with the knowledge to develop or lead the development of that section and track progress.

|  |
| --- |
| **1. Identification and Description of the Fishery** |
| **Section** | **Brief description** | **Who is responsible** | **Status** |
| Introduction | Add list of Steering Group members & logos |  |  |
| 1.1 Fishery to which this plan applies | Add table of different UoAs, Add map of area, fishery name, species, location, methods |  |  |
| 1.1 Term of plan, date of next review, key authors | Steering Group to agree the term of the plan or to leave it open ended. Identify key authors. |  |  |
| 1.2 Description of the fishery | Historical Overview |  |  |
| 1.2 Description of the fishery | Biology of the Target Stocks |  |  |
| 1.2 Description of the fishery | Ecosystem and Habitat |  |  |
| 1.2 Description of the fishery | Economic and Social Characteristics |  |  |
| 1.2 Description of the fishery | Identification of key uncertainties and data needs |  |  |
| 1.3 Linkages with other programs | Overview of other ongoing programs, major projects or initiatives that may have a bearing on the development of the FMP |  |  |
| **2.Goals and Objectives** |
| 2.1 Governance and Policy | Include review of Long-Term Objectives & Key Policy Linkages |  |  |
| 2.2 Fisheries-Specific Management Objectives | Long-term Objectives and Short-term Objectives |  |  |
| **3.Fisheries Management Structure** |
| 3.1 Legal Framework | Description of legal or customary framework for the fishery |  |  |
| 3.2 Institutional Arrangements | Description of the institutions and other organisations involved in the management of the fishery |  |  |
| 3.3 Consultation and Co-management Arrangements | Add description of the processes and arrangement that allows non-statutory bodies, and where appropriate individuals, to contribute to fishery management planning |  |  |
| 3.4 Allocation of Resources | Basic Principles and Specific Mechanisms for allocating resources |  |  |
| **4. Harvest Strategy and Control Rules** |
| 4.1 Harvest Strategy | Description, Monitoring, Review and Evaluation of the Harvest Strategy |  |  |
| 4.2 Harvest Control Rules | Description and review of the Harvest Control Rules |  |  |
| 4.3 Decision-making Frameworks | Description of process to review and refine existing measures and strategies and make decisions |  |  |
| **5. Ecosystem Management Strategies** |
| 5.1 Primary and Secondary Species | Strategy for management and other considerations |  |  |
| 5.2 Endangered, Threatened and Protected Species (ETP) | Management strategy and other considerations |  |  |
| 5.3 Habitats | Management strategy and other considerations |  |  |
| 5.4 Ecosystem | Management strategy and other considerations |  |  |
| **6. Stock Assessment, Fishery Monitoring and Research** |
| 6.1 Stock assessments | Current status of target stock(s) |  |  |
| 6.1 Stock assessments | Stock assessment methodologies |  |  |
| 6.2 Fisheries-dependent monitoring and reporting | Provide details on what information is regularly and periodically collected from the fishery, including effort, catch and landings |  |  |
| 6.3 Bycatch, ETP species and other surveys | Provide details on regular and periodic surveys to collect data on (i) non-target catch, (ii) the interactions with endangered, threatened and protected (ETP) species and their consequences, (iii) habitat distribution and impact assessments and (iv) other surveys |  |  |
| 6.4 Other relevant research | Provide details of any other research that is required or being carried out to support ensuring the sustainability of the fishery. This could include ecosystem and socio-economic themes. Where appropriate put these into context with wider national, regional or international research initiatives |  |  |
| **7. Compliance and Monitoring** |
| 7.1 Objectives and Approach | The main objectives of fisheries control, including linkages to any higher policy |  |  |
| 7.2 Planning | Risk assessment - Description of main risks of non-compliance, recurring planning processes and deterrence of non-compliance measures |  |  |
| 7.3 Roles and responsibilities in compliance | Description of the main organisations responsible for fisheries monitoring, control and surveillance, including their jurisdictions and responsibilities. |  |  |
| **8. Fishery Performance Evaluation** |
| 8.1 Measurable Performance Indicators | Description of indicators for measuring fishery performance  |  |  |
| 8.2 Review Process | Description of process to review progress against outcomes specified in the FMP |  |  |
| 8.3 Fisheries Management Plan Revision and Update | Description of process and schedule for reviewing the FMP |  |  |
| **9.Resources required to implement the FMP** |
| 9.1 Approach | Human and Financial Resources |  |  |
| 9.2 Cost sharing and recovery | Describe mechanisms for cost sharing or recovery for management |  |  |

### General formatting advice

The template has all headings formatted, the following is general advice on how to format the text to make it easier to read and has a standard format.

1. Font: Use just one font throughout the FMT. An easy-to-read font such as Arial or Times New Roman format 12 is usually used for reports.
2. Spacing: Lines and paragraphs should be spaced at 12 pt, to open out the text and make it easier to read.
3. Figures (include graphs, charts, photographs, and illustrations) and Tables should be:
	1. cited in the text,
	2. numbered in the order of their citation in the text,
	3. positioned close to where they are first cited, and
	4. have a caption with the number and its description.

### Linkages with the Default Assessment Tree

Linkages between MSC default assessment tree and the template sections are provided in the table below.

|  |  |  |
| --- | --- | --- |
| **Principle and Component** | **Performance Indicator** | **FMP Section** |
| **P1 TARGET STOCK** | **Stock Outcome** | **1.1.1 Stock status** | **5.1.1** |
| **1.1.2 Stock rebuilding** | **2.2.2** |
| **Harvest Strategy** | **1.2.1 Harvest strategy** | **4.1** |
| **1.2.2 Harvest control rules and tools** | **4.2** |
| **1.2.3 Information and monitoring** | **5.1.2, 5.2** |
| **1.2.4 Assessment of stock status** | **5.1.2** |
| **P2 ECOSYSTEM** | **Primary Species** | **2.1.1 Outcome status** | **1.2.3** |
| **2.1.2 Management strategy** | **5.1, 4.2.1** |
| **2.1.3 Information** | **5.3** |
| **Secondary Species** | **2.2.1 Outcome status** | **1.2.3** |
| **2.2.2 Management strategy** | **5.1, 4.2.1** |
| **2.2.3 Information** | **5.3** |
| **ETP Species** | **2.3.1 Outcome status** | **1.2.3** |
| **2.3.2 Management strategy** | **5.2, 4.2.1** |
| **2.3.3 Information** | **5.3** |
| **Habitats** | **2.4.1 Outcome status** | **1.2.3** |
| **2.4.2 Management strategy** | **5.3, 4.2.1** |
| **2.4.3 Information** | **5.3** |
| **Ecosystem** | **2.5.1 Outcome status** | **1.2.3** |
| **2.5.2 Management strategy** | **5.4, 4.2.1** |
| **2.5.3 Information** | **5.3** |
| **P3 GOVERNANCE AND MANAGEMENT** | **Governance and Policy** | **3.1.1 Legal framework** | **3.1** |
| **3.1.2 Consultation roles & responsibilities** | **3.2** |
| **3.1.3 Long-term objectives** | **2.1.1** |
| **Fisheries-Specific Management** | **3.2.1 Fishery-specific objectives** | **2.2** |
| **3.2.2 Decision-making processes** | **4.3** |
| **3.2.3 Compliance and enforcement systems** | **6** |
| **3.2.4 Management performance evaluation**  | **7** |

# TEMPLATE

**FISHERY NAME**

<Brief descriptive name of the fishery. Usually includes the location, species and gear types e.g. ‘Western Channel lobster trap fishery’>

**Month Year**

<Insert month and year of current version of the FMP>

**Names / Logos of key FMP proponents**

<Insert names and if appropriate logos of the organisations or agencies preparing the management plan>

**FMP Version number**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version number** | **Date published** | **Key contributors** | **Description of key changes** |
|  |  |  |  |
|  |  |  |  |

<It is good practice to provide numbers to record the version number of the management plan e.g. Version 1.0 for the initial approved version, together with other information to provide transparency on the plan’s development>

**Table of content**

<insert Table of Content>

# Identification and Description of the Fishery

|  |
| --- |
| **Guidance for completing Section 1 – Identification and Description of the Fishery**Section 1 should set out:* The (i) location and nature of the fishery in terms of the target stocks covered, its location, fishing methods, and (ii) the time period covered by the plan and the revision dates if known.
* A description of the fishery, including its history, the nature of the target species, the environment and socio-economic characteristics.

The purpose is to provide readers with a broad understanding of the fishery and its main characteristics.  |

## Fishery to which this plan applies

Delete the text in brackets in fill in the required information

|  |  |
| --- | --- |
| **Fishery name:**  | <Brief descriptive name of the fishery. Usually includes the location, species and gear types e.g. ‘Western Channel lobster trap fishery’> |
| **Species covered:**  | <The common and scientific name(s) of the species being covered by the FMP. The FMP can cover a single species, a number of similar species e.g. within the same genus, or can be multi-species in nature> |
| **Fishery location:**  | <The geographical area covered by the management plan. This normally mirrors the *jurisdictional boundaries* of a fishery (e.g. within an Exclusive Economic Zone or coastal baseline limit), the *target* *stock boundaries* or the *statistical divisions* (e.g. ICES statistical divisions) or a combination of all three. The inclusion of maps is encouraged>  |
| **Fishing method(s):** | <The name of the gear type(s) being used in the fishery. If possible, this should follow the International Standard Statistical Classification of Fishing Gear[[2]](#footnote-3). Where appropriate, include additional details of the gear and its deployment e.g., the use of lights, whether purse seine sets are associated with objects like Fish Aggregating Devices (FADs), or gillnet mesh size ranges>  |
|  |
| **Term of plan:** | <States how long the plan will last. The term of the plan may vary. In most cases it is open-ended e.g. does not have an end date, whilst others may have a fixed term e.g. five years>  |
| **Date of next review:** | <It is important that the plan is regularly reviewed and updated where necessary. Reviews may be annual, with a more detailed review over a longer period e.g. five years> |
| **Key authors:** | <Identifies the main authors of the plan. This may be at organisation or individual levels> |

## Description of the Fishery

### Historical Overview

<Brief history of the development of the fishery, including catch and effort trends, any key events (e.g. closures) and a chronology of management e.g. key legislation and the institutions involved>

or

<Brief history of the development of the fishery, including catch and effort trends, any key events (e.g. closures) and a chronology of management e.g. key legislation and the institutions involved>

|  |
| --- |
| Inset text here |

### Biology of the Target Stocks

<For each species / stock complex to be included in the plan (see Section 1.1 above), provide a brief description of its *main characteristics* (e.g. distribution, known stocks) *life cycle*, *inter-species relationships* (e.g. its major predators and prey) and *critical habitats* (associations with different habitats, in particular vulnerable marine ecosystems (VMEs)>

|  |
| --- |
| <Insert text here> |

### Ecosystem and habitat

<Description of the *physical ecosystem* (depth, currents, substrate types & coastlines) and *biological* *environment* e.g. nutrient status, primary production, main trophic constituents, main habitat distribution, presence of vulnerable marine ecosystems (VMEs) and any interactions with other non-target bycatch, including endangered, threatened or protected (ETP) species.>

|  |
| --- |
| <Insert text here> |

### Economic and Social Characteristics

<Description, supported by maps and tables where appropriate, of the main landing locations, annual volume of catches, fishery seasonality, number of people involved *directly* and *indirectly*, brief summary of downstream value chain and the socio-economic dependencies of the fishery location>

|  |
| --- |
| <Insert text here> |

### Identification of key uncertainties and data needs

|  |
| --- |
| <Identify and describe possible sources of uncertainty such as accuracy or precision of data, survey frequency, adequacies of management, natural variability, misreporting, etc. Also identify and describe key data needs> |

## Linkages with other programs

<Provide information on any other programs, key projects or important initiatives that may interact with management of the fishery and which may have implications for the fishery with respect to data, research, policy development or management of the fishery.

|  |
| --- |
| <Insert text here> |

# Goals and Objectives

|  |
| --- |
| **Guidance for completing Section 1 – Goals and Objectives**Section 2 should set out:* The wider governance and policy environment in which the fishery operates, both in terms of the long-term objectives outside of the fishery and the policies that give rise to these.
* The long and short-term management objectives of the fishery itself.

The purpose is to provide readers with a broad understanding of what management of the fishery is trying to achieve, both at fishery and wider levels.  |

## Governance and Policy

### Long-term Objectives

<Provide a brief description of the objective(s) contained in high level of broader government policy. Typically, management decisions are taken in the context of broader pre-stated objectives. The success of management decisions is therefore judged against how well those decisions deliver against objectives. To ensure clear strategic direction, government policy and laws should provide management with a clear set of objectives to guide decision-making. Fishery-specific management policy (such as an FMP) will be developed in the context of these high level, long-term objectives, demonstrating how these will be met – See Section 2.2 below>

<Describe how the objective will be achieved. Include how the FMP will comply with higher-level policy (fisheries, environment, food security, etc). Note that the precautionary approach should be explicit in the long-term objectives>

|  |
| --- |
| <Insert text here> |

### Key Policy Linkages

<List or describe linkages with high-level policy and legislation (international, regional, national and local)>

|  |
| --- |
|  <Insert text here> |

## Fisheries-Specific Management Objectives

### Long-term Objectives

<Provide a brief description of the *long-term* objectives of the fishery covered by this plan. Long-term means at least over the term of the plan (and beyond) and if the plan is open-ended, over at least five years. For fisheries in a FIP, ideally these will be based upon the FIP Improvement Action Plan.

Fishery-specific objectives (or operational objectives) provide direction for management measures or regulations and are designed around the overarching national, international or regional goals and/or policies set by governments for their fishery sector (see Section 2.1.1 above). These may be as simple as a series of bullet points or might be expanded to provide more detail>

<Note that the short- and long-term objectives should be consistent with achieving the outcomes expressed by MSC’s Principles 1 and 2 (sustainable fish stocks and minimising environmental impact) and are explicit within the FMP>.

<Describe how the long-term objectives will be achieved. If possible, each management objective should be examined individually, and the management measures designed to help achieve that objective should be identified and explained>

<For more complex fisheries, the plan could be more specific on how objectives and measures link up and which performance indicators are going to be used to measure the achievement of the management objectives. This must be done by structuring the plan in a way that requires the development of performance indicators. The indicators must cover all objectives of the plan. In general, there will be indicators of the biological status of the stock but also social and economic indicators of the health of the fishery>

|  |
| --- |
| <Insert text here> |

### Short-term Objectives

<Provide a brief description of the *short-term* objectives of the fishery covered by this plan. Short-term means objectives that need to be achieved within the life of the plan and if the plan is open-ended, within five years or less. In many cases short-term objectives reflect urgent management priorities and may include re-building the fishery. These may be as simple as a series of bullet points or might be expanded to provide more detail>

< Describe how the short-term objectives will be achieved. See Section 2.2.1 above>

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| <Insert text here> |

# Fisheries Management Structure

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| **Guidance for completing Section 1 – Fishery Management Structure**Section 3 should set out:* The legal framework within which the fishery operates.
* The institutional arrangements for managing the fishery.
* The co-management arrangements for sharing management with fishery participants and other stakeholders.
* The consultation processes that the fishery should undertake to ensure participatory management.
* The principles and means for sharing the fishery’s resources in an equitable fashion.

The purpose is to provide readers with an understanding of how the fishery is managed and who is involved.  |

## Legal Framework

<Description of the legal and/or customary framework that ensures the fishery is sustainably managed, resources are equitably allocated and that also allows for disputes to be resolved. This might include (i) fishery and relevant environmental legislation (Policies, Acts, Regulations) at all relevant jurisdictions – regional, national, international; (ii) relevant international instruments and evidence of domestic implementation, and (iii) Regional Fishery Management Organisations (RFMO) conservation and management measures>

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## Institutional Arrangements

<Description of the different institutions, organisations and other bodies involved in the management of the fishery, including statutory management organisations, those responsible for monitoring, control and surveillance (MCS), fisher and producer organisations and non-statutory bodies that play a recognised role in managing the fishery. This could be provided as an organisational diagram, and supported by description of key bodies outlining their roles and responsibilities>

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## Consultation and Co-management Arrangements

<Description of the process and arrangement that allow non-statutory bodies and, where appropriate, individuals to contribute to fishery management planning>

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| <Insert text here> |

## Allocation of Resources

### Basic Principles

<Description of the process and arrangement that allow non-statutory bodies and, where appropriate, individuals to contribute to fishery management planning>

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| <Insert text here> |

### Specific Mechanisms

<Description of the different mechanisms by which fishery resources are allocated, how these allocations are managed, and how they can be transferred and cancelled. This section should be harmonised with the harvest strategy and control rules in the next section>

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# Harvest Strategy and Control Rules

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| **Guidance for completing Section 4 – Harvest strategy and control rules**Section 4 should set out:* The strategy by which the fishery will be harvested.
* The Harvest Control Rules (HCRs) that will be used to implement the harvest strategy.
* The decision-making frameworks that will be used to design, develop and review the harvest strategy and its control rules.

The purpose is to provide explicit statements on the approach to managing sustainable harvesting of fishery resources and how the control rules will ensure that the fishery is adaptive and responds to changes in stock condition.  |

## Harvest Strategy

### Description

<A description of the approach taken to manage the fishery and make sure it is responsive to the target stock status. For instance, a harvest strategy may decide whether input controls (e.g. methods to limit fishing effort) or output controls (e.g. methods to limit fishing mortality) or a combination of both are used. In some cases, this strategy may be transitional e.g. moving from one approach to another, in which case the timescale needs to be mentioned. Additional detail may be provided in terms of the initial design and provide justification of why a particular strategy has been adopted. The harvest strategy should be designed to achieve the fishery-specific objectives stated in Section 2.2>

<The harvest strategy should also include strategies for (i) minimising unwanted catches of target, primary and secondary species, (ii) minimising interactions with ETP species, and (iii) ensuring that habitat and ecosystem impacts are within acceptable levels>

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|  <Insert text here> |

### Monitoring, Review and Evaluation of the Harvest Strategy

<A brief description of the main mechanisms to monitor the fishery (see also Section 5: Stock Assessment, Fishery Monitoring and Research) and how the results will be used to review and evaluate the harvest strategy and refine it over time. Such review may include a periodic assessment of alternative measures to minimise unwanted catch of the target and non-target stocks>

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## Harvest Control Rules

### Description of the Harvest Control Rules

<Provide a list of harvest control rules (HCRs) that have been agreed for the fishery. In general, HCRs should be economically sound, compliant with national regulations and/or international fishery agreements, based on relevant international experiences, supportive of ecosystem-based fisheries management, and compatible with the biology of target stocks. These HCRs should be well-defined e.g. detailing their purpose, mechanism, trigger points and performance indicators. If possible, they should also be considered in terms of their robustness to uncertainty>

<In addition, HCRs or other mechanisms to minimise unwanted catches of target, primary and secondary species, (ii) interactions with ETP species and (iii) ensuring that habitat and ecosystem impacts are within acceptable levels could be included. An example of these could be move-on rules when a benthic impact trigger point is reached, such as a catch of VME indicator species>

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### Review of the Harvest Control Rules

<A brief description of the main mechanisms to monitor the effectiveness of the HCRs in terms of how responsive they are to stock status and how effective they are in restoring the stock to target levels>

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## Decision-making Frameworks

<Building on Sections 4.1 and 4.2 above, provide a brief overview on the process to review and refine existing measures and strategies designed to achieve the fishery-specific objectives. This includes processes to review HCRs and to identify the need for new or modified HCRs>

<Provide additional detail on the different processes needed to design, review and update management measures and strategies. Could be in the form of a flow diagram. Should mention the institutional responsibilities involved, timelines and consultation procedures>

<Describe how information is identified and used in decision-making processes, including how the precautionary approach is applied. It may also be appropriate to include an overview of how the outcomes of decision-making are made available to fishery stakeholders>

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# Ecosystem Management Strategies

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| **Guidance for completing Section 5 – Ecosystem management strategies**Section 5 should set out:* The strategies by which non-target species, endangered, threatened or protected (ETP) species, habitats and ecosystem structure and functioning will be managed.

The purpose is to provide explicit statements on the approach to managing the non-target elements of the aquatic ecosystem related to the fishery.  |

## Primary and Secondary Species

<Under the MSC standard, the assessment must ensure that the fishery does not impair the recruitment of non-target bycatch (e.g. those species not being included in the Unit of Assessment). Such species are categorised as primary (e.g. usually managed with set refence points) or secondary (unmanaged). The latter category also includes an assessment of species outside the scope of MSC certification e.g. seabirds and marine mammals. Primary and secondary species are further sub-classified as *main* (e.g. more than 5% by weight of the total of all catches in the UoA or where it is less resilient and makes up >2% of the catch) or *minor*>

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### Management strategy

<Brief description of the approach to which a fishery will ensure that they will not hinder the rebuilding of the main primary and secondary species at/to levels which are highly likely to be above the point of reproductive impairment (PRI). This should provide at least a partial strategy[[3]](#footnote-4) for their management>

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### Other considerations

<Provide supporting evidence that the management strategy above is likely to work, based upon information about the fishery or the species involved. Include evidence that the measures and partial strategy are being implemented successfully. In the case of sharks, provide evidence that it is highly likely shark fining is not taking place>

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## Endangered, Threatened and Protected Species (ETP)

### Management strategy

<Brief description of the approach to which a fishery will manage the fishery’s impact on ETP species, including measures to minimise mortality, which is designed to be highly likely to achieve national and international requirements for the protection of ETP species>

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| <Insert text here> |

### Other considerations

<Provide supporting evidence that the management strategy above is likely to work, based upon information about the fishery or the species involved. Include evidence that the measures and partial strategy are being implemented successfully>

<Provide evidence that there is a regular review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of ETP species and they are implemented as appropriate>

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| <Insert text here> |

## Habitats

### Management strategy

<Brief description of the approach to which a fishery will ensure it is highly unlikely to reduce structure and function of both the commonly encountered and the vulnerable marine ecosystem (VME) habitats to a point where there would be serious or irreversible harm>

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### Other considerations

<Provide supporting evidence that the management strategy above is likely to work, based upon directly about the UoA and/or habitats involved. Include evidence that the measures and partial strategy are being implemented successfully>

<Provide evidence that there is some quantitative evidence that the UoA complies with both its management requirements and the protection measures afforded to VMEs by other MSC UoAs/ non-MSC fisheries, where relevant>

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## Ecosystem

### Management strategy

Brief description of the approach by which a fishery will ensure that it will, if necessary, take into account available information. Also the approach by which the fishery is expected to restrain impacts of the UoA on the ecosystem so that it is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm. This should provide at least a partial strategy for ecosystem management>

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### Other considerations

Provide supporting evidence that the management strategy above is likely to work, based upon information about the fishery or the ecosystem involved. Include evidence that the measures and partial strategy are being implemented successfully

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# Stock Assessment, Fishery Monitoring and Research

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| **Guidance for completing Section 6 – Stock Assessment, Fishery Monitoring and Research**Section 6 should set out:* A description of the stock status and trend at the time of the plan, together with a description of the stock assessment methodologies, or other measures of stock levels.
* Description of fisheries-dependent research and reporting.
* Description of other relevant research, including bycatch, ETP and habitat surveys.

The purpose is to set out mechanisms for monitoring key indicators relating to stock condition and environmental performance.  |

## Stock assessments

### Current status of target stock(s)

<Brief summary of what is known about the stock, including historical trends if possible. Where appropriate, include summary graphs e.g. of spawning stock biomass, recruitment and fishing mortality where available. This text should be updated as and when a new stock assessment is conducted>

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### Stock assessment methodologies

<Provide some details on the stock assessment methodologies used and why and, if possible, identify uncertainties in the assessment process or proxies to stock levels>

<Provide context on when the last stock assessment took place, the level of peer-review and how the stock assessment process and methodologies are being improved as a result>

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| <Insert text here> |

## Fisheries-dependent monitoring and reporting

<Provide details on what information is regularly and periodically collected from the fishery, including effort, catch and landings>

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| <Insert text here> |

## Bycatch, ETP species and other surveys

<Provide details on regular and periodic surveys to collect data on (i) non-target catch, (ii) the interactions with ETP species and their consequences, (iii) habitat distribution and impact assessments and (iv) other surveys>

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| <Insert text here> |

## Other relevant research

<Provide details of any other research that is required or being carried out to support ensuring the sustainability of the fishery. This could include ecosystem and socio-economic themes. Where appropriate, put these into context with wider national, regional or international research initiatives>

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# Compliance and Monitoring

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| **Guidance for completing Section 7 – Compliance and Monitoring**Section 7 should set out:* The overall objectives of monitoring, control and surveillance (MCS) efforts in the fishery.
* How MCS activities are planned.
* Roles and responsibilities in fisheries compliance.

The purpose is to provide readers with a broad understanding of how compliance in the fishery is monitored and what approaches are taken to deter non-compliance.  |

## Objectives and Approach

<Brief summary of the main objectives of fisheries control, including linkages to any higher policy>

<General approach to MCS e.g. sea-based, port-based, self-regulation, fleet coverage of vessel monitoring systems (VMS), etc.>

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## Planning

### Risk assessment

<Brief summary of the main objectives of fisheries control, including linkages to any higher policy>

<General approach to MCS e.g. sea-based, port-based, self-regulation, fleet coverage of vessel monitoring systems (VMS), etc.>

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### Recurrent planning

<Description of the recurrent planning processes (e.g. annual control planning), how these are designed, resourced and implemented. Should also include some details on how control efforts and impacts are monitored and used for recurrent planning processes>

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### Deterrence of non-compliance

<Description of the main mechanisms for deterrence against rule-breaking. This may include enforcement-based sanctions (both administrative and criminal) available for illegal, unreported and unregulated (IUU) fishing infringements, including details of penalty levels where possible. Also informal approaches, such as norm-based controls. >

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## Roles and responsibilities in compliance

<Description of the main organisations responsible for fisheries monitoring, control and surveillance, including their jurisdictions and responsibilities>

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# Fishery Performance Evaluation

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| **Guidance for completing Section 8 – Fishery Performance Evaluation**Section 8 should set out:* The main performance indicators that will be used to monitor how well the plan is being implemented and how effective it is.
* The process by which fisheries management can be periodically reviewed and the FMP revised.

The purpose is to ensure that the FMP remains relevant to the ongoing and emerging challenges to the sustainable management of the fishery. The approach presented below presumes that the fishery is working to meet MSC’s fishery standard requirements, mostly likely though a Fisheries Improvement Project (FIP), and has developed a time-bound Improvement Action Plan. Once the fishery exits the FIP (e.g. becomes certified or otherwise leaves the MSC program), this section can be replaced with standard fishery performance monitoring and evaluation text. In this case, the fishery is directed towards more generic guidance on fisheries performance objective setting and evaluation, such as in Hindson *et al* (2005).  |

## Measurable Performance Indicators

<Where the fishery is in a FIP[[4]](#footnote-5), MSC’s Benchmarking and Tracking Tool (BMT) should be used here. The BMT provides a method for reporting the status of fisheries against the MSC Fisheries Standard and tracks the progress being made as fisheries improve towards sustainability and certification. MSC provides written guidance[[5]](#footnote-6) and an Excel-based BMT tool[[6]](#footnote-7) that allows users to benchmark the performance of a fishery or FIP against the MSC Fisheries Standard>

<Once the fishery has exited the FIP, SMART[[7]](#footnote-8) indicators need to be developed to enable monitoring of the fishery against the long- and short-term objectives outlined in **Section 2**. These indicators should be subject to periodic evaluation to ensure they remain relevant and useful>

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## Review Process

<An *internal review* of the FIP Action Plan should be undertaken on an annual basis, with progress/ outcomes noted against the individual actions in Table 3 of the Action Plan, and the BMT updated accordingly. The process and mechanism for review should be recorded here, including any public consultation considered necessary>

<A periodic *external review* of the FIP Action Plan should be undertaken on a periodic basis e.g. in the form of an independent pre-assessment for the initial design of the Action Plan and possibly a final independent review once the FIP has been completed to ensure that the fishery is ready to undergo full assessment. The process and mechanism for external reviews should be recorded here>

<Once the fishery has exited the FIP, the FMP should be formally revised on an annual basis to reflect any changes to the fishery management, as well as any new information supporting this management e.g. new stock assessment results. We suggest that a more detailed evaluation, if possible, with some external input, is conducted every five years to ensure the FMP remains relevant and robust>

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## Fisheries Management Plan Revision and Update

<A Fisheries Management Plan should be a living document that is adaptive to changing instances both within and outside the fishery. Based on the review processes earlier in this section, the FMP can be updated, and more detail can be added as it matures. This section should therefore describe the process by which the FMP will be revised e.g. at which periodicity, by who, and the degree of stakeholder participation and consultation involved. It is noted that some elements of the plan may need legislative changes (e.g. some harvest control rules), thus the processes and timescale of such changes should be reflected here>

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# Resources required to implement the FMP

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| **Guidance for completing Section 9 – Resources required to implement the FMP**Section 9 should set out:* The approach to ensuring that sufficient human and financial resources are allocated to implement the plan.
* Approaches to share and / or recover costs from stakeholders.

The purpose is to formalise how the FMP is to be supported and maintained.  |

## Approach

### Human Resources

<Describe the approach to ensuring there are sufficient human resources to maintain, develop and when necessary, update the FMP. If possible, identify the lead agency responsible and any key partners involved, detailing roles and responsibilities>

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### Financial Resources

<Describe the approach to ensuring there are sufficient financial resources to maintain, develop and, when necessary, update the FMP. If possible, provide details of the budget involved and their source>

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## Cost sharing and recovery

<Describe any cost sharing or cost-recovery mechanisms>

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| <Insert text here> |

# APPENDIX A: References

**FAO (1997).** Fisheries Management. FAO Technical Guidelines for Responsible Fisheries. No. 4. FAO Fishery Resources Division and Fishery Policy and Planning Division. Fisheries management. Rome, FAO. 1997. 82p. <http://www.fao.org/3/a-w4230e.pdf>

**FAO (2002).** Design and Implementation of Management Plans. Chapter 9 in ‘A Fishery Manager’s Guidebook’. Management Measures and their Application. Cochrane, K.L. (ed.). FAO Fisheries Technical Paper. No. 424. Rome, FAO. 2002. 231p. <http://www.fao.org/3/y3427e/y3427e00.htm#Contents>

**FAO (2009).** International guidelines for the management of deep-sea fisheries in the high seas. FAO, Rome. 73 p. <http://www.fao.org/3/i0816t/i0816t00.htm>

**Hindson, J., D. Hoggarth, M. Krishna, C. Mees and C. O’Neill (2005).** How to Manage a Fishery. A simple guide to writing a Fishery Management Plan. Marine Resources Assessment Group (MRAG), London; Centre for Environment Education; Ahmedabad; & Scales Consulting Ltd, London. 81p. <https://assets.publishing.service.gov.uk/media/57a08c90ed915d3cfd00147a/R8468d.pdf>

**NEFMC (1998).** Monkfish Fishery Management Plan. Prepared jointly by the New England Fishery Management Council (NEFMC) & the Mid-Atlantic Fishery Management Council (MAFMC) in coordination with the National Marine Fisheries Service (NMFS). Finalised Sept 17, 1998. 405p. <https://s3.amazonaws.com/nefmc.org/MonkForPDF.FMP.pdf>

**Primary Industries and Regions South Australia (2014).** Paper number 67: Management Plan for the South Australian Commercial Spencer Gulf Prawn Fishery. PIRSA Fisheries and Aquaculture, Adelaide, Australia. 81 p. <http://pir.sa.gov.au/__data/assets/pdf_file/0003/57954/Prawn-Spencer_Gulf-Fishery-Management_Plan.pdf>

Appendix B: Glossary

*The following glossary is based on those from FAO or MSC*

**Adaptive management.** Adaptive management attempts to reduce uncertainties over time in a structured process of ‘learning by doing’. Management actions are used or interpreted as experiments to learn more about the resource system at the same time as it is being managed. New knowledge is generated by the deliberate use of learning processes instead of sticking to rigid technical solutions that may be sub-optimal. In an adaptive approach, some areas may be deliberately heavily exploited to determine the response of the stock, while other areas are kept as reserves or only lightly exploited to reduce the risk of overfishing on the overall stock.

**Allocation.** Distribution of the opportunity to access fisheries resources, within and among fishing sectors.

**Assessment.** A process that connects knowledge and action regarding a problem. Review and analysis of information derived from research for the purpose of informing the decision-making process. It may not require new research and involves assembling, organising, summarising, interpreting and reconciling existing knowledge, and communicating it to the policymaker or other actors concerned by the problem. Assessment is used to refer to the initial certification and re-certifications of fisheries.

**Benthic.** Describes animals that live on, in or near the substrate.

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

**By-catch.** At a broad level, fisheries by-catch includes all material, living and non-living, other than targeted species caught while fishing. It usually refers to discards (that part of the catch returned to the water), by-product, and the 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 a specified area over a given period of time. The catch includes any animals that are released or returned to the water.

**Certification.** Procedure by which a third party gives written or equivalent assurance that a product, process or service conforms to specified requirements.

**Co-management.** Arrangements between governments and stakeholder groups to allow joint responsibility for managing fisheries resources on a cooperative basis.

**Commercial fishing.** Fishing undertaken for the purpose of trade or business.

**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 can be increased now and in the future.

**Ecosystem.** A dynamic complex of plant, animal, fungal and microorganism 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, hours of trawling.

**Exploitation rate.** Ratio of catch (tonnes) divided by spawning biomass (tonnes).

**Fishery.** FAO defines a fishery as a unit determined by an authority or other entity that is engaged in harvesting fish. Typically, the unit is defined in terms of some or all of the following: people involved, species or type of fish, area of water or seabed, method of fishing, class of boats and purpose of the activities. The MSC requirements also use this term to refer to a Unit of Assessment (or a group of such UoAs) that is under assessment or certified against the MSC Fisheries Standard.

**Fishery dependent data.** Information collected about a fishery or fish stock by the participants of a fishery; for example, 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; for example, scientific surveys and observer reports.

**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.

**Harvest Control Rule (HCR).** An HCR is a set of pre-agreed rules or actions used for determining a management action in response to changes in indicators of stock status with respect to defined ‘trigger’ reference points. HCRs are sometimes described as a set of ‘if’ and ‘then’ rules, defining the circumstances that will lead to management responses (i.e. if the stock falls to x, then the management will respond by y).

**Harvest Strategy.** A harvest strategy is the combination of monitoring, stock assessment, harvest control rules (HCRs), and management actions that are required to bring about the sustainable management of the fishery. For instance a harvest strategy may decide whether inputs controls (e.g. methods to limit fishing effort) or output controls (e.g. methods to limit fishing mortality) or a combination of both are used.

**Harvest,** The catch or take of fish from an area over a period of time.

**Input controls,** Limitations on the type or 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.

**Limited entry.** Where fishing effort is controlled by restricting the number of operators, usually by limiting the number of licences in a fishery.

**Logbook.** An official record or declaration of catch and effort data made by commercial fishers.

**Maximum Sustainable Yield.** The highest theoretical equilibrium yield that can be continuously taken (on average) from a stock under existing (average) environmental conditions without affecting significantly the reproduction process.

**Mesh size.** The size of mesh permitted in nets and traps.

**Mortality.** The death of fish from any source.

**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.

**Non-target species.** Any part of the catch except the target species.

**Objective.** An objective is an explicitly stated goal to be achieved over the short- or long-term. Objectives are usually policy-driven and should be achievable and precautionary in nature where necessary.

**Performance Indicator (PI).** The lowest level of sub-criterion of an MSC criterion in the decision tree; the level at which the performance of the fishery is scored by the certifier.

**Precautionary approach.** One that recognises the uncertainties in our knowledge of the system (e.g. the natural productivity of the stocks, the true values of reference points, the current size of the stock and the effect of future management actions) and adjusts management actions accordingly.

**Recruitment overfishing.** Excessive fishing effort or catch which reduces recruitment to the extent that the stock biomass falls below the pre-defined limit reference point.

**Reference point.** A reference against which the performance of the indicator can be assessed.

**Retained species.** The species within the catch that are not discarded, including target species and by-product.

**Sample.** A proportion or a segment of a fish stock that is removed for study and is assumed to be representative of the whole.

**Spatial.** Of or relating to space or area.

**Species.** A group of organisms capable of interbreeding freely with each other but not with members of other 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 fish 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.** An integrated analysis of information to estimate the status and trends of a population against benchmarks such as reference points.

**Target species.** The species fishers aim to catch.

**Temporal.** Of or relating to time.

**Threatened.** A species or community that is vulnerable or endangered

**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.

**Uncertainty.** The incompleteness of knowledge about the state or process of nature: including the true values of reference points and other population parameters, and the relative importance of internal and external influences on the fishery resource.

**Unit of Assessment (UoA).** The target stock(s) combined with the fishing method/gear and practice (including vessel type/s) pursuing that stock, and any fleets, or groups of vessels, or individual fishing operators or other eligible fishers that are included in an MSC fishery assessment. In some fisheries, the UoA and UoC may be further defined based on the specific fishing seasons and/or areas that are included.

**Vulnerable Marine Ecosystem (VME).** VMEs have one or more of the following characteristics, as defined in paragraph 42 of the FAO Guidelines (FAO, 2009): (i) *uniqueness or rarity* – an area or ecosystem that is unique or that contains rare species whose loss could not be compensated by similar areas or ecosystems; (ii) *functional significance of the habitat* – discrete areas or habitats that are necessary for survival, function, spawning/reproduction, or recovery of fish stocks; for particular life-history stages (e.g., nursery grounds, rearing areas); or for ETP species; (iii) *fragility* – an ecosystem that is highly susceptible to degradation by anthropogenic activities; (iv) *life-history traits of component species that make recovery difficult* – ecosystems that are characterised by populations or assemblages of species that are slow growing, are slow maturing, have low or unpredictable recruitment, and/or are long lived or (v) *structural complexity* – an ecosystem that is characterised by complex physical structures created by significant concentrations of biotic and abiotic features.

1. See <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/index-eng.htm> [↑](#footnote-ref-2)
2. <http://www.fao.org/3/a-bt986e.pdf> [↑](#footnote-ref-3)
3. A ‘partial strategy’ represents a cohesive arrangement which may comprise one or more measures, an understanding of how it/they work to achieve an outcome and an awareness of the need to change the measures should they cease to be effective. It may not have been designed to manage the impact on that component specifically. [↑](#footnote-ref-4)
4. See <https://www.msc.org/for-business/fisheries/developing-world-and-small-scale-fisheries/fips> [↑](#footnote-ref-5)
5. <https://www.msc.org/docs/default-source/default-document-library/for-business/fishery-improvement-tools/benchmarking-and-tracking-tool--guidance-document.pdf?sfvrsn=840c1bb_20> [↑](#footnote-ref-6)
6. <https://www.msc.org/docs/default-source/default-document-library/for-business/fishery-improvement-tools/msc-benchmarking-and-tracking-tool-excel-spreadsheet-v2-1.xlsx?sfvrsn=76d27110_14> [↑](#footnote-ref-7)
7. ***Specific*** – targets a specific area for improvement; ***Measurable*** – you can measure some indicator to check if you have achieved it; ***Agreed*** – by the appropriate stakeholders; ***Realistic*** – within your timescale and resources; ***Time dependent*** – it includes a stated timescale for achievement (adapted from Hindson *et al*, 2005) [↑](#footnote-ref-8)