Ministry for Primary Industries
Manatū Ahu Matua

National Fisheries Plan for Highly Migratory Species

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Prepared for public consultation
By the Highly Migratory Species Team

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Requests for further copies should be directed to:
Publications Logistics Officer
Ministry for Primary Industries
PO Box 2526
WELLINGTON 6140

Email: brand@mpi.govt.nz
Telephone: 0800 00 83 33
Facsimile: 04-894 0300

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List of Abbreviations & Acronyms

Schedule 6	A schedule of the Fisheries Act 1996 that outlines provisions for the return of specified quota management species to the sea
ACAP	Agreement on the Conservation of Albatrosses and Petrels
ACC	Accident Compensation Corporation
ACE	Annual Catch Entitlement
The Act	The Fisheries Act 1996
AOP	The Annual Operational Plan
ARR	The Annual Review Report
B_{MSY}	The average stock biomass that results from taking an average catch of MSY
CCSBT	Commission for the Conservation of Southern Bluefin Tuna
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on Migratory Species
CPUE	Catch per unit effort
DOC	Department of Conservation
EEZ	Exclusive Economic Zone
FAD	Fish Aggregating Device
FAO	Food and Agriculture Organisation of the United Nations
FFA	Forum Fisheries Agency, a pan-Pacific body that provides expertise, technical assistance and other support to its members on tuna resources and their management.
HSS	Harvest Strategy Standard 2008
HMS	Highly migratory species
IFF	Iwi Fisheries Forum
IFP	Iwi Fisheries Plan
MCS	Monitoring control and surveillance
MEY	Maximum Economic Yield
MFAT	Ministry of Foreign Affairs and Trade
The Minister	The Minister for Primary Industries
MOU	Memorandum of Understanding
MPI	Ministry for Primary Industries
MSC	Marine Stewardship Council
NPOA—Seabirds	National Plan of Action to Reduce the Incidental Catch of Seabirds in New Zealand Fisheries
NPOA—Sharks	National Plan Of Action for the Conservation and Management of Sharks

NZSFC	New Zealand Sports Fishing Council (formerly New Zealand Big Game Fishing Council)
QMS	Quota Management System
RFMO	Regional Fisheries Management Organisation
SPC	Pacific Community
TAC	Total Allowable Catch
TACC	Total Allowable Commercial Catch
WCPFC	Western and Central Pacific Fisheries Commission

1. Overview

1.1 PURPOSE

This National Fisheries Plan for Highly Migratory Species (the HMS Fisheries Plan) establishes objectives for the management of New Zealand's highly migratory species (HMS) fisheries and strategies to achieve them, and identifies performance indicators in order to monitor the achievement of these objectives. The HMS Fisheries Plan commences in 2017.

This plan, along with supporting management processes, will provide an integrated, transparent roadmap of what management and services will be provided in HMS fisheries. It will include those services required to meet relevant legislative obligations under the Fisheries Act 1996 and the strategic directions of *Fisheries 2030*.

1.2 SCOPE

The HMS plan includes criteria and objectives to guide the management of Highly Migratory fisheries within NZ fisheries. For Highly Migratory fisheries this mainly impacts those fisheries operating within the EEZ from 12nm-200nm, but where a national allocation has been made under a RFMO determination will include all those areas appropriate to the RFMO.

The management of Highly Migratory fisheries encompasses all target stocks, bycatch fish stocks, and the environmental effects of fishing. In managing the stocks in the New Zealand context, consideration of the wider RFMO management settings and strategies needs to be taken into account. In some instances, this may impose constraints on the ability of New Zealand to manage its stocks in a manner appropriate to the wider New Zealand fisheries regime.

The plan has been prepared in a consultative collaborative process with stakeholders from tangata whenua, industry, the recreational sector, and environmental organisations. MPI will amend and update the plan as appropriate.

1.3 STRUCTURE

The management of New Zealand's Highly Migratory fisheries consists of three parts, divided into longer-term objectives and shorter-term operational cycles.

The HMS Fisheries Plan

The HMS Fisheries Plan describes the overall strategic direction for New Zealand's HMS fisheries and provides:

1 Strategic Context
2 HMS Management Objectives
3 Profile of New Zealand's HMS fisheries

Annual Operational Plan (AOP)

While the fisheries plan provides a multi-year, overarching framework for the management of HMS fisheries, details of the day-to-day operational objectives that will be implemented for each individual fishery are specified in the AOP. The AOP also outlines the required services, delivery mechanisms, and service prioritisation issues for the upcoming financial year.

The AOP sets out:

1. How individual fisheries will be managed during the individual years which make up the term of the HMS Fisheries Plan;
2. Key tasks that will be undertaken to support the successful delivery of management and operational objectives;
3. Key performance indicators that will be used to monitor whether the delivery of the management and operational objectives is successful
4. The core services (e.g. field operations, research, and regulatory) that are required in each fishing year to deliver management and operational objectives
5. In situations where there are limited business group resources and competing tasks and objectives, the operational plan also prioritises which services will be delivered, including a rationale for this prioritisation

The AOP will be produced before the start of each financial year, and will be publicly available through the MPI website. Its production will be aligned with planning and prioritisation processes within the Ministry for Primary Industries (MPI).

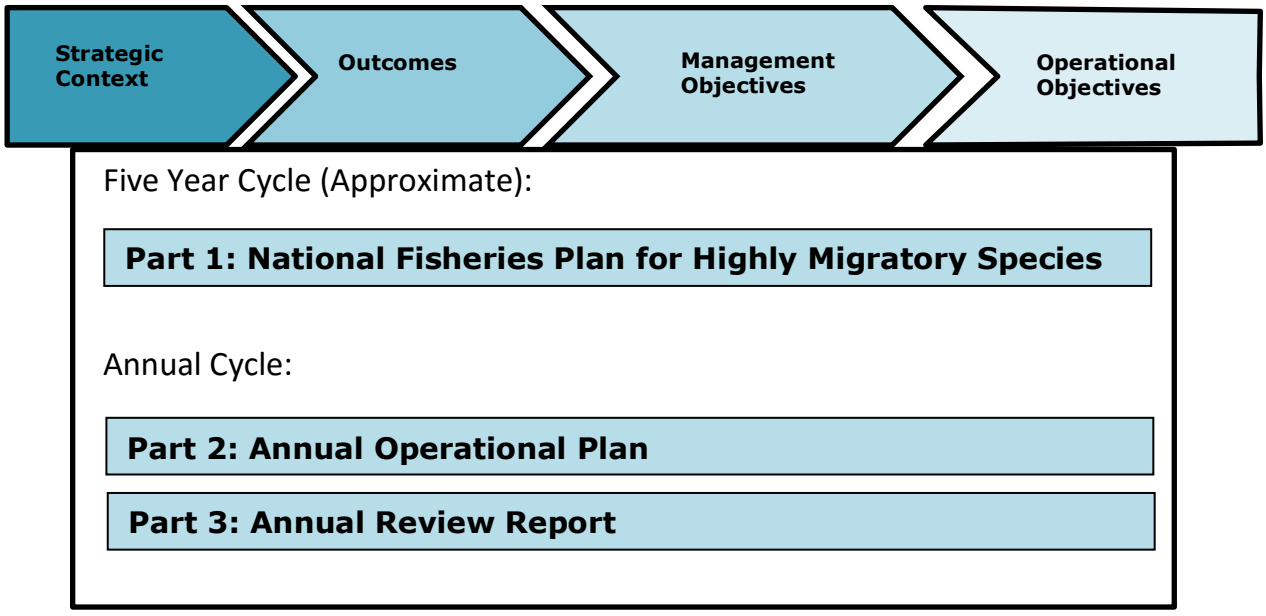
Annual Review Report (ARR)

A formal annual review process is used to monitor the delivery of the tasks identified in the current AOP as well as overall performance of the fisheries in relation to some of the wider HMS management objectives.

The ARR will assess progress against performance indicators laid out for each Management or Operational Objective.

The ARR will be used to inform the development of the following year's AOP, and will be publicly available through the MPI website.

HMS Fisheries Plan Structure:



1.4 LEGAL STATUS

Section 11A of the Fisheries Act 1996 (the Act) provides general guidance on what a fisheries plan may contain. Section 11A(2) states that a plan may relate to one or more stocks, fishing years, or areas, or any combination of these. Section 11A(3) of the Act states that the plan may include various items, including fisheries management objectives to support the purpose and principles of the Act.
Section 11A of the Act provides the legal basis for development of the HMS Fisheries Plan and will guide its implementation through the AOP and ARR. Neither the management and/or operational objectives, nor the tasks to support them, will diminish the legal requirement to ensure the purpose and principles of the Act are met. Over time, if there are conflicts between any part of the HMS Fisheries Plan and legislative obligations as set out in the Act, then the legislative requirements unequivocally take priority.

It is proposed that the Minister for Primary Industries (the Minister) approves the HMS Fisheries Plan under Section 11A of the Act. This Plan is intended to apply for the period 2017 to 2022, unless reviewed earlier. In approving this plan, the Minister would agree to the following:

- The strategies and management objectives that will guide the management of all New Zealand fisheries for HMS in the coming years
- The proposed implementation of the plan, including the development of AOPs and ARRs.

2. Strategic Context

2.1 LEGISLATIVE CONTEXT

Domestic Legislation

The overarching legislation associated with the HMS Fisheries Plan is the Act.

Parts 1 and 2 of the Act outline broad principles and obligations under which MPI operates. In particular, Part 1, Section 5 draws attention to the following obligations:

- New Zealand's international obligations relating to fishing; and
- The provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.

Part 2 of the Act sets out the broad purpose and principles of the Act. In particular, Part 2, Section 8 of the Act defines the purpose of the Act:

> (1) The purpose of this Act is to provide for the utilisation of fisheries resources while ensuring sustainability.
>
> (2) In this Act, **ensuring sustainability** means-
>
> > (a) Maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations; and
> >
> > (b) Avoiding, remedying, or mitigating any adverse effects of fishing on the aquatic environment.
>
> **Utilisation** means conserving, using, enhancing, and developing fisheries resources to enable people to provide for their social, economic, and cultural well-being.

Part 2, Section 9 of the Act establishes the following environmental principles that shall be taken into account:

(a) Associated or dependent species should be maintained above a level that ensures their long-term viability;
(b) Biological diversity of the aquatic environment should be maintained; and
(c) Habitat of particular significance for fisheries management should be protected.

Section 10 of the Act outlines information principles for decision makers as follows:

(a) Decisions should be based on the best available information;
(b) Decision makers should consider any uncertainty in the information available in any case;
(c) Decision makers should be cautious when information is uncertain, unreliable, or inadequate; and
(d) The absence of, or any uncertainty in, any information should not be used as a reason for postponing or failing to take any measure to achieve the purpose of this Act.

The Wildlife Act 1953 provides context to Section 9 of the Act with regard to associated or dependant species: the majority of seabirds are protected under the Wildlife Act 1953. Whilst it is not illegal to accidentally kill seabirds as part of normal fishing operations, it is an offence not to report their capture or fail to utilise the mandatory mitigation tools.

International Obligations

Under the United National Convention of the Law of Sea (UNCLOS) 1982 and its associated agreements, New Zealand has international obligations regarding the management of fish stocks, taking into account the effects on associated or dependant species.

These obligations are repeated in the subsequent 1995 United Nations Fish Stocks Agreement (UNFSA), and can now be considered binding on all countries as part of customary international law.

New Zealand also has general obligations relating to HMS as a signatory to various international agreements on the management of marine resources. Specific obligations also arise because of New Zealand's participation in relevant regional fisheries management organisations (RFMOs). The duties of the RFMOs are laid out in the FAO Code of Conduct for Responsible Fisheries and the UNFSA.

Depending on the type of species, coastal states must provide for optimum utilisation of stocks within their jurisdiction, taking into account associated and dependant species, and must cooperate with other states in the management of trans-boundary and highly migratory fish stocks.[1]

This plan identifies how New Zealand will implement the commitments it has made that relate to the management of HMS under international agreements and through RFMOs. It also establishes key principles for how HMS fisheries shall be managed in New Zealand. In addition, New Zealand may advocate for RFMOs that develop conservation and management measures for HMS stocks to also apply these principles.

Fishing for HMS, both on the high seas and within exclusive economic zones (EEZs), can often be subject to an obligation to cooperate with other countries in the management of those stocks throughout their range. RFMOs are the primary vehicle for cooperation between interested countries in the management of fisheries.

Two RFMOs are of direct relevance to the management of New Zealand fisheries for HMS:

- The Commission for the Conservation of Southern Bluefin Tuna (CCSBT); and
- The Western and Central Pacific Fisheries Commission (WCPFC).

The mandate of CCSBT is to ensure, through appropriate management, the conservation and optimum utilisation of southern bluefin tuna. New Zealand is a founding member of CCSBT and a signatory to the convention. There is no specific convention area for CCSBT, and measures apply throughout the range where southern bluefin tuna is caught.

The mandate of WCPFC is to promote and effectively manage the long-term conservation and sustainable use of HMS in the western and central Pacific Ocean. New Zealand is a signatory to the convention. The WCFPFC convention area is shown below (Figure 1).

[1] United Nation Convention on the Law of the Sea 1982 Articles 61 to 64. Agreement for the implementation of the provisions of the United Nation Convention on the Law of the Sea of 10 December 1982 relating to the conservation and management of straddling fish stocks and highly migratory fish stocks. Article 8.

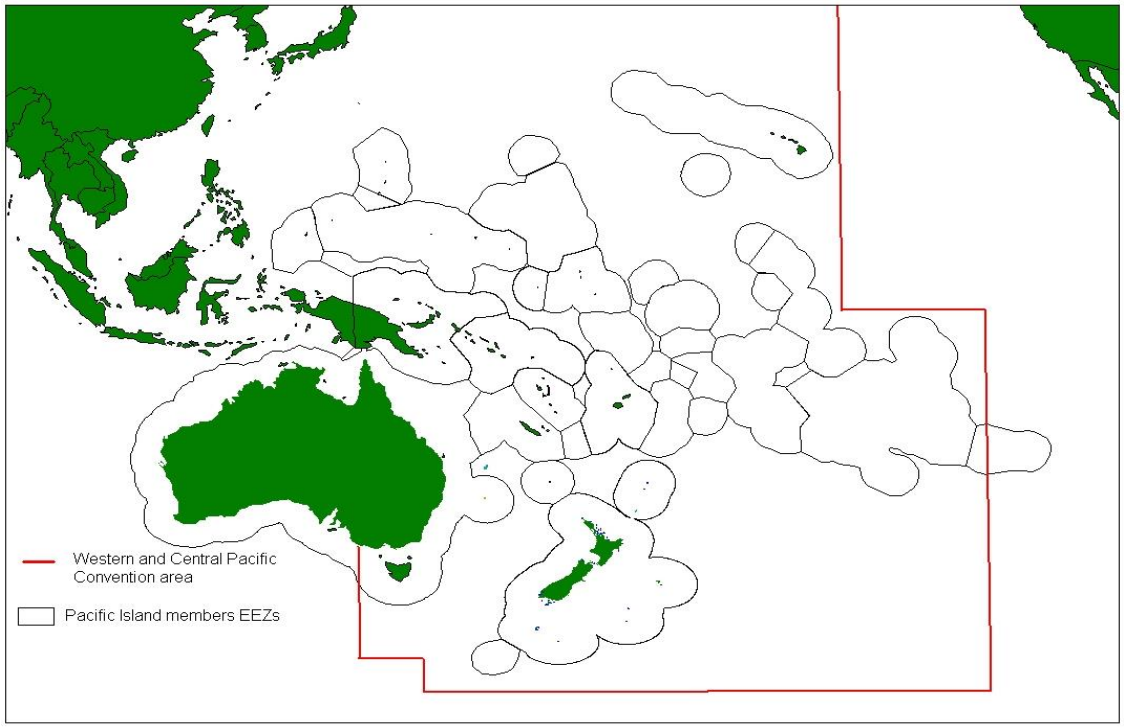


Figure 1: Western and Central Pacific Fisheries Convention Area

New Zealand is also party to the Agreement on the Conservation of Albatrosses and Petrels (ACAP). The purpose of that Agreement is much broader than reducing the incidental mortality of seabirds through interactions with fishing operations. However, because fishing related mortality is a key threat for albatrosses and petrels, ACAP has been very active in this area.

Treaty of Waitangi Settlement Obligations

Obligations under the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 (and individual iwi Deeds of Settlement) can be considered in two broad categories:

- Specific obligations relating to use (both commercial and non-commercial); and
- More general obligations relating to the right of tangata whenua to participate in fisheries management decisions and have their values and aspirations given particular regard.

Specific treaty obligations in the Act provide for commercial elements of the settlement (through 20% of quota as new species enter the QMS and non-commercial elements through regulations providing for customary use). The more general obligations provide for tangata whenua input and participation, and having particular regard to kaitiakitanga[2].

Nothing contained in a fisheries plan changes the Crown's obligations to Māori under the Treaty of Waitangi. The Crown's obligations are specified in legislation, including the Māori Fisheries Act 2004, the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992, individual iwi treaty settlement protocols, and the Act.

2.2 POLICY CONTEXT

The main document that shapes the strategic direction of fisheries management is *Fisheries 2030*. *Fisheries 2030* is carried over from the former Ministry of Fisheries into MPI and is specific to fisheries – serving as the basis for the previous HMS Fisheries Plan.

[2] This obligation is contained in S12(1)(b) of the Act. The Ministry considers that obligation to "provide for the input and participation" is a more active duty than consultation generally requiring earlier engagement with tangata whenua (at the option definition stage, rather than the evaluation of options).

Additional guidance for the management of HMS fisheries comes from Māori fisheries policy statements, MPI's Harvest Strategy Standard, and the National Plans of Action for Sharks and Seabirds.

Fisheries 2030

New Zealanders maximising benefits from the use of fisheries within environmental limits

To support the above goal, *Fisheries 2030* describes two "outcome statements": Use and Environment. Specific "governance conditions" are also fundamental to achieving our goals. Each of these is further specified through a series of Management Objectives.

The *Fisheries 2030* outcomes and governance conditions establish a broad framework for management of fisheries. The ten Management Objectives below, and more specific Operational Objectives discussed later in this plan, provide operational definition to this strategic vision for HMS fisheries.

Outcomes/Governance Conditions

Use Outcome: Fisheries resources are used in a manner that provides greatest overall economic, social, and cultural benefit

Environment Outcome: The capacity and integrity of the aquatic environment, habitats and species are sustained at levels that provide for future and current use

Governance Conditions: Sound governance arrangements that are well specified, transparent, and which support cost-effective and accountable decision-making

Management Objectives

Use Outcome	**1**	Support viable and profitable commercial tuna fisheries in New Zealand
	2	Maintain and enhance world class game fisheries in New Zealand fisheries waters
	3	Māori interests (including customary, commercial, recreational, and environmental) are enhanced

Environment Outcome	**4**	Maintain sustainable HMS fisheries within environmental standards
	5	Implement an ecosystem approach to fisheries management, taking into account associated and dependent species
	6	Protect, maintain, and enhance fisheries habitat

Governance conditions	**7**	Maintain an effective fisheries management regime
	8	Recognise and deliver Deed of Settlement obligations
	9	Ensure New Zealand interests are taken into account internationally
	10	Contribute to Pacific capacity development

Future of our Fisheries

The evolution of New Zealand's fisheries management system is currently the focus of an MPI programme: 'Future of our Fisheries'. This initiative is designed to identify and implement improvements with the focus on three main areas:

- Better information
- Agile and responsive decision-making
- Maximising value from fisheries.

A key short-term component is the Integrated Electronic Monitoring and Reporting System initiative (IEMRS) which aims to implement a comprehensive reporting and vessel monitoring system from October 2017 and to implement electronic monitoring (i.e. cameras on board all vessels) commencing from October 2018. This will improve MPI's capacity to monitor catches across our commercial fisheries for Highly Migratory Species.

The 'Future of our Fisheries' programme will firstly focus on regulatory changes to support IEMRS, with a subsequent medium-term work stream to strengthen the operation of the current management system and a long-term work stream to develop a management system to meet future needs.

Māori Fisheries Policy

It is important to recognise that Māori have a relationship with HMS, and to provide for such relationships to be maintained. This is reflected through a number of management objectives within the HMS Fisheries Plan, including Management Objective 3 (to enhance Māori interests (including customary, commercial, recreational and environmental); and Management Objective 8 (to recognise and provide for Deed of Settlement obligations).

Equally, this relationship is relevant in the consideration of other objectives, including Management Objective 4 (maintaining a sustainable fishery for HMS within environmental standards) and Management Objective 5 (implementation of an ecosystem approach to fisheries management). Both of these objectives can help to further the relationship of Māori with HMS by ensuring HMS fisheries remain abundant within healthy ecosystems.

Beyond this plan, the Fisheries Treaty Strategy[3] establishes an agreed plan for engagement with Māori on fisheries issues. The vision of the Strategy is summarised as, "Tangata whenua and the Crown working in partnership to provide for the utilisation of fisheries resources while ensuring sustainability, having particular regard to kaitiakitanga, with the Crown meeting its obligations to Māori."

National Plans of Action

In response to the United Nation's Food and Agricultural Organisation's (FAO) International Plans of Action for the conservation of seabirds and sharks, New Zealand published National Plans of Action to Reduce the Incidental Catch of Seabirds in New Zealand Fisheries (NPOA-Seabirds) and the National Plan of Action for the Conservation and Management of Sharks (NPOA-Sharks).

MPI published the revised NPOA-Seabirds in 2013. NPOA-Seabirds sets out a long term objective that:

> *New Zealand seabirds thrive without pressure from fishing related mortalities, New Zealand fishers avoid or mitigate against seabird captures and New Zealand fisheries are globally recognised as seabird friendly.*

NPOA-Seabirds is the driver for all New Zealand actions to reduce the incidental mortality of seabirds from fishing. The objectives of this HMS Fish Plan are aligned with the NPOA-Seabirds, and AOPs will set the prioritised actions and services needed to meet those shared objectives.

The NPOA-Seabirds is based on a risk assessment approach to identifying and managing seabird

3 http://www.fish.govt.nz/NR/rdonlyres/0A3BB85E-0C14-42FB-899D-B0C0D2E7E6D3/0/Treaty_Strategy_Overview.pdf

interactions with fishing operations. The focus on limiting captures of high-risk seabird species (those for which populations may not be able to sustain current incidental captures) is complemented by other objectives aimed at reducing captures overall, putting in place best practice measures in commercial and non-commercial fisheries and working internationally to ensure wider fishing related risks are addressed. In this HMS Fisheries Plan, The NPOA-Seabirds is the focus of Operational Objective 6.4.

Similarly, in 2013, MPI published NPOA-Sharks, with the following stated objective:

> *To maintain the biodiversity and the long-term viability of all New Zealand shark populations by recognising their role in marine ecosystems, ensuring that any utilisation of sharks is sustainable, and that New Zealand receives positive recognition internationally for its efforts in shark conservation and management.*

MPI's work on sharks is supported by a 2014 qualitative risk assessment, which considered relative risks to shark populations for Quota Management System (QMS), non-QMS, and protected shark species. Most of MPI's work toward NPOA-Sharks objectives has related to the 2014 Shark Finning Ban and on-going work relating to best practice for "Handling and Release" of live sharks. In this HMS Fisheries Plan, The NPOA-Sharks is the focus of Operational Objective 4.2.

The main mechanism through which the NPOAs will be given effect is the national fisheries planning process. Specifically, the HMS Fisheries Plan will set objectives and targets to address all the five year objectives in the NPOAs. The AOP will set the prioritised actions and services needed to meet the five year objectives for each year.

Harvest Strategy Standard

The Harvest Strategy Standard 2008 (HSS) applies to all New Zealand fishstocks in the QMS. The HSS is a policy statement of best practice in relation to the setting of fishery and stock targets and limits for fish stocks in New Zealand's QMS. It is intended to provide guidance as to how fisheries law will be applied in practice by establishing a consistent and transparent framework for decision-making to achieve the objective of providing for utilisation of New Zealand's QMS by ensuring sustainability.

The HSS sets a framework to apply target and limit biological reference points to QMS fishstocks where relevant.

The Ministry will generally rely on international organisations and agreements in which New Zealand participates to determine the status of HMS or other species or stocks under the purview of international organisations and agreements.

Where an international organisation or agreement has adopted harvest strategies and/or rebuilding plans that meet or exceed the minimum standards contained herein, MPI's approach will generally be to support those strategies. In other situations, Ministry representatives will promote development and adoption, by the international organisation or agreement, of harvest strategies that meet or exceed the standards set out in the HSS.

3. Management Objectives and Strategies to Achieve Them

The *Fisheries 2030* management outcomes (use, environment, and governance) establish a broad framework for management of fisheries. The ten Management Objectives below, and more specific Operational Objectives under several of them, provide additional definition to this strategic vision.

This section provides the following information for each Operational Objective:

- **Current Status:** What is the current status of HMS fisheries in relation to the Operational Objective? Is the status quo acceptable? What are the primary obstacles to achieving the Operational Objective?
- **Management Initiatives:** What approach would be required in order to achieve the Operational Objective over time, bearing in mind the risks associated with not achieving the objective, and the cost-effectiveness of actions required to achieve it?
- **Key Performance Indicators:** How will performance be measured? Have any specific goals been set for the term of this plan?

3.1 OVERVIEW OF MANAGEMENT AND OPERATIONAL OBJECTIVES

OUTCOME	MANAGEMENT AND OPERATIONAL OBJECTIVES	
Use	**1**	**Support viable and profitable commercial tuna fisheries in New Zealand**
	1.1	Reduce administrative barriers to profitability in HMS fisheries
	1.2	Negotiate favourable country allocations for New Zealand fishers
	1.3	Support initiatives to add value to HMS fisheries
	1.4	Recognise importance of access to fisheries resources in New Zealand and the South Pacific region, and identify potential threats and opportunities
Use	**2**	**Maintain and enhance world class game fisheries in New Zealand fisheries waters**
	2.1	Maintain and enhance recreational catch rates for HMS game fisheries
Use	**3**	**Māori interests (including customary, commercial, recreational, and environmental) are enhanced**
	3.1	Take into account the views of relevant iwi and hapu in management of HMS
	3.2	Ensure abundant HMS for customary use
Environmental	**4**	**Maintain sustainable HMS fisheries within environmental standards**
	4.1	Encourage management of HMS at specified target reference points
	4.2	Support the objectives of the National Plan of Action for Sharks
	4.3	Promote sustainable management of HMS fisheries through RFMOs
Environmental	**5**	**Implement an ecosystem approach to fisheries management, taking into account associated and dependent species**

	5.1	Recognise value of HMS and their ecosystems, including predators, prey, and protected species
	5.2	Improve the quality of information available on the capture of protected species
	5.3	Avoid, remedy, or mitigate the adverse effects of fishing on associated and dependent species (including protected species), using a risk assessment approach
	5.4	Support the objectives of the National Plan of Action for Seabirds
Environmental	**6**	**Protect, maintain, and enhance fisheries habitat**
	6.1	Identify and, where appropriate, protect habitats of particular significance to HMS, especially within New Zealand waters
Governance	**7**	**Maintain an effective fisheries management regime**
	7.1	Ensure transparency by providing stakeholders with relevant information and performance indicators for HMS fisheries
Governance	**8**	**Recognise and provide for Deed of Settlement obligations**
	8.1	Implement Deed of Settlement obligations as they relate to HMS
Governance	**9**	**Ensure New Zealand interests are taken into account internationally**
	9.1	Influence international fora and ensure New Zealand interests are taken into account
	9.2	Build and maintain strong relationships with other fishing nations, in order to influence international fora
Governance	**10**	**Contribute to Pacific capacity development**
	10.1	Contribute to the implementation of MPI's MOU with NZ Aid on Pacific capacity development

3.2 MANAGEMENT OBJECTIVES TO SUPPORT USE OUTCOME

Fisheries resources are used in a manner that provides greatest overall economic, social, and cultural benefit

Objective 1: Support viable and profitable commercial tuna fisheries in New Zealand

1.1	**Reduce administrative barriers to profitability in HMS fisheries**

Current Status

The profitability of a fishery is affected by management decisions as well as factors beyond management control (e.g. fuel cost, exchange rate, market price). Ensuring the overall profitability of the fishery is primarily the responsibility of the industry. However, MPI can support this objective through cost effective management of its services.

In recent years, research costs in this fishery have remained low and MPI will continue to support projects that best address the needs of the fishery in a cost effective way.

With the exception of albacore and skipjack, HMS fisheries are relatively high value, low volume fisheries. The levy allocation for HMS fisheries reflects this. Monitoring cost recovery levies and other administrative barriers to profitability is a business-as-usual task for MPI, in collaboration with stakeholders through regular meetings and communication.

Management Initiatives

- Annually assess required services with respect to total fishery costs
- If necessary, promote amendments to cost recovery rules for consideration and/or contribute to any overall review
- Allow for stakeholder participation in high-level planning of service delivery to ensure its cost-effectiveness

Key Performance Indicators

- Fishery catch rates and key economic indicators
- Ratio of levies to returns from fishery

1.2	**Negotiate favourable country allocations for New Zealand fishers**

Current Status

New Zealand's access and/or catch allocations for many HMS fisheries are set by Regional Fisheries Management Organisations (RFMOs). The two RFMOs that the HMS team primarily engages in are the CCSBT and the WCPFC.

New Zealand actively participates in these RFMOs to ensure effective and sustainable fisheries management and development of HMS across the Pacific. It also works to negotiate, on behalf of its domestic fishing interests – both commercial and non-commercial – for favourable access and/or catch allocations.

WCPFC is increasingly interested in establishing harvest control rules for catch-based management, as well as continually reviewing and improving its Conservation and Management Measures; New Zealand takes an active role in all of these negotiations. Work is ongoing through the Pacific Islands Forum Fisheries Agency (FFA) process, with like-minded Pacific island countries to find ways to improve the management of south Pacific albacore under the Tokelau Arrangement. New Zealand is actively promoting the establishment of a catch-based management system for albacore that will balance its domestic fishing interests with the needs of the Pacific.

Within CCSBT, New Zealand has advocated for all mortality to be accounted for by Members, and for non-Member catch to be taken into account when setting global catch allocation. Improvement of the international management and compliance regimes for southern bluefin tuna contribute to a healthier stock. New Zealand will look to ensure that, as the southern bluefin tuna stock rebuilds, New Zealand is given a fair national catch allocation.

Management Initiatives

- Advocate allocations that take full account of New Zealand interests
- Implement negotiated country allocations by reviewing domestic catch limits and other management controls as required
- Review management arrangements for south Pacific albacore and skipjack as required

Key Performance Indicators

- Maintenance of a country allocation for southern bluefin tuna based on proportional share of the global catch allocation (subject to sustainability)
- Promotion of country access and/or catch allocations for key species managed by WCPFC

1.3	Support initiatives to add value to HMS fisheries

Current Status

The New Zealand seafood sector is increasingly looking to produce value-added products for sale on discerning international markets in order to increase profitability. Obtaining third-party certifications, such as Marine Stewardship Council (MSC) certification, for specific fisheries is currently the primary way HMS fisheries have added value. At present, the MSC standard dominates the independent certification market for seafood.

The financial return from the likes of MSC certification, particularly in terms of increased market prices, remains uncertain. However, it is increasingly apparent that third party certification is becoming the minimum standard for entry into certain markets.

Currently, New Zealand's albacore tuna troll fishery and Talley's skipjack purse seine fishery are MSC certified. There are no additional species that are immediate candidates for MSC certification, but MPI will be supportive if any fisheries undergo assessment for MSC certification in the future.

MPI will continue to support industry initiatives to add value to HMS fisheries.

Management Initiatives

- MPI and industry will discuss options for increasing the number of MSC certified HMS fisheries
- MPI will support industry investigation into other options for adding value to catch as desired (e.g. other certifications, alternative markets)
- MPI will assist industry with certification processes, as necessary

Key Performance Indicators

- Continued access to key markets
- New Zealand albacore maintains MSC certification
- New Zealand skipjack maintains MSC certification

1.4	**Recognise importance of access to fisheries resources in New Zealand and the South Pacific region, and identify potential threats and opportunities**

Current Status

Within the New Zealand EEZ, interest in HMS fisheries is shared by customary, recreational, and commercial fishers, as well as environmental groups and the general public, who will, at times, have differing objectives for areas of interest.

New Zealand's fishing industry relies on access to fisheries resources within New Zealand and in the South Pacific region. Access to a wider area of fishing allows operators to extend their fishing season and allows greater flexibility to allocate effort at times of greatest potential economic return.

Decisions on the wider marine environment have in the past impacted on HMS fisheries operations. It is important that, in those cases, these impacts are properly taken into account as part of the decision making process.

Management Initiatives

- MPI will ensure that the views of all HMS stakeholders are represented in matters relating to in-zone access, while also advocating for continued access on the high seas, or as part of any wider regional management arrangement.
- Engage with other Ministries on matters relating to HMS access
- Engage with relevant fora to advocate for New Zealand access regionally

Key Performance Indicators

- Future decisions on in-zone access take into account views of HMS stakeholders
- Access to regional HMS resources reflect interests of New Zealand
- Threats and opportunities are identified

Objective 2: Maintain and enhance world class game fisheries in New Zealand fisheries waters

2.1	Maintain and enhance recreational catch rates for HMS game fisheries

Current Status

MPI is responsible for monitoring non-commercial tuna and billfish game fisheries, as well as consulting and engaging with relevant recreational fishers and charter operators.

Non-commercial fisheries are monitored in a variety of ways. Recreational charter boats are subject to compulsory registration, activity reporting, and catch reporting for specified stocks, including southern and Pacific bluefin tunas. Monitoring also occurs through voluntary reporting, including through the long-standing game fish tagging programme, landed catch records from New Zealand Sport Fishing Council (NZSFC) clubs, and targeted logbook schemes. Information from recreational fisheries monitoring is used in stock assessments and other scientific research.

MPI takes into account recreational interests when making fisheries management decisions, and recognises the economic and inherent value of game fisheries to New Zealand. MPI recognises the potential adverse effects of increasing fishing effort and catch in the southwest Pacific region on the availability of billfish and yellowfin tuna in New Zealand. MPI will advocate for policies that maintain and enhance recreational catch rates of HMS, both domestically and internationally.

In the past, when necessary, agreements between commercial and non-commercial fishers have been negotiated in areas of inter-sector conflict, with varying success. Participants in the Fish Plan Advisory Group (FPAG) have indicated their commitment to developing coordinated, collaborative responses to potential conflicts wherever possible, through semi-annual meetings, the AOP, and the ARR.

Management Initiatives

- Monitor trends using landed catch from NZSFC records, tag and release data from the game fish tagging database, information from charter vessel reporting, and CPUE from logbook schemes
- New Zealand will advocate for the adoption of reference points that maintain the natural distribution and range of HMS stocks
- Further investigate possible reasons for low yellowfin catches, including any possible overlap with commercial fisheries for skipjack
- For striped marlin, if CPUE drops below the long-term mean for four consecutive years, a management review will be triggered

Key Performance Indicators

- Annual recreational catch reported in NZSFC records
- Game fish catch rates from logbook data

Objective 3: Māori interests (including customary, commercial, recreational, and environmental) are enhanced

3.1	Take into account views of relevant iwi and hapu in management of HMS

Current Status

Under section 12 of the Act, fisheries managers have a statutory obligation to provide for the input and participation of tangata whenua with an interest in the stock concerned and/or in the effects of fishing on the aquatic environment in the area concerned. In doing so, particular regard should be paid to kaitiakitanga.

Currently, Te Ohu Kai Moana (TOKM) participate in FPAG meetings, and MPI work with TOKM to encourage iwi groups to join and participate in stakeholder meetings. TOKM is also supported to engage with iwi groups where the limited size of their HMS quota portfolio means that either membership or active participation in stakeholder meetings is not feasible.

MPI also provides an opportunity for iwi to input into both the AOP and ARR, as well as sustainability and regulatory rounds, through regular presentations at the relevant Iwi Fisheries Forums (IFFs).

In 2016, the HMS Team, with the assistance of the Customary Fisheries Team at MPI, conducted an analysis of its performance on customary and Māori fisheries issues. Several areas for improvement were identified, including providing opportunities for input and participation earlier on in annual planning processes, and processes were put in place to monitor performance toward this objective quarterly. Following this exercise, we anticipate increased communication with input and participation from iwi and IFFs on HMS issues.

Management Initiatives

- Provide opportunities for Māori to share knowledge on HMS
- Engage with iwi through IFFs, especially in order to provide for input and participation into annual planning, regulatory rounds, and sustainability rounds
- Encourage consideration of interests in HMS fisheries during development of iwi fisheries plans (IFP) , and incorporate feedback from IFPs into planning and prioritisation

Key Performance Indicators

- Iwi are actively involved in long-term and annual planning processes for HMS fisheries
- MPI monitors the delivery of Treaty commitments, including section 12 statutory obligations, through the Strategic Outcomes for Māori register. The register outlines the specific commitments and responsibilities across the organisation
- Fisheries management will also keep track of the iwi and/or IFFs who input into the HMS Fisheries Plan and/or participate in the implementation of the plan

3.2	**Ensure abundant HMS for customary use**

Current Status

Many iwi have a focus on inshore species when setting rohe moana[4] boundaries, although some rohe moana may extend into areas in which HMS are seasonally present.

To date, little specific information has been collected on relationships of tangata whenua with HMS. However, research conducted during the development of the original HMS Fisheries Plans in 2010, and since the publication of those Plans, has suggested that customary fisheries for HMS are not a priority for iwi or IFFs.

With that in mind, pending expressions of interest from iwi or IFFs, MPI will focus on improving performance and assessment of performance against Operational Objective 3.1 (above). Management initiatives and topics for further research related to this Operational Objective will be explored as resources permit, guided by specific Māori customary interests in HMS fisheries.

In addition to the above, it is worth stating that the initiatives aimed at using HMS sustainably, and protecting relevant marine ecosystems and habitats, should also be considered in support of this objective.

Management Initiatives

- Work with iwi to increase consideration of any interests in HMS when customary tools are used (for example, in setting rohe moana boundaries)
- Work with the Customary Fisheries Team to encourage kaitiaki/tangata tiaki to report all HMS catches resulting from fishing activity authorised by customary permits under the Fisheries (Kaimoana Customary Fishing) Regulations 1998

Key Performance Indicators

- Iwi take into account interests in HMS (as appropriate to individual iwi) when fishing under customary permits and when setting rohe moana boundaries
- Māori customary interest in HMS is taken into account when reviewing any need for more active management using customary tools

[4] Customary food gathering areas.

3.3 MANAGEMENT OBJECTIVES TO SUPPORT ENVIRONMENT OUTCOME

The capacity and integrity of the aquatic environment, habitats and species are sustained at levels that provide for current and future use.

Objective 4: Maintain sustainable HMS fisheries within environmental standards

4.1	**Encourage management of HMS at specified target reference points**

Current Status

The HSS outlines that, where an international organisation or agreement has adopted harvest strategies and rebuilding plans that meet or exceed the minimum standards in the Harvest Strategy Standard, New Zealand will generally support those strategies.

The WCPFC Convention provides for members of the Commission to determine stock-specific target reference points and the action to be taken if they are exceeded (Article 6(1)(a)). In December 2015, WCPFC established a target reference point for skipjack tuna. A proposal to set a target reference point for albacore was unsuccessful, but New Zealand plans to continue advocating for this primarily through the FFA.

Work on an official 'management procedure' within CCSBT was aimed at formalising the management responses to a given stock level, by setting objectives and parameters. The management procedure has been used to guide the setting of the global southern bluefin tuna TAC for fishing years since 2012.

Management Initiatives

- Advocate for the establishment of international targets and limits for all HMS
- Implement the targets as per the HSS

Key Performance Indicators

- New Zealand identifies stock management targets and limits for key HMS that are consistent with the HSS
- New Zealand catch limits are consistent with identified targets and limits
- New Zealand catches do not exceed catch limits and/or allocations

4.2	Support the objectives of the National Plan of Action for Sharks

Current Status

In 2013, the NPOA-Sharks was published in order to ensure sustainable management of shark species across all New Zealand fisheries. The NPOA-Sharks also defines medium and long-term objectives aimed at increasing information and improving management. HMS sharks (blue, porbeagle, and mako) are distributed throughout the Pacific.

At present, no estimates of sustainable yield are available for HMS sharks. However, in recent years, indicator-based analysis has been used to assess shark stock status. Most recently, analysis of distribution indicators for mako sharks and blue sharks, as well as distribution and CPUE indicators for porbeagle sharks, show that all three species show increasing or stable population trends since 2005. Within New Zealand, TACs are set at levels allowing for bycatch in associated tuna target fisheries.

There are ongoing management commitments related to the decision to ban shark finning in 2014; primarily in relation to monitoring the effects of the ban on fisher behaviour and reporting. These obligations will carry-forward into this revised plan.

The first step in the assessment of the impact of HMS fisheries on shark populations is the collection of accurate information on catch and discard levels. This information is primarily supplied by QMS self-reporting documents and by observer reports. It is likely that electronic monitoring and reporting will increase the accuracy of this information.

Given the level of international and domestic interest, the effective management of sharks is likely to require ongoing focus in years to come.

Management Initiatives

- Regular review of shark fisheries, as outlined in the NPOA-Sharks
- Increase the collection of accurate information on catch and discard levels
- Support electronic reporting initiatives that improve the accuracy of this information, and make use of any additional information on shark discards through the Integrated Electronic Monitoring and Reporting System (IEMRS)
- Annually monitor shark catches, using available observer data (for example, size composition; discard rates), fisher reporting, and anecdotal reports
- Advocate for and input into Pacific-wide stock assessment for key HMS sharks

Key Performance Indicators

- Performance against objectives of the NPOA-Sharks
- New Zealand compliance with international obligations
- Accuracy of reporting, in relation to level of catch and landing destination code
- Increased information available on catch and discard levels of shark species
- Indicator-based analysis of stock status
- Levels of compliance with Schedule 6 release conditions

4.3	**Promote sustainable management of HMS fisheries through RFMOs**

Current Status

Setting a TAC at a sustainable level (whether this limit is expressed through controls on catch and/or effort), and allocating rights to parts of the available catch are important steps for overall sustainable management.

The WCPFC Convention provides for members of the Commission to determine stock-specific reference points and the actions to be taken if the reference points are exceeded.

The harvest strategy workplan agreed at WCPFC in 2015 outlines a schedule for adopting or refining harvest strategies for skipjack, bigeye, yellowfin, and South Pacific albacore.

Current controls adopted by WCPFC tend to set allocations by flag state outside of EEZs, while within the EEZs of Pacific Island countries, total allowable effort controls are used as a proxy. In December 2015, a proposal to establish a target reference point for skipjack was successful. New Zealand has also been working with Pacific island countries to develop shared strategies for achieving sustainable management of the albacore fishery, through the Tokelau Arrangement, for controlling catches.

CCSBT country catch allocations are set every three years. New Zealand advocates strongly for a precautionary approach to managing the stock as a whole, and for fair allocation of catch between countries.

Management Initiatives

- Monitor the New Zealand fishery for any signs of stock contraction
- Identify and advocate for targets and/or limits for albacore within the WCPFC area in cooperation with Pacific island countries
- Advocacy for allocation of rights that provide for responsible development of New Zealand and Pacific fisheries
- Actively participate in stock assessment reviews for South Pacific albacore

Key Performance Indicators

- Management targets for skipjack and associated species consistent with the HSS
- WCPFC identifies reference points and targets
- Management targets for albacore consistent with the HSS

Objective 5: Implement an ecosystem approach to fisheries management, taking into account associated and dependent species

5.1	**Recognise value of HMS and their ecosystems, including predators, prey, and protected species**

Current Status

The Act provides for the utilisation of fisheries while ensuring sustainability. Ensuring sustainability has a broad definition which includes managing potential impacts on the aquatic environment.

This objective includes recognition of the value of protected species and ensuring that fisheries do not adversely affect populations of threatened species.

There are several domestic and international structures in place to protect vulnerable species, some of which are associated with HMS fisheries, including the Convention on the International Trade in Endangered Species (CITES), the Convention on Migratory Species (CMS), the Wildlife Act 1953, the Marine Mammals Protection Act 1978, and Schedule 4C of the Act.

Parties to the CMS recently adopted a non-binding Memorandum of Understanding for the conservation of migratory sharks, covering all shark species listed in either appendix of the CMS, including porbeagle and mako sharks. In 2015, New Zealand became a signatory to this agreement, which outlines various conservation and management measures for sharks.

Management Initiatives

- Implement conservation and management measures as required
- Support the Department of Conservation (DOC) to maintain watching brief on international processes that identify species at risk (e.g. the CMS, CITES) and participate in development of New Zealand position as appropriate
- Monitor available information in relation to the values of HMS and their ecosystems

Key Performance Indicators

- No bycatch species' sustainability is compromised
- Awareness of non-extractive values of HMS amongst officials, fishers, and the public

5.2	**Improve the quality of information available on the capture of protected species**

Current Status

Low levels of observer coverage in HMS fisheries and, in some cases, the rarity of protected species interactions, limit our understanding of fishing-related threats to protected species.

Fisheries Observers record interactions with protected species including turtles and seabirds, to the species level where possible. Observers also collect biological data (e.g. size, length, and age data; and stomach contents analysis), as well as information about gear configuration and use of mitigation measures.

In HMS fisheries, observer coverage tends to be focussed on vessels, areas, and times where southern bluefin tuna are more likely to be caught in order to fulfil New Zealand's 10% observer coverage obligation under CCSBT. This coverage level is generally achieved, although recent changes to the fishery following the Fisheries (Foreign Charter Vessels and Other Matters) Amendment Act 2014, and resulting fleet changes, may make meeting this target more challenging.

The delivery of fisheries services is planned well in advance, so there is often a time lag between the decision to increase and/or decrease observer coverage in a fishery and implementation of the decision. It is important that long-term information needs are considered during this planning process, and that those information needs are met through the appropriate spatial, temporal, and fleet distribution of observer coverage.

The implementation of IEMRS during the term of this plan will provide an additional source of information on bycatch interactions. MPI will use the data provided by electronic monitoring and reporting to advance its understanding of protected species interactions in HMS fisheries.

In addition to observer reporting, fishers also report incidental captures of seabirds and turtles on non-fish bycatch forms. Monitoring and improving levels of self-reporting will improve the quality of relevant information, and encourage fisher participation in the protection of vulnerable associated or dependent species in HMS fisheries.

Management Initiatives

- Monitor incidental catches of protected species (including comparison of observer and fisher reports of non-fish bycatch)
- Plan observer coverage to meet obligations and requirements
- Specify target observer coverage levels in AOP
- Meet target levels of observer coverage in each fishery

Key Performance Indicators

- Levels of non-fish bycatch reporting is ± 20% levels of observed non-fish bycatch reporting
- Observer coverage target is achieved
- Observer coverage is representative across vessels, areas, seasons, target species and gives desired level of precision

5.3	**Avoid, remedy, or mitigate the adverse effects of fishing on associated and dependent species (including protected species), using a risk assessment approach**

Current Status

The Act requires that adverse effects of fishing on the aquatic environment should be avoided, remedied, or mitigated. HMS fisheries are known to impact on some vulnerable incidental bycatch species.

Notwithstanding regulated measures, risk assessments have indicated that HMS fishing operations adversely impact some seabird and marine mammal populations. The latest risk assessment identified that the surface longline fishery poses a substantial portion of risk to four of the top nine seabird species at 'high' or 'very high' risk from commercial fishing[5].

The seabird risk assessment will be updated in 2017, while a southern hemisphere seabird risk assessment is underway and will likely be completed during the term of this plan.

Where an adverse environmental impacts is identified, management will be focused to avoid or mitigate the impact.

Management Initiatives

- Monitoring of captures and risk-based mitigation or research applied
- Annual review of mitigation requirements and specifications
- Support Liaison Officer Programme as required
- Stakeholder meetings facilitate discussions on raising awareness and initiatives
- Monitor available information
- Incorporate into wider risk-based approach to associated species

Key Performance Indicators

- Vessel management plans in place on all HMS vessels
- 100% compliance rate for observed mitigation use
- Improved knowledge of effects of fishing on associated and dependent species
- Stakeholder awareness of issues
- Risk assessment work carried out

[5] The surface longline fishery poses a substantial portion of the fisheries risk to the: black petrel, Gibson's albatross, northern Buller's albatross, and Antipodean albatross.

5.4	Support the objectives of the National Plan of Action for Seabirds

Current Status

The Act requires that adverse effects of fishing on the aquatic environment should be avoided, remedied, or mitigated. Notwithstanding regulated measures, risk assessments have indicated that HMS fishing operations are adversely impacting some seabird species. The current level of observed seabird captures remains beyond the levels that both MPI and industry consider acceptable.

NPOA-Seabirds aims to reduce risk of incidental seabird bycatch. NPOA-Seabirds will be reviewed during the lifetime of this plan and revised NPOA-Seabirds objectives will guide future AOPs.

Current regulatory mitigation focusses on preventing access to baited hooks. When setting longlines, a tori line must be used, as well as either setting at night or line weighting. A number of voluntary practises also contribute to mitigation, for example, offal management. Poor levels of compliance with mandatory measures have been an issue in the surface longline fleet, and improving these will be a strong focus during the period covered by this plan.

Finally, DOC and other industry players have been trialling various mitigation technologies, such as hook-shielding devices and improved tori lines. MPI will provide support, as needed, to these efforts.

Management Initiatives

- Annually monitor seabird captures, including available observer data and non-fish bycatch forms
- Annual review of mitigation requirements and specifications as required
- Support the Liaison Officer Programme
- Stakeholder meetings to facilitate discussions on seabird initiatives
- Compliance actions taken in cases where breaches have been identified
- Provide for the trial and use of alternative seabird mitigation strategies as appropriate
- Support seabird initiatives at RFMOs, for example defining ‘high risk areas’, and technologies such as hook shielding devices
- Assist Pacific islands to develop NPOA-Seabirds or similar (See objective 13.1)
- Communicate and collaborate bilaterally on seabird initiatives as necessary

Key Performance Indicators

- Performance against objectives of NPOA-Seabirds
- Seabird proxy targets:
  - Seabird mitigation plans (SMPs) in place on all vessels
  - Levels of non-fish bycatch reporting is ± 20% levels of observed non-fish bycatch reporting
  - 100% compliance rate for observed mitigation use
- Use rates of voluntary mitigation practices and innovation in mitigation gear

Objective 6: Protect, maintain, and enhance fisheries habitat

6.1	**Identify and, where appropriate, protect habitats of particular significance to HMS, especially within New Zealand waters**

Current Status

Habitats of significance are not well defined, but are likely to include spawning, feeding, and nursery areas. Limited information is available on such habitats within New Zealand waters.

Some HMS such as hammerhead sharks may use some New Zealand harbours, but the key HMS target species are not thought to spawn or pup within New Zealand waters, making this a lower priority area for this plan.

Although current knowledge is limited, the significance of habitats within New Zealand waters is likely low for most species. Nonetheless, it may be appropriate for New Zealand to support projects to identify and, where appropriate, protect habitats of significance outside of New Zealand waters. For example, some HMS stocks may benefit from protection at their spawning grounds.

Management Initiatives

- Monitor availability of information in this field including research undertaken by other agencies
- If necessary, undertake work to evaluate available information

Key Performance Indicators

- Improved knowledge on habitats of significance

3.4 MANAGEMENT OBJECTIVES TO SUPPORT GOVERNANCE CONDITIONS

Sound governance arrangements that are well specified, transparent, and which support cost-effective and accountable decision-making

Objective 7: Maintain an effective fisheries management regime

7.1	**Ensure transparency by providing stakeholders with relevant information and performance indicators for HMS fisheries**

Current Status

This objective ensures stakeholders have access to information that will allow them to assess how HMS fisheries are managed.

The FPAG meets twice a year to review the implementation of the fisheries plan and the AOP. This consultation is currently the primary way stakeholders have a say in the way that HMS fisheries are managed. Additionally, the fisheries plan, AOP and ARR are available to the public through the MPI website.

MPI also holds two workshops a year with the commercial surface longline fleet and takes part in the Tuna Management Association annual general meeting. MPI uses these meetings to discuss issues of high importance or urgency to fishers and/or fisheries managers.

The Pelagic Update is a brief printed newsletter sent to HMS stakeholders semi-annually. It may be useful to consider increased digital communications and/or social media communications to increase engagement with some stakeholder groups, specifically environmental non-profits and the general public.

Management Initiatives

- MPI to provide information to the public on research developments, management measures, or codes of practice for HMS as appropriate
- Make AOPs and ARRs available to public through MPI website
- Produce articles for MPI website, the Pelagic Update, and national media to publicise HMS research and management updates
- FPAG to meet semi-annually to review implementation of the fisheries plan and AOP

Key Performance Indicators

- FPAG participants are satisfied with the level of information provided
- Other stakeholders are satisfied with the level of information provided

Objective 8: Recognise and provide for Deed of Settlement obligations

8.1	Implement Deed of Settlement obligations as they relate to HMS

Current Status

The Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 establishes both specific obligations relating to commercial and non-commercial use of fisheries, and more general obligations relating to the right of tangata whenua to participate in fisheries management decisions and to have particular regard given to their values and aspirations (kaitiakitanga). This framework also allows for the development of protocols with iwi as part of individual Deeds of Settlement. To date, no Deed of Settlement protocols include specific requirements in relation to HMS. Nonetheless, the protocols generally establish principles that govern interactions between MPI and iwi bodies.

TOKM has outlined its view that introducing remaining HMS species (notably albacore and skipjack) into the QMS would contribute further to implementation of commercial aspects of the Treaty of Waitangi (Fisheries Claims) Settlement Act.

In addition, many iwi have developed IFPs that represent their views as part of other planning processes (for example, for local government). In the future, IFPs are likely to provide additional guidance for HMS fisheries management, particularly if efforts are made to ensure consideration is given to possible interests in HMS during the development of such plans. Such documents will be reviewed to identify any items of relevance to AOPs.

Management Initiatives

- Annual review of Deed of Settlement protocols and IFPs to identify any items of relevance, and incorporation of this material as appropriate into planning and prioritisation

Key Performance Indicators

- Criteria set out in individual Deed of Settlement protocols are met
- HMS fisheries are considered during the drafting processes of IFPs

Objective 9: Ensure New Zealand interests are taken into account internationally

9.1	**Influence international fora and ensure New Zealand interests are taken into account**

Current Status

RFMOs (CCSBT, WCPFC) and other international agreements (e.g. CMS) can directly influence fishing in New Zealand's EEZ, and by New Zealand vessels on the high seas. Participation at these fora, where New Zealand can advocate for favourable outcomes, is hugely valuable and requires attendance at annual or subsidiary meetings.

New Zealand must be well-informed about the range of domestic interests (commercial, cultural, environmental, and social) to ensure they are taken into account within international negotiations. Being well-informed also allows better assessment of the likely impacts of measures.

To date, New Zealand domestic interests have been identified through regular contact, including briefings and debriefings for annual and subsidiary meetings, and stakeholder participation on delegations.

Management Initiatives

- Hold briefings and debriefings with fisheries stakeholders before and after both CCSBT and WCPFC annual and subsidiary meetings as required
- Influence RFMOs and associated fora to take into account New Zealand interests

Key Performance Indicators

- Stakeholder views incorporated into New Zealand negotiating positions
- Outcomes of international fora efficiently communicated to stakeholders

9.2	**Build strong relationships with other fishing nations, in order to influence international fora**

Current Status

Opportunities to build relationships with other nations that fish for HMS occur across various international engagements and meetings. New Zealand's active role in these engagements, particularly in the Pacific, have forged strong relationships with our international counterparts.

Engagement and support for Pacific Island countries occurs via multiple approaches including the Memorandum of Understanding on Pacific Capacity Development (see Management Objective 13), bilateral arrangements directly with countries, and through strategic relationships with regional fora such as the WCPFC, CCSBT, FFA, the Pacific Community (SPC) and Te Vaka Moana.

Management Initiatives

- Attend relevant international fisheries meetings
- Engage with regional groupings including FFA, SPC, and Te Vaka Moana
- Hold bi-lateral and multi-lateral meetings to build strategic connections with international partners

Key Performance Indicators

- Members support New Zealand's initiatives at international fora

Objective 10: Contribute to Pacific capacity development

10.1	**Contribute to the implementation of MPI's Memorandum of Understanding (MOU) with New Zealand Aid on Pacific capacity development**

Current Status

MPI has been delivering assistance to Pacific island countries' fisheries administrations under a MOU, "Pacific Economic Development, Pacific Fisheries Management and Development Initiative: Phase II", with the Ministry of Foreign Affairs and Trade (MFAT) since 2012. It is resourced at MPI, by way of FTE funding from MFAT.

The assistance that MPI's HMS team provides aims to improve governance and support the development of fisheries management and monitoring, control, and surveillance (MCS) systems and processes. This will improve the on-going ability of Pacific island countries to sustainably manage their fisheries resources, both shared and in-zone. The team employs a bottom-up approach across the region through practical capability building of fisheries administration staff. This lays a foundation for progress towards the overall goal of the MOU to maximise the economic and developmental benefits, through sustainable management and utilisation of Pacific fisheries resources.

Management Initiatives

- Strategic planning with Pacific island countries' fisheries administrations on building capacity for governance frameworks in relation to fisheries management
- Use secondments, attachments, and workshops to support fisheries management capacity development in Pacific island countries' fisheries administrations
- Engage with FFA and SPC to support institutional planning and capacity building where appropriate, including assistance to implement Pacific initiatives funded through MFAT
- Coordinate and provide technical fisheries management advice for both offshore and coastal fisheries, as well as customary management frameworks
- Provision of technical MCS and enforcement (MCS&E) advice that will build capacity of Pacific partners to design their own MCS frameworks to support fisheries management
- Provide advice to the Administrator of Tokelau on the management of Tokelau's offshore fisheries as and when required

Key Performance Indicators

- Provision of advice to Pacific Island countries on strengthening governance
- Provision of fisheries management advice to Pacific partners with which New Zealand has bilateral arrangements

4. Profile of New Zealand's HMS fisheries Sector

This section provides an overview of the HMS fisheries sector, recent trends in the fishery, its current operation and its challenges.

4.1 KEY TRENDS

- Export earnings from the seafood sector have remained flat for over a decade now;
- World renowned game fisheries and expanding interest in sport fishing;
- It is increasingly apparent that third party certification is becoming the minimum standard for entry into certain markets;
- A greater public focus on the negative impacts of fishing on non-fish and non-target species (bycatch);
- Purse seine, longline and troll remain the most popular methods of fishing for HMS species; and
- The New Zealand fishing fleet has considerably reduced since 2001, and the gap between the number of larger and smaller vessels is expected to continue increasing over the years to come.

4.2 HMS SPECIES

Biological Overview

Large Tunas

The distribution of tuna in New Zealand waters is seasonal and is influenced by both short- and long-term environmental factors. Stock status can also influence availability in New Zealand waters. Catch rates of southern bluefin tuna, for example, have been affected by the overall status of the stock in recent years. Evidence of a long term decline in the availability of yellowfin in New Zealand waters may also be related to the level of fishing effort on the stock as a whole or environmental changes.

While there are known fishing grounds for tuna species such as bigeye and southern bluefin, the timing and detail of their distribution can vary from year to year. The key spawning and juvenile grounds for these species, which are areas of importance for fisheries management, are generally outside of New Zealand fisheries waters.

Southern bluefin tuna consist of a single stock primarily distributed between latitudes 30°S and 45°S. Southern bluefin tuna caught in the New Zealand EEZ appear to represent the easternmost extent of a stock whose centre is in the Indian Ocean. A range of size classes is present in New Zealand waters (and taken by the commercial fishery), including both mature and juvenile fish. The estimated age at maturity is around 12 years, by which stage the fish may be as large as 165cm.

Bigeye tuna is distributed broadly across the Pacific Ocean, in both the Northern and Southern Hemispheres. Individuals found in New Zealand waters are mostly adults.

Billfish

Swordfish range from latitudes 50°N to 45°S in the western Pacific Ocean and from 45°N to 35°S in the eastern Pacific Ocean. Spawning takes place in the tropical waters of the western Pacific and to a lesser extent the equatorial waters of the central Pacific. The New Zealand fishery, which is based generally on mature fish, is assumed to be part of a south-west Pacific stock.

Striped marlin range from 45°N to 40°S in the Pacific and from continental Asia to 45°S in the Indian Ocean. Within the Western and Central Pacific Convention area there is generally considered to be a northern and a southern hemisphere stock. Most striped marlin caught in New Zealand waters are relatively large (70 kg and heavier), and are believed to be mature.

Albacore

Two albacore stocks (North and South Pacific) are recognised in the Pacific Ocean, although there is some movement of fish between the two stocks. For the South Pacific stock, most catches occur in longline fisheries in the EEZ of other South Pacific states and territories, in high seas areas, and in a New Zealand-based troll fishery.

Adult albacore spawn in tropical and sub-tropical waters between latitudes 10^{o}S and 25^{o}S during the austral summer, with juveniles recruiting to surface fisheries in New Zealand coastal waters about two years later. Albacore tuna are found in most waters around New Zealand. From this region, albacore appear to gradually disperse to the north, but may make seasonal migrations between tropical and sub-tropical waters.

Albacore is an 'apex' or 'top' predator when fully grown. Albacore prey on fish and squid, particularly lancetfish and lantern fish, as well as crustaceans. Adult albacore have few natural predators themselves. Nonetheless, smaller albacore are probably an important food source for other pelagic species including blue and mako sharks.

Skipjack

Skipjack tuna are typically a schooling species, with juveniles and adults forming large schools at or near the surface in tropical and warm-temperate waters to at least 40°S in New Zealand waters. Skipjack movement is variable but is thought to be influenced by large-scale oceanographic conditions (as well as other factors such as availability of food and potentially overall stock size).

Individuals found in New Zealand waters are mostly juveniles, which also occur more broadly across the Pacific Ocean, in both the northern and southern hemisphere. Individual tagged skipjack tuna have shown movements of over several thousand nautical miles but also exhibit periods of residence around islands in the central and western Pacific. They migrate to warmer waters for the winter months. Spawning occurs year-round in tropical waters.

4.3 FISHERY INFORMATION

Fleet Configuration

Approximately 170 domestically owned and operated vessels (mostly 15 to 25m) make up the main part of the domestic commercial New Zealand tuna fishing fleet. These vessels fish using troll or longline gear, with some switching between gear types seasonally or operating for part of the year in non-tuna fisheries.

Following the development of domestic longlining in the early 1990s, the number of vessels in the domestic tuna fleet operating in New Zealand fisheries waters peaked in 2001 and has subsequently declined after introduction of longline target and bycatch species into the QMS in 2004.

Two New Zealand-flagged large purse seiners and several smaller capacity purse seine vessels have fished in the EEZs of Pacific Island States and on the high seas of the equatorial western and central Pacific Ocean since 2000. These vessels have traditionally also fished part of the year within New Zealand fisheries waters targeting free swimming (unassociated) schools of skipjack.

No foreign licensed tuna longline vessels have fished in New Zealand fisheries waters since 1995. A small fleet of foreign-owned longline vessels on charter to a New Zealand fishing company has

operated in New Zealand fisheries waters since the late 1980s. These longliners have almost exclusively targeted southern bluefin tuna. As of 1 May 2016, all foreign vessels operating in New Zealand waters must be flagged to New Zealand. This change has led to changes in the size and make-up of the longline fleet, and specifically the fleet targeting southern bluefin tuna.

In general, it is expected that larger players will continue to buy quota, increasing the gap between larger and smaller firms over the years to come. Recent economic conditions have also resulted in further decreases in participation in domestic longlining. These conditions include a variable New Zealand dollar, increasing input costs, and a static market value for fish product.

Fishing Patterns

The key target species in the longline fishery is southern bluefin tuna. The southern bluefin tuna fishery begins in the first quarter of the year off the west coast of the South Island and gradually shifts during the second quarter of the year, mostly off the east coast of the North Island. The remainder of the year the fishery targets swordfish, bigeye tuna, and other species off the east coast and northeast tip of the North Island.

The albacore troll fishery is based mainly on the west coast of the North and South Islands and operates between December and May each year. Catches can vary markedly from year to year, depending largely on the availability of albacore in New Zealand waters.

The purse seine fishery within New Zealand fisheries waters occurs on both the east and west coast of the North Island between January and May. The amount of catch / effort in a given year depends on the presence of the larger purse seine vessels that sometimes move down from the tropics to fish within New Zealand fisheries waters during the summer, as well as the availability of skipjack in New Zealand waters.

Catch Composition

The catch by species taken within and beyond New Zealand fisheries waters is summarized in Table 1. Since 2010, skipjack catches taken by purse seine have comprised the greatest part of the catch of all tuna species, both inside and outside New Zealand fisheries waters. Outside New Zealand fisheries waters, yellowfin catch (by purse seine) makes up most of the balance, but are rarely part of the purse seine catch inside New Zealand fisheries waters where the tuna purse-seine fishery is exclusively targeted on free schools of skipjack.

Albacore are the second largest component of the tuna catch, and are taken mostly by troll gear, but also by longline. Troll gear also takes a small amount of skipjack with occasional catches of other tuna species. Swordfish are almost exclusively caught by longliners.

Table 1: Estimated whole weight (t) of tuna and swordfish landed by New Zealand flagged vessels active in the WCPFC Convention Area, for years 2010 to 2014 (0 refers to catches < 500 kg). NZFW refers to catches within New Zealand fishery waters (up to 200nm off the coastline), and Extra Territorial (ET) refers to catches outside this area. The 2014 figures are preliminary. Note: the estimates presented in this Table may differ from those estimated by the SPC due to differences in the estimation procedures used for the purse seine catch.[6]

		Calendar year					
		2010	**2011**	**2012**	**2013**	**2014**	**2015**
Albacore	NZFW	2292	3205	2990	3142	2257	2648
Thunnus alalunga	ET	0	0	0	0	0	0
	Total	2292	3205	2290	3142	2257	2648
Bigeye	NZFW	132	174	154	110	122	81
Thunnus obesus	ET*	134	125	95	92	190	20
	Total	266	299	250	202	312	101
Pacific bluefin	NZFW	14	28	13	24	12	16
Thunnus orientalis	ET	0	0	0	0	0	0
	Total	14	28	13	24	12	16
Skipjack	NZFW	8629	10840	9881	13312	11245	12351
Katsuwonus pelamis	ET	16530	9999	8016	10456	8137	6362
	Total	25159	20839	17897	23768	19382	18712
Swordfish	NZFW	536	739	687	778	583	715
Xiphias gladius	ET	0	0	0	0	0	0
	Total	536	739	687	778	583	715
Yellowfin	NZFW	6	3	2	1	2	16
Thunnus albacares	ET*	818	966	1042	925	942	262
	Total	824	968	1044	925	944	278

* The ET estimates for yellowfin tuna also include some bigeye tuna as these are not always separated on purse seine logbooks completed by fishers.

Recreational HMS Fisheries

Most game fish in New Zealand are large migratory oceanic species. They are usually only available in New Zealand waters for part of the year. The main game fish season runs from late December to April and focuses, in the North Island, on striped marlin, blue marlin, and yellowfin tuna. Fishing for yellowtail kingfish and swordfish can extend the game fish season beyond the warmest months. Black marlin and shortbill spearfish are also occasionally caught in New Zealand waters.

Game fishers in different parts of New Zealand target other tuna species, mainly albacore and skipjack, while small numbers of bigeye and bluefin tuna (southern and Pacific) are caught as target or bycatch species.

New Zealand anglers catch HMS shark species as bycatch. The vast majority are tagged and released, or simply released. Fishing club catch tallies are therefore likely to underestimate the actual recreational catch of sharks.[7]

4.4 ECONOMIC CONTEXT

HMS fisheries have both a commercial and a non-commercial (recreational) value.

[6] WCPFC Country Report

[7] J. Holdsworth, K. Walshe, T. Sippel. Characterisation of the New Zealand Recreational Game fish Fishery. 2005.

Recreational fishing generates significant economic benefits to New Zealand. The marlin fishery is one of the few examples in New Zealand of a fishery indirectly allocated entirely to the recreational sector. Other HMS fisheries are shared between sectors to varying degrees.

The key revenue driver for the commercial fishery is export earnings (around $51 million in 2015[8]). Limiting factors include the value of the New Zealand dollar in relation to other currencies and the market or cannery price. Costs include compliance costs and government levies. Exports provide around 99% of total revenues for the sector, while the domestic market remains very limited. For over a decade, the total value of export earnings of seafood in New Zealand dollars has remained relatively flat.[9]

The New Zealand seafood sector is the fourth largest exporting sector in the economy, reaching just over $1.6 billion for 2015, however this accounts for less than 0.5% of global seafood production and less than 2% of global seafood trade. The main markets are China, Australia, USA and Japan.[10]

Economic Context by Fishery

Large Tuna Fishery

The large pelagic species are generally high value species. Longline-caught tunas, such as southern bluefin tuna, Pacific bluefin tuna, and bigeye tuna, continue to fetch the highest prices. While the return for these species is high, there is a high cost involved in getting longline-caught species to overseas markets, and at times, fishers may make a net loss if fish do not meet market quality standards.

Billfish Fishery

Game fishing is a highly valued pastime for many New Zealanders and international visitors. The fishery for striped marlin and swordfish make up a large proportion of the multi-million dollar recreational game fishery in New Zealand. A recent study of economic activity associated with all recreational fishing estimated nearly a billion dollars a year in expenditure, contributing $570 million to GDP and over 8,000 full time equivalent jobs.[11]

The potential for growth and high value returns to New Zealand from incoming tourists' spending on game fishing relies on reasonable catch rates. Game fishing is an important part of the social and economic wellbeing of regional and coastal towns in New Zealand, drawing visitors and revenue into low income areas such as Northland and the East Cape.

Albacore Fishery and Skipjack Fishery

Most albacore and skipjack tuna caught in New Zealand waters or caught by New Zealand vessels is exported frozen, with only a small amount sold domestically. They are primarily sent to canneries in a variety of markets, including Spain, Thailand, Vietnam and Mauritius. The values of albacore and skipjack are considerably lower than that of large tuna.[12]

Albacore was recently re-certified by MSC, whilst skipjack achieved MSC certification for the first time. Both certifications run for a period of four years. The financial returns, in terms of increases market price, remains uncertain. However, it could be the minimum standard for entry into markets in the near future.

Government Costs

The New Zealand fishing sector does not receive any Government subsidies and some governance and service costs are recovered directly from the commercial fishing industry. In comparison, many international competitors do receive direct subsidies or cost-reducing transfers.

8 Statistics New Zealand
9 Statistics New Zealand
10 Statistics New Zealand
11 Recreational Fishing in New Zealand: A Billion Dollar Industry, 2016. New Zealand Marine Research Foundation.
12 For the latest information on global tuna prices see the FFA website www.ffa.int/trade_news.

Over the last six years, the Government has recovered approximately $1.5 million per year from the HMS sector (from a total of $34 million across all fisheries, including both fisheries and DOC costs). The total levy charges are usually the highest for southern bluefin (around $0.5 million per year), followed by bigeye, skipjack, swordfish and albacore. The $ per tonne levy charges are also usually the highest for southern bluefin in the HMS sector, followed by Pacific bluefin, bigeye, swordfish and yellowfin.

Third Party Certification

Supermarket chains in the USA and Europe are publicly committing themselves to 'responsible' sourcing policies for food generally, and seafood at the forefront of this strategy. This has led to requests or requirements for independent certification to validate that a fish product was sourced legally and from well-managed and sustainable fisheries. At present the MSC standard dominates the independent certification market for fish.

The financial return from the likes of MSC certification, particularly in terms of increased market prices, remains uncertain. However, it is increasingly apparent that third party certification is becoming the minimum standard for entry into certain markets.

4.5 ENVIRONMENTAL MANAGEMENT

HMS Fisheries and the Environment

Most highly migratory species are 'apex' or 'top' predators when fully grown. They consume a range of fish and squid species. Adults of the species have few natural predators, although juveniles are likely to be an important food source for various other HMS. Apex predators are thought to play a crucial role in maintaining the health of an ecosystem, in part because they may exert substantial control over the sizes of the populations of many species on lower levels of the food web. Consequently, they may contribute to the stability of marine ecosystems, and maintain biodiversity.

Tuna longline fisheries catch a range of bycatch or non-target species, including pelagic sharks and other fish bycatch, many of which have catch limits within New Zealand waters. Juvenile skipjack and albacore are often caught as bycatch in large tuna fisheries.

When albacore is targeted by trolling in New Zealand waters it makes up over 99% of the total catch, with bycatch accounting for less than 1%. Of this limited bycatch, the main species include skipjack tuna, yellowfin tuna, bigeye tuna, Ray's bream, kahawai, and several species of shark. Various other species are also caught from time to time, but in small quantities.

Of the HMS fisheries, longline fishing is the most likely to result in interactions with non-fish bycatch. Strategies have been developed to mitigate interactions with seabirds, marine mammals and sea turtles. Troll fishing has limited or no incidental interactions with seabirds, marine mammals, and marine reptiles.

HMS fisheries are not known to have significant adverse effects on benthic habitats.

Sharks

The primary document that deals with the impacts of fishing on seabirds in New Zealand is the NPOA-Sharks[13].

Pelagic sharks like blue sharks, makos, and porbeagles are at risk of being caught on tuna long lines. Sharks are an important apex predator and, in recent years, public concern for the conservation and welfare of sharks has increased.

In October 2014, New Zealand banned the practice of shark finning (maintaining the fins of sharks while disposing of the rest of the body at sea).

Some key facts about the shark fin ban:

- Previous to 2014, live shark finning was banned/non-existent in New Zealand.
- HMS sharks are managed sustainably under the QMS.

[13] NPOA-Sharks

New Zealand implemented its shark fin ban using a combination of fins naturally attached, fins artificially attached using plastic ties, and official shark to fin ratios at the time of landing.

Specific provision has been made to allow the release of HMS sharks in the QMS, subject to the condition that they are alive and likely to survive release. This provision allows for the release of juvenile sharks which have little or no commercial value and large sharks that can be dangerous to handle.

As of 1st October, 2014, a change to Schedule 6 of the Act means that certain pelagic sharks (blue shark, mako, and porbeagle) can be returned to the sea either dead or alive, with specific codes for each state when they are returned. This change is meant to support the shark finning ban as it provides a legal option for fishers who accidentally catch a shark for which they have no market.[14]

Blue shark is the most common bycatch species. Large reductions in longline effort, coupled with the shark finning ban and Schedule 6 changes, have resulted in reductions in landings of the major bycatch species. Research thus far has been unsuccessful in finding an efficient and effective way to mitigate shark bycatch.

Seabirds

The primary document that deals with the impacts of fishing on seabirds in New Zealand is the NPOA-Seabirds[15].

Incidental capture by commercial fishing operations is a significant threat to many seabird species globally. This has been acknowledged to be of serious concern since the early 1990s.

New Zealand has the most diverse seabird community in the world, including the greatest number of albatrosses and petrels. DOC's *New Zealand Threat Classification System*[16], has ranked species according to the threat of extinction. A number of species with the highest ranking are captured in the surface longline fishery (e.g. black petrel and Gibson's albatross).

MPI monitors seabird bycatch as part of its at-sea observer program. Observations are used to calculate total estimated captures. This information is further used to model risk from fishing to each seabird species. According to the most recent MPI risk assessment[17], a number of species are at 'high' or 'very high' risk from commercial fishing. Of the top nine species with the highest risk ranking, the surface longline fishery poses a substantial portion of the fisheries risk to four[18].

Surface (pelagic) longlines are set near the surface to target species such as tuna or swordfish. For extended periods of time during deployment of the gear, the baited hooks are in diving range of seabirds. This puts the seabirds at risk from being fatally hooked or tangled in the line when they attempt to take the bait. This risk can be exacerbated if, for environmental or operational reasons, hooks are pulled up towards the surface, for example, by seabirds diving and retrieving hooks.

Mandatory mitigation focusses on preventing access to the baited hooks. When setting longlines, line weights increase hook sink rates and tori lines and night setting screen hooks until they sink. A number of voluntary practises also contribute to mitigation. For example, offal management to avoid attracting birds to the vessel and dying baits blue to hide them from view.

There is also risk of seabird capture during hauling if uneaten baits have remained on the hooks. Birds captured on the haul are usually able to be released alive, however there is the possibility of subsequent unseen mortality.

[14] http://www.fish.govt.nz/en-nz/Environmental/Sharks/Eliminating+shark+finning+in+New+Zealand.htm?wbc_purpose=Basic&WBCMODE=PresentationUnpublished%2525252b%2525252b%2523MainContentAnchor%2523MainContentAnchor%2cPresentationUnpublished%25252b%25252b%23MainContentAnchor%23MainContentAnchor

[15] NPOA-Seabirds

[16] *New Zealand Threat Classification System*

[17] Richard, T., Abraham, E.R. (2014) Assessment of the risk of commercial fisheries to New Zealand seabirds, 2006–07 to 2012–13. MPI

[18] The surface longline fishery poses a substantial portion of the fisheries risk to the: black petrel, Gibson's albatross, northern Buller's albatross and Antipodean albatross.

There is relatively low observer coverage in the surface longline fishery (a target of 10 percent of fishing effort per annum). This has led to uncertainty around bycatch information, resulting in high estimations of total incidental seabird captures.[19]

The estimated total incidental seabird captures in the surface longline fishery has fallen from over 2,000 in 2003 to well below 1,000 in 2014. Results from the latest risk assessment are used in identifying and managing seabird interactions and this Plan supports a continuation of the trend in reducing seabird captures in HMS fisheries, in line with NPOA-Seabirds.

Improving seabird bycatch information and mitigation is an ongoing agenda for New Zealand, as well as CCSBT and WCPFC.

Turtles

Since 2003, fifteen sea turtle captures have been reported by fishers and observers within New Zealand fisheries waters. Of these, eleven were leatherback turtles, one was reported as a green turtle, and three were unidentified. All of these turtles were released alive. No turtle catches have been observed or reported from the purse seiners that operate within New Zealand fisheries waters.

The scientific committee of the WCPFC has assessed the level of turtle interactions in the New Zealand surface longline fishery as negligible.

Members of WCPFC have committed to implementing international guidelines to reduce sea turtle mortality, enhance the implementation of mitigation measures and report all available information on sea turtle interactions (CMM 2008-03). New Zealand has issued its surface longline vessels with turtle de-hooking and line cutting equipment to improve the handling of any turtles that are caught.

Marine Mammals

The environmental effects of HMS fisheries on marine mammals are relatively small. In the 2014–15 fishing year, there were 37 observed captures of New Zealand fur seal in surface longline fisheries. No estimates of total captures were made. The most recent fur seal capture in the skipjack purse seine fishery was in 2008. Dolphins are occasionally encountered in the purse seine fishery. An industry code of practice has been developed to mitigate any impact.

Benthic Interactions

Surface Longline Fisheries have no impact on the benthic environment. The method of purse seining, the most common fishing method for the skipjack fishery, does not have adverse effects on benthic habitats so long as the net depth is appropriate for the water depth. However, benthic species have been known to have been taken in purse seine nets, indicating that purse seine vessels may sometimes fish in shallower waters (relative to their net depth). Purse seine fishing for skipjack usually occurs some distance off the coast. Shallow water extends offshore for considerable distances on the west coast of the North Island, and in this area there is some risk of benthic impacts, although operators report using shallower nets than those used in tropical fisheries.

[19] Richard, T., Abraham, E.R. (2014) Assessment of the risk of commercial fisheries to New Zealand seabirds, 2006–07 to 2012–13. MPI

5. Engagement with Partners and Stakeholders

5.1 TANGATA WHENUA

Fisheries are a traditional source of economic and cultural wealth for Māori. Being able to provide fish or shellfish to feed whanau (family) or manuhiri (guests) has always been part of the cultural heritage of tangata whenua, or 'people of the land'. Commercial fisheries have also been important, as seafood was traded widely among tribal groups and, later, with European settlers. Māori traditionally ate a wide variety of seafood. No specific records have been found to date of fishing for some HMS, but they were nonetheless potentially part of customary catches, given the distance offshore that Māori fished, and the quality of their fishing materials. Māori have past, present, and future interests in HMS fisheries.

Kaitiakitanga can be generally understood as guardianship, protection, or preservation. It is a way of managing the environment, based on the traditional Māori worldview. It is a broad notion that is intimately connected to other Māori values and principles, which together make up tikanga. Each iwi (including their hapu) may express these values in different ways. (For more information, see Appendix 1, Tikanga: Examples of Māori Principles and Practices)

In 2009, MPI began a process to support tangata whenua, through IFFs, to develop IFPs as a vehicle to express their kaitiakitanga aspirations and objectives relating to fisheries. These IFPs are then given regard in fisheries management decisions, as fisheries plans will incorporate relevant objectives and prioritisation information from IFPs. IFFs and IFPs are key tools for ensuring tangata whenua have effective input and participation at the appropriate levels of fisheries management decision making, early on in the decision-making process. IFPs provide for input from individual iwi and hapu by communicating objectives that reflect their environmental, commercial, and customary fisheries interests.

TOKM participates in FPAG meetings, and MPI works with TOKM to encourage iwi groups to join and participate in stakeholder meetings. TOKM is also supported to engage with iwi groups where the limited size of their HMS quota portfolio means that either membership or active participation in stakeholder meetings is not feasible.

MPI also provides an opportunity for iwi to input into both the AOP and ARR, as well as sustainability and regulatory rounds, through regular presentations at the relevant IFFs.

5.2 ENVIRONMENTAL STAKEHOLDERS

A number of environmental non-governmental organisations (ENGO) are stakeholders in HMS fisheries. These include international ENGOs, such as World Wildlife Fund (WWF), Birdlife International, and Greenpeace, who are also involved in international fora, such as WCPFC.

In recent years, public and ENGO attention has increasingly focused on the effects of fishing on non-targeted species, especially protected species, including seabirds, sharks, and marine mammals. ENGOs also advocate for sustainable management of fisheries resources in New Zealand and throughout the Pacific region. Environmental stakeholder interests in New Zealand's HMS fisheries are best provided for through continued involvement in our semi-annual FPAG meetings. ENGO representatives also regularly participate in fisheries science working groups and other working groups established to contribute to specific management goals such as the Seabird Advisory Group in support of the NPOA-Seabirds.

5.3 COMMERCIAL FISHING INDUSTRY

There are around 1,200 commercial fishing vessels registered in New Zealand and 239 Licensed Fish Receivers (LFRs) and processors. In the HMS fishery, in the 2015-16 fishing year, there were 136 vessels operating. Most of these vessels land to a small subset of LFRs that understand the processes associated with landing, processing, and exporting high value tunas, and understand the reporting requirements required specifically for southern bluefin tuna under its international catch documentation scheme.

As of 2016, around 1,400 individuals and companies own quota in all New Zealand fisheries, totalling around 650,000 tonnes. In HMS fisheries, the LFRs tend to own the majority of quota, whilst many HMS fishers purchase ACE to cover catches.

The management of the HMS fisheries is a collaborative initiative with commercial stakeholders. This ensures industry and Ministry resources are targeted at common objectives. MPI continues to engage with the commercial stakeholders through our semi-annual FPAG meetings, Longline Workshops, industry meetings, and other working groups established to contribute to specific management goals.

In recent years, efforts have begun to establish an industry collaborative body under Fisheries Inshore NZ for the tuna longline fishery. An MOU between Fisheries Inshore NZ (FINZ) and the HMS Committee, a group that represents the views of HMS quota owners and fishers, has been established. This collaborative body will promote clear communication between commercial operators and MPI, as well as provide continued engagement from industry on national and stock-specific issues in order to contribute to the successful management of HMS fisheries.

5.4 RECREATIONAL FISHERS

Although recreational fishing is only a small component of the HMS fisheries sector, there are certain HMS fisheries where recreational fishers have an active interest in how these fisheries are managed. Game fishing is a highly valued pastime for many New Zealanders and visitors to New Zealand. Game fish such as billfish, tuna, and sharks make up a multi-million dollar recreational game fishery in New Zealand.

There is a broad mix of people involved in the game fish fishery in New Zealand. The increased strength and reliability of trailer boats and improved electronics (communication, sounders, and GPS) has led to an increase in the number of people involved in deep sea and offshore recreational fishing over the past few decades.

To account for this interest, MPI will ensure that the recreational sector is involved in key management decisions through participation in HMS Fisheries Science Working Groups and FPAG meetings. MPI also benefits from receiving data on game fisheries collected as part of fishing club records compiled by the NZSFC, the Game Fish Tagging Programme[20], and game fisher logbooks.

5.5 PUBLIC

There is an increasing international and domestic focus on managing the undesirable effects of fishing on the environment. Pelagic longlining and trolling are not fishing methods that have a benthic impact.[21] The public interest in HMS fisheries is therefore generally related to the effects of fishing on non-fish and non-target species.

[20] http://bluewatermarine.co.nz/project/gamefish-tagging/

[21] Accidental benthic contact may occur from time to time during purse seine fishing, but is limited (such contact impedes rather than improves the fishing operation).

6. Appendix 1: Tikanga: Examples of Māori Principles and Practices

The suffix "tanga"	The suffix "tanga" added to a base word converts the base word into a process word changing it from a noun to verb.
Tikanga	The Māori way of doing things; correct procedure, custom, habit, lore, method, manner, rule, way, code, meaning, reason, plan, practice, convention. It is derived from the word tika meaning 'right' or 'correct'.
Kaitiakitanga	The root word in kaitiakitanga is tiaki, which includes aspects of guardianship, care and wise management. Kaitiakitanga is the broad notion applied in different situations. The prefix kai denotes the agent by which the tiaki is performed. Kaitiaki therefore stands for a person and/or other agent who performs the tasks of guardianship. Kaitiakitanga is the practice of guardianship.
Kotahitanga	Collective action and unity. Kotahi means one; with tanga added as the suffix it means oneness.
Manaakitanga	Manaakitanga implies a duty to care for others, in the knowledge that at some time others will care for you. This can also be translated in modern Treaty terms as "create no further grievances in the settlement of current claims."
Whanaungatanga	Whanaungatanga is the process through which Māori, through their kinship ties, meet their obligations towards each other and to the natural world. It is the basic cement that holds things Māori together.
Rangatiratanga	Rangatiratanga is the process of exercising mana at the level of *Iwi* or *hapu* depending upon the issue at hand. If an issue is of interest to the *Iwi* as a whole, then members of the *Iwi*, through their mandated representative structures, would expect to be involved. The same principle applies at the *hapu* and whanau level.
Mana	Mana can be described as the enduring, indestructible power of the gods. In modern times mana has taken on various meanings.
Mauri	Everything in the natural world possesses mauri, a "special power possessed by Io which makes it possible for everything to move and live in accordance with the conditions and limits of its existence. Everything has mauri, including people, fish, animals, birds, forests, land, seas and rivers: the mauri is that power which permits these living things to exist within their own realm and sphere."
Whakapapa	Whakapapa or genealogy, is a fundamental principle that permeates the whole of Māori culture. However, it is more than just a genealogical 'device'. It is in fact a paradigm of cultural discourse and provides the basis for establishing, enhancing, and even challenging relationships between individuals, whanau (families), hapu (local tribal entities) and iwi (regional tribal bodies).
Rohe Moana	A marine area under the authority of an iwi or kaitiaki.
Tangata Kaitiaki/Tiaki	Any person appointed as Tangata Kaitiaki or Tangata Tiaki under the Fisheries (Kaimoana Customary Fishing) Regulations 1998 or the Fisheries (South Island Customary Fishing) Regulations 1999, being a member of the Tangata Whenua or a tangata whenua organisation or their notified representative.

7. Appendix 2: Highly Migratory Species

As listed in Annex 1 of the United Nations Convention on the Law of the Sea

Albacore tuna: *Thunnus alalunga*.
Bluefin tuna: *Thunnus thynnus*.
Bigeye tuna: *Thunnus obesus*.
Skipjack tuna: *Katsuwonus pelamis*.
Yellowfin tuna: *Thunnus albacares*.
Blackfin tuna: *Thunnus atlanticus.*
Little tuna: *Euthynnus alletteratus*; *Euthynnus affinis.*
Southern bluefin tuna: *Thunnus maccoyii*.
Frigate mackerel: *Auxis thazard*; *Auxis rochei*.
Pomfrets: Family Bramidae.
Marlins: *Tetrapturus angustirostris*; *Tetrapturus belone*; *Tetrapturus pfluegeri*; *Tetrapturus albidus*; *Tetrapturus audax*; *Tetrapturus georgei*; *Makaira mazara*; *Makaira indica*; *Makaira nigricans*.
Sail-fishes: *Istiophorus platypterus*; *Istiophorus albicans.*
Swordfish: *Xiphias gladius*.
Sauries: *Scomberesox saurus*; *Cololabis saira*; *Cololabis adocetus*; *Scomberesox saurus scombroides.*
Dolphin: *Coryphaena hippurus*; *Coryphaena equiselis*.
Oceanic sharks: *Hexanchus griseus*; *Cetorhinus maximus*; Family Alopiidae; *Rhincodon typus*; Family Carcharhinidae; Family Sphyrnidae; Family Isurida.
Cetaceans: Family Physeteridae; Family Balaenopteridae; Family Balaenidae; Family Eschrichtiidae; Family Monodontidae; Family Ziphiidae; Family Delphinidae.

As listed on Schedule 4B of the Fisheries Act 1996

Frigate mackerel (*Auxis thazard*)
Mahi mahi (*Coryphaena hippurus, Coryphaena equiselis*)
Ray's bream (*Brama brama*)
Swordfish (*Xiphias gladius*)

Marlin, sailfish, and spearfish:

Atlantic sailfish (*Istiophorus albicans*)
black marlin (*Makaira indica*)
blue marlin (*Makaira nigricans*)
white marlin (*Tetrapturus albidus*)
longbill spearfish (*Tetrapturus pfluegeri*)
Mediterranean spearfish (*Tetrapturus belone*)

Indo-Pacific sailfish (*Istiophorus platypterus*)
striped marlin (*Tetrapturus audax*)
roundscale spearfish (*Tetrapturus georgei*)
short billed spearfish (*Tetrapturus angustirostris*)

Sharks:

bigeye thresher (*Alopias superciliosus*)
blue shark (*Prionace glauca*)
bronze whaler (*Carcharhinus brachyurus*)
Galapagos shark (*Carcharhinus galapagensis*)
longfin mako (*Isurus paucus*)
oceanic white tip (*Carcharhinus longimanus*)
Porbeagle shark (*Lamna nasus*)
shortfin mako (*Isurus oxyrinchus*)
silky shark (*Carcharhinus falciformis*)
smooth hammerhead (*Sphyrna zygaena*)
tiger shark (*Galeocerdo cuvier*)
Family Alopiidae
Family Carcharhinidae

Tuna:

albacore tuna (*Thunnus alalunga*)
Atlantic bluefin tuna (*Thunnus thynnus*)
bigeye tuna (*Thunnus obesus*)
blackfin tuna (*Thunnus atlanticus*)
kawakawa (*Euthynnus affinis*)
little tuna (*Euthynnus alletteratus*)
Pacific bluefin tuna (*Thunnus orientalis*)
skipjack tuna (*Katsuwonus pelamis*)
southern bluefin tuna (*Thunnus maccoyii*)
yellowfin tuna (*Thunnus albacares*)