

# **INTERTEK MOODY MARINE**

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# American Albacore Fishing Association North Pacific Albacore Pole & Line and Troll/Jig Fishery

# PUBLIC CONSULTATION DRAFT REPORT

Dr. Norman Bartoo, Dr. Rob Blyth-Skyrme, Dr. Mike Laurs

Fishery Client: American Albacore Fishing Association 4364 Bonita Road #311 Bonita CA 91902 USA

## **Conformity Assessment Body:**

Intertek Moody Marine 99 Wyse Road Dartmouth Nova Scotia Canada B3A 4S5

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# Glossary

AAFA	American Albacore Fishing Association
ATHL	Average of the ten historically lowest estimated (stock biomass) points
BCTFA	British Columbia Tuna Fishermen's Association
CHMSF	Canadian Highly Migratory Species Foundation
CPS	Coastal pelagic species
CR	MSC Certification Requirements V.1.2
EEZ	Exclusive economic zone
ETP	Endangered, threatened or protected (species)
FMP	Fishery Management Plan
HMS	Highly migratory species
IATTC	Inter-American Tropical Tuna Commission
IMM	Intertek Moody Marine
ISSF	International Seafood Sustainability Foundation
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MSC	Marine Stewardship Council
NC	Northern Committee (of the WCPFC)
NMFS	National Marine Fisheries Service
NZ	New Zealand
PFMC	Pacific Fisheries Management Council
PI	Performance indicator
PSA	Productivity-susceptibility analysis
RBF	Risk-based framework
SAFE	Stock assessment and fishery evaluation (report)
SG	Scoring guidepost
SI	Scoring issue
SICA	Scale-intensity-consequence analysis
SSB	Spawning stock biomass
SWFSC	Southwest Fisheries Science Center
UoC	Unit of certification
US	United States of America
WCPFC	Western and Central Pacific Fisheries Commission
WFOA	Western Fishboat Owners Association
WWF	World Wildlife Fund

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# **1** Executive Summary

This report sets out the results of the reassessment of the American Albacore Fishing Association (AAFA) North Pacific albacore tuna (*Thunnus alalunga*) pole & line and troll/jig fishery against the Marine Stewardship Council (MSC) Principles and Criteria for Sustainable Fishing. The fishery was previously certified as sustainable in August 2007.

This version of the assessment report is the Public Consultation Draft Report, such that changes may yet be made to the report after the stakeholder review. Following the Final Determination stage, the fishery will be certified if no objections are raised by stakeholders to its certification.

The assessment of the fishery was undertaken by Dr. Norman Bartoo, Dr. Rob Blyth-Skyrme and Dr. Mike Laurs, who covered Principle 1 (target stock), Principle 2 (environment) and Principle 3 (management) components of the MSC Standard respectively. A site visit to San Diego, California, was undertaken in October 2011 to meet with scientists, fishery managers and stakeholders, as well as representatives of AAFA. No stakeholders chose to meet with the team during the site visit, although some initial, written stakeholder submissions were received, included in this report as Appendix 7 (from the World Wildlife Fund- WWF) and Appendix 8 (from the International Seafood Sustainability Foundation- ISSF).

Albacore is a highly migratory species (HMS), and the North Pacific stock ranges across much of the North Pacific Ocean between about  $10^0$  N and  $50^0$  N. Albacore mature by the relatively early age of approximately 6 years and have a moderate lifespan to about 10 to 12 years. The species is highly fecund with up to about 2.6 million eggs per spawning. Growth rates are moderate, with fork lengths at first birthday nearly 40 cm and at sexual maturity at age 6 approximately 90 cm or somewhat less.

Albacore, like other tunas, have a number of physiological and morphological specializations that adapt them to a fast, continuous swimming lifestyle in the pelagic open ocean environment. Their metabolic rates are 2 to 10 times higher than most other bony fishes, and they have very large eyes for detecting prey and specialized fins and body form to reduce drag. Albacore are generally considered inherently resilient to fishing pressure because they have a high rate of intrinsic increase, mature at an early age, are highly fecund, are not long-lived, have a broad distributional range, and do not exhibit any characteristics that increase the ease or population consequences of capture, such as aggregating for spawning or exhibiting sequential hermaphroditism (Marsh, 2010).

The most recent assessment, completed in 2011 for fishery data through 2009, estimated that the total stock biomass of North Pacific albacore was 800,000 t in 2009, while the spawning stock biomass was near to the historic median of about 405,000 t (WCPFC 2011b).

The AAFA North Pacific albacore fishery is conducted in near-shore to offshore waters off the Pacific west coast of the USA, as well as sometimes in Canadian waters when appropriate agreements are in place. AAFA vessels use pole & line and/or troll/jig gears, with vessels commonly switching between gears types when conditions and catch rates dictate.

The pole & line and troll gears are inherently highly selective, with no seabed contact and very low levels of bycatch. Fish are caught one-at-a-time, and the gears are always attached to and worked in very close proximity to the vessel. Live northern anchovies may be used as bait in the pole & line fishery, or chum while pole & line fishing or trolling, which helps to hold shoals of albacore around the vessel. Bycatch in the northern anchovy fishery is also very low, while the method of capture means that bycatch can usually be released in very good condition.

North Pacific albacore occur in waters under the jurisdiction of both the Inter-American Tropical Tuna Commission (IATTC) and the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC). When operating in the



United States Exclusive Economic Zone (US EEZ), as well as in international waters when catches are landed in US ports, US HMS fisheries are managed by the Pacific Fishery Management Council (PFMC). The US West Coast albacore fishery is managed through the PFMC Highly Migratory Species Fishery Management Plan (HMS FMP).

The AAFA North Pacific albacore fishery achieved overall scores of 85.0 for Principle 1, 95.3 for Principle 2, and 94.4 for Principle 3. As such, it is recommended that the fishery is certified according to the MSC standard as being sustainable.

Two conditions of certification were placed on the fishery, however, for Performance Indicators (PIs) 1.1.2 and 1.2.2; these require the following outcomes to be achieved:

### For PI 1.1.2

The client is required to demonstrate by the 4<sup>th</sup> annual audit that:

- The limit reference point is set above the level at which there is an appreciable risk of impairing reproductive capacity.
- The target reference point is such that the stock is maintained at a level consistent with  $B_{MSY}$  or some measure or surrogate with similar intent or outcome.

### For PI 1.2.2

The client is required to demonstrate by the 4<sup>th</sup> annual audit that:

- Well defined harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.
- The selection of the harvest control rules takes into account the main uncertainties.
- Available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the harvest control rules.

A non-binding recommendation was also made. This was that it would be good practice for AAFA members to be provided with and to follow guidance for seabird handling, as required by longline vessels, in the very rare event that a seabird was taken aboard an AAFA vessel.



# 2 Authorship and Peer Reviewers

### 2.1 Assessment Team

This assessment and report was produced by Dr. Norm Bartoo, Dr. Rob Blyth-Skyrme, and Dr. Mike Laurs; these team members led the Principle 1 (Stock), Principle 2 (Environment) and Principle 3 (Management) elements of the assessment respectively. Dr. Blyth-Skyrme is also the lead assessor for the assessment. A brief summary of their experience and qualifications is included below.

#### Dr. Norm Bartoo.

Dr. Norman Bartoo received a BS in Fisheries Management and Administration in 1970, a Masters in Fisheries Statistics in 1972, and a PhD in Fisheries Population Biology in 1977 from the University of Washington. From 1977 through 2009, Dr. Bartoo was employed by the US National Marine Fisheries Service (NMFS) Southwest Fisheries Science Center (SWFSC). There he conducted stock and fishery assessments on tunas, billfish, sharks and other highly migratory species in the Pacific and Atlantic Oceans. Dr. Bartoo directed research and stock assessments of coastal pelagic species, marine mammal stocks, Antarctic species and others. Dr. Bartoo served as a US science delegate and advisor to numerous international science bodies and forums and has extensive experience on both international and domestic scientific committees and workshops, including the Pacific Fishery Management Council. Dr. Bartoo retired from the NMFS in 2009 as the Regional Science Director, managing all research and done by the SWFSC's 3 laboratories and 4 Divisions. He has also served as the Scientific Editor of the US Fishery Bulletin and NOAA's Professional Paper series (2002-2005), and was on the Editorial Board of Ciencias Marinas. Dr. Bartoo has authored or co-authored over 60 publications and numerous technical reports.

#### Dr. Rob Blyth-Skyrme.

Dr. Rob Blyth-Skyrme received a BSc in Marine Biology from the University of Liverpool, a MSc in Aquaculture from the University of Stirling, and a PhD in Fisheries Management from the University of Wales, Bangor. He has worked in marine fisheries science, management and policy for more than 10 years. Prior to becoming a fisheries consultant, Dr. Blyth-Skyrme was the Deputy Chief Officer for Eastern Sea Fisheries Joint Committee, the largest inshore fisheries management organization in England. He then became a senior advisor to the UK Government on marine fisheries and environmental issues, leading a team dealing with fisheries policy, science and nationally significant fisheries and environmental casework. He has extensive experience of running and providing lead input to workshops and management fora at a national level, and has published a number of papers in peer-reviewed international journals. Dr. Blyth-Skyrme now runs Ichthys Marine Ecological Consulting, a marine fisheries and environmental consultancy with offices in the UK and Hawaii, and has undertaken all facets of MSC work as a lead assessor and expert team member.

#### Dr. Mike Laurs.

Dr. Michael Laurs is currently a part time marine fisheries consultant. Previously, he led a Federal fisheries research laboratory multi-disciplinary research program, as well as an operational fishery forecasting program, for albacore tuna for a little over 20 years. The research included a broad range of topics and much of it was closely coordinated with the US albacore fishing industry. Dr. Laurs conducted fishery development research that resulted in the US surface albacore fishery expansion to the central and western North Pacific and the South Pacific. He also worked closely with the west coast states and Canada to develop a uniform albacore fishery logbook system and a coordinated



market sampling system to obtain length frequency and related fishery data in ports where albacore were landed. Much of the biological research, including albacore genetics, physiology, and general biology was conducted with academic partners that he recruited. He established a notably successful albacore tagging program that resulted in a unique, valuable database of 30,000 albacore used in ageand-growth, stock structure, migration, and ecological research on the species. The albacore oceanography research, which was a notably strong part of the program, resulted in greatly improved understanding of albacore habitat and the roles that environmental variability plays in causing variations in where, when, and how many albacore may be available and vulnerable to the surface fishery. He also pioneered the application of satellite remote sensing technology in albacore ecological research.

It should be noted that the risk-based framework (RBF) was not used in this assessment, and so no team members were required to have undertaken training in the RBF.

#### 2.2 Peer Reviewers

Information on Peer Reviewers will be provided in due course, after the client has inspected the Client Draft Report, and drafted and agreed an Action Plan to address the Conditions of Certification identified during the assessment process.

#### Peer Reviewer 1: Robert Gillett.

Robert Gillett has been involved in tuna fisheries and their development/management over the last 30 years. This has included three years aboard a pole-and-line vessel, over 100 reports and publications on tuna fisheries, and work across the Pacific and Indian Oceans. Mr. Gillett's clients for the tuna work have included the United Nations Development Programme, Secretariat of the Pacific Community, Forum Fisheries Agency, Food and Agriculture Organization of the United Nations, the World Bank, International Finance Corporation, the Australian Agency for International Development, the Nature Conservancy, Pacific Islands Forum Secretariat, the Asian Development Bank, University of Hawaii, U.S. National Oceanic and Atmospheric Administration, European Union, Commonwealth Secretariat, the Western and Central Pacific Fisheries Commission, the Worldwide Fund for Nature, the International Sustainable Seafood Foundation, and the Indian Ocean Tuna Commission. He has an extensive publication list focused on tuna fisheries, and was a peer reviewer for the New Zealand albacore tuna troll fishery assessment.

#### Peer Reviewer 2: Kevin McLoughlin

Kevin McLoughlin is a specialist fisheries consultant who previously worked with the Bureau of Rural Sciences as a Senior Fisheries Scientist engaged in a wide range of international and domestic fisheries issues with close links to Government policy. Mr. McLoughlin's responsibilities included production of BRS Fishery Status Reports—these have had a major influence on the direction of Australia's fisheries management and policy. His responsibilities have required a high level of interaction with policy and industry clients, and with international organisations. An important aspect of his work has been to be able to translate complex fisheries information to a range of audiences. Mr. McLoughlin was also a peer reviewer for the New Zealand albacore tuna troll fishery assessment, and is a member of the team conducting surveillance audits of that fishery.



# **3** Description of the Fishery

#### 3.1 Unit of Certification and scope of certification sought

The MSC Guidance to the MSC Certification Requirements (MSC 2011a) specifies that the Unit of Certification as:

"The fishery or fish stock (= biologically distinct unit) combined with the fishing method/gear and practice (= vessel(s) pursuing that stock."

The fishery proposed for certification is therefore defined as:

Species:	Albacore tuna (Thunnus alalunga).
Geographical Area:	North Pacific.
	It is recognised that this fishery represents a small proportion of the total fishing pressure on this stock. As a consequence, the status of the North Pacific stock as a whole is assessed, together with fishing practices and consequences within the AAFA pole & line and troll/jig fleet only.
Method of Capture:	Pole & Line and Troll (Jig).
	AAFA vessels targeting albacore in the North Pacific use two different methods to catch albacore; pole & line fishing and trolling; these methods are described fully in Section 3.2 of this report.
	Most AAFA vessels focus on using trolling gear. However, some vessels may repeatedly switch between pole & line and troll gears on any given day in the fishery, trolling before switching to pole & line fishing when a sufficient density of fish is found, but then switching back to trolling if the shoal subsequently disperses. Northern anchovy is the 'bait' or 'chum' of choice in pole & line fishing and may be used occasionally by vessels using trolling gear to attract and hold shoals of albacore near the surface. It is therefore not feasible to separate the catches made by the two gear types, while landings are also not separated by gear type by the state of Washington. The two gear types, which are both fished at or near the surface, are combined under one Unit of Certification.
	Throughout this assessment document, the fishery will be referred to as the AAFA North Pacific albacore surface 'pole and troll' fishery.
Management System:	Albacore occur within the jurisdictions of both the Inter-American Tropical Tuna Commission (IATTC) and the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC). When operating in the US EEZ, as well as in international waters when catches are landed in US ports, the US fishery is under domestic management of the Pacific Fishery Management Council.
Client Group:	American Albacore Fishing Association (AAFA) member vessels and vessels recognised by AAFA.
	Any vessels joining the Unit of Certification must recognise any requirements of MSC certification applied to AAFA vessels.



#### 3.1.1 Scope of Assessment in Relation to Enhanced Fisheries

The albacore stock targeted in the North Pacific albacore fishery is not enhanced and is dependent entirely on wild spawning and growth. As such, enhanced fishery considerations do not apply to the fishery under assessment.

#### 3.1.2 Scope of Assessment in Relation to Introduced Species Based Fisheries (ISBF)

Albacore is native to the North Pacific.

#### **3.2 Overview of the fishery**

Albacore tuna (*Thunnus alalunga*) is a highly migratory species (HMS), and the North Pacific stock ranges across much of the North Pacific Ocean between about  $10^{\circ}$  N and  $50^{\circ}$  N. Albacore therefore occur in waters under the jurisdiction of both the Inter-American Tropical Tuna Commission (IATTC) and the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC). When operating in the United States Exclusive Economic Zone (US EEZ), as well as in international waters when catches are landed in US ports, US HMS fisheries are managed by the Pacific Fishery Management Council (PFMC).

The AAFA North Pacific albacore pole and troll fishery is undertaken off the US West Coast, between California and Washington, both within the US EEZ and well offshore in international waters. The fishery employs two fishing methods- trolling and pole & line fishing.

Trolling for albacore consists of towing artificial lures with barbless hooks behind a fishing vessel at a speed of about 6 knots. Individual trolling lines are generally 3 to 20 fathoms long and are often constructed from ¼-inch braided nylon line, with a 2 fathom leader made from 200 to 260 pound test nylon monofilament, to which is attached an artificial feathered jig with a barbless double hook. Fish are caught one at a time on the trolling line and, upon striking the jig, are retrieved immediately with a hydraulic gurdy or line-puller. Usually about 14 to 20 lines may be trolled by an albacore fishing vessel, however, typically not all lines are pulled during heavy fishing activity. Trolling vessels will customarily operate with a captain and one or sometimes two crew.

In pole & line fishing, fishers use a stout pole, formerly constructed of bamboo and now made of fibreglass or a high-technology composite, with a short line that has a single barbless hook with an artificial lure or rarely a livebait. Schools of albacore are usually located by trolling and the vessel is stopped near the school of albacore, which is kept close to the vessel by throwing small amounts of live fish chum, preferably northern anchovy. Each pole & line set-up is used by an individual fisher to catch one fish at a time that is lifted aboard the vessel. Pole & line vessels usually carry about three to six pole & line fishers and a captain, who usually also 'throws' chum.

US albacore trolling vessels, which are also often called 'jig vessels', that operate in the North Pacific are in two general size classes. Smaller vessels, which range mostly from about 10m to 15m in length with hold capacities that vary from about 5 to 30 short tons, mainly comprise the fleet that operates in near shore waters within about 200 miles of the North American coast. Vessels chiefly from about 17m to 30m in length, with hold capacities from about 40 to 100+ short tons, from the fleet that operates on the high seas, as well as on near shore waters. Most vessels have refrigerated fish holds employing various types of refrigeration, but some smaller vessels may use ice to keep catches fresh. Pole-and-line vessels, which may also be called 'bait boats', are generally about the same size range and hold capacities as the larger size class of trolling vessels. All have refrigerated fish holds, some with blast or plate freezing and others with refrigerated brine systems. Pole-and-line vessels also have



capabilities to conduct troll fishing and may shift back and forth between these types of fishing depending on the fishing conditions and/or the availability of live anchovy for chum and bait.

### **3.3 Principle One: Target Species**

### 3.3.1 Albacore life history

Albacore is a highly migratory tuna species found in all of the global oceans and Mediterranean Sea. In the Pacific Ocean there are two separate and distinct stocks of albacore, one in the northern hemisphere and the other in the southern hemisphere. Albacore matures by the relatively early age of approximately 6 years and has a moderate lifespan to about 10 to 12 years. The species is highly fecund with up to about 2.6 million eggs per spawning. Spawning takes place throughout the year, with a peak in summer months, in subtropical waters between about  $10^{0}$  N to  $25^{0}$  N latitudes, mostly in the western Pacific, in the vicinity of the Hawaiian Islands, and in some years off Guadalupe Island, Mexico. Growth rates are moderate, with fork lengths at first birthday nearly 40 cm and at sexual maturity at age 6 approximately 90 cm or somewhat less. First recruitment into a fishery is at about age 1 year, when albacore are caught by Japanese surface fisheries in the western Pacific. Pre-adult fish between 2 and 5 years are targeted by surface pole & line and troll fisheries, and undergo extensive migrations in temperate and subtropical waters between the western or central and eastern North Pacific. On the other hand, spawning 6+ year old adults undertake more limited movements in the tropical and subtropical waters mostly within the central and western North Pacific. Adult fish are targeted by longline fisheries.

Albacore, like other tunas, have a number of physiological and morphological specializations that adapt them to a fast, continuous swimming lifestyle in the pelagic open ocean environment. They are endothermic as the result of a counter-current *rete mirabile* heat exchanger system, which enables them to maintain internal core body temperatures up to  $10^{\circ}$  C warmer than ambient ocean water temperatures. Their metabolic rates are 2 to 10 times higher than most other bony fishes, and they have very large eyes for detecting prey and specialized fins and body form to reduce drag. Albacore are opportunistic carnivores and as adults have few predators, except they are sometimes are believed to be preyed on by large marine mammals, sharks, and billfish.

Albacore are generally considered inherently resilient to fishing pressure because they have a high rate of intrinsic increase, mature at an early age, are highly fecund, are not long-lived, have a broad distributional range, and do not exhibit any characteristics that increase the ease or population consequences of capture, such as aggregating for spawning or exhibiting sequential hermaphroditism (Marsh, 2010).

#### **3.3.2** History of fishing and management

The US surface troll fishery for albacore in the North Pacific began in the early 1900's when fishers commenced targeting seasonally migrating albacore in near-shore oceanic waters off southern California to meet the needs of a tuna cannery established there. The troll fishery gradually spread northwards, but was restricted to waters off California until the late 1930's, when it extended to waters off the states of Oregon and Washington, and eventually to off British Columbia, Canada. Traditionally until the late 1970's, the troll fishery usually began operating in early July, when migrating albacore approach the west coast of North America, and was primarily conducted in near shore oceanic waters. From 1961 through 1979, approximately 99% of the reported US catches of North Pacific albacore were made within 200 miles of the North American coast, with 84% off the US coast and 9% and 7% in the jurisdictional waters of Mexico and Canada, respectively.



**Table 1:** US commercial landings (metric t) of North Pacific albacore for 1981-2010, by HMSpermitted vessels landing albacore, with bycatch (albacore data from ISC 2011, bycatch data from PFMC 2011b, with additional analysis). Note that some bycatch will originate from HMS fisheries other than the albacore pole & line or troll fisheries.

Year	Albacore	Other Tunas	Sword- fish	HMS Sharks	Dorado	Coastal Pelagics	Other	Total
1981	13,385	14	0	< 0.5	< 0.5	2	1	13402
1982	7,034	4	4	2	1	< 0.5	< 0.5	7045
1983	9,966	16	3	1	< 0.5	34	1	10021
1984	10,334	13	25	5	< 0.5	2	4	10383
1985	7,913	2	11	4	< 0.5	< 0.5	2	7932
1986	5,140	2	1	< 0.5	0	< 0.5	1	5144
1987	2,924	< 0.5	5	2	0	1	1	2933
1988	4,810	< 0.5	18	2	0	< 0.5	1	4831
1989	1,914	1	7	8	< 0.5	< 0.5	2	1932
1990	2,718	< 0.5	2	< 0.5	< 0.5	< 0.5	1	2721
1991	1,845	< 0.5	2	1	< 0.5	0	< 0.5	1848
1992	4,572	1	13	2	0	0	< 0.5	4588
1993	6,254	18	90	5	9	0	2	6378
1994	10,978	< 0.5	1	< 0.5	< 0.5	0	1	10980
1995	8,125	1	1	< 0.5	< 0.5	< 0.5	1	8128
1996	16,962	42	< 0.5	< 0.5	< 0.5	0	1	17005
1997	14,325	8	1	1	< 0.5	< 0.5	2	14337
1998	14,489	116	4	3	< 0.5	< 0.5	2	14614
1999	10,120	24	15	1	< 0.5	< 0.5	4	10164
2000	9,714	2	22	< 0.5	< 0.5	< 0.5	1	9739
2001	11,349	10	< 0.5	1	< 0.5	< 0.5	6	11366
2002	10,768	2	2	< 0.5	< 0.5	< 0.5	4	10776
2003	14,161	3	0	< 0.5	< 0.5	< 0.5	2	14166
2004	13,473	1	0	< 0.5	< 0.5	< 0.5	3	13477
2005	8,479	< 0.5	0	< 0.5	0	0	1	8480
2006	12,547	1	0	< 0.5	< 0.5	< 0.5	1	12549
2007	11,908	< 0.5	0	0	< 0.5	< 0.5	1	11909
2008	11,761	6	0	0	< 0.5	< 0.5	3	11770
2009	12,793	7	< 0.5	< 0.5	< 0.5	< 0.5	2	12802
2010	12,004	< 0.5	0	< 0.5	< 0.5		< 0.5	12004
Mean 1981-2010	9,426	13	8	2	1	4	2	9,450
Mean 1981-2010 as % of albacore	n/a	0.14	0.08	0.02	0.01	0.04	0.02	n/a
Mean 2001-2010	11,924	4	0	0	< 0.5	< 0.5	3	11,928
Mean 2001-2010 as % of albacore	n/a	0.03	0.00	0.00	0.00	0.00	0.03	n/a



Since the late 1970's, US albacore fishers with larger vessels may begin troll fishing in the early spring months on the high seas. Some of these vessels operate as far west as the International Dateline and beyond, to extend the fishing season by intercepting albacore migrating towards the coast of North America and locating high catch rate areas. The extent of the albacore migration is variable and a significant characteristic of the US surface fishery is the wide north-south variation in the geographical locations of the most productive fishing grounds. Uniquely, a large proportion of this variability is at the multi-decade rather than the inter-year time scale.

The estimated number of vessels landing albacore peaked at more than 2,000 in the mid-1970's. However, fewer vessels have been active in recent years. During the past five years the number of US pole and troll vessels that landed albacore ranged from 523 and 680 (PFMC 2011b), with vessels smaller than about 17 m outnumbering larger vessels by approximately two to one.

The history of the US pole & line fishery for albacore differs somewhat from that of the troll fishery, and is linked to the US tropical tuna fishery for yellowfin, bigeye, and skipjack tunas. The pole & line method of catching albacore also began in the early 1900's with vessels operating within a one-day run from port to provide product for a tuna cannery located in southern California. A poor catch of albacore in 1918, though, forced pole & line boats to shift to fishing for tropical yellowfin and skipjack to fill the cannery's demand for tuna. In subsequent years even though the availability of albacore may have been high, the amount of pole & line effort expended for albacore was thereafter greatly influenced by events in the tropical tuna fishery. Today there are, fewer than about 35 US vessels using this fishing method for catching North Pacific albacore.

The US surface trolling and pole & line fisheries account for approximately 17% of the North Pacific albacore landed by all nations. The bulk of the catch is canned and marketed as 'white meat' tuna. A relatively small amount of the catch is marketed in the fresh and fresh-frozen trade. The total quantities of albacore landed by the US pole and troll fishery has varied over time, depending mainly on availability of the stock to fishermen and their vulnerability to capture, as well as on the market for albacore (Chip Bissell, AAFA, pers. comm.), but the average annual landings for the last 30 years (9,426 t) is not very different from the average for the last 10 years (11,924 t) (Table 1).

#### 3.3.3 Status of Stock, assessment methods and standards

The current assessment of the status and expected future trends in the North Pacific albacore stock was completed in June 2011 using fishery data through 2009, and was reviewed by the International Scientific Committee for tuna and tuna-like species in the North Pacific Ocean (ISC) in June, 2011 (WCPFC 2011b). This assessment was conducted using the Stock Synthesis modeling platform (SS3, Version 3.11b) and is based on the assumption that there is a single well-mixed stock of albacore in the North Pacific. It was estimated that the total stock biomass in 2009 was approximately 800,000 t, while the spawning stock biomass was about the historic median of 405,000 t (WCPFC 2011b).

The new model used was a seasonal, length-based, age-structured, forward-simulation population model with a focus on providing reliable estimates of population dynamics and stock abundance. Major changes to model inputs and structure in this assessment relative to an assessment conducted in 2006 include the use of catch-at-length data rather than catch-at-age data. The results derived were similar to those derived from the previous assessment in 2006 and were slightly more optimistic with regard to spawning stock biomass. The SS3 model and the VPA model used in previous assessments were on the current data and both estimated similar historical trends in SSB and recruitment, but with different scaling for biomass. The assessment stated that the scaling difference is largely attributable to the different growth curves used in the SS3 model and the VPA reference run. The Albacore Working Group of the ISC (ALBWG) concluded that the growth curve used in the 2006 assessment is not representative of growth in North Pacific albacore. Based on the agreement in trends of estimated



quantities between the VPA and SS3 base-case model, the ability to explain the scaling differences between models, and the robustness of the stock status and conservation advice to these differences, the WG concluded that the SS3 model will replace the VPA as the principal model for North Pacific albacore assessments.

The Northern Committee (NC) of the WCPFC established an interim management objective for North Pacific albacore in 2008. The objective is to maintain the spawning stock biomass (SSB) above the average of the ten historically lowest estimated points (ATHL) with a probability greater than 50%. The NC requested that the ALBWG evaluate the status of the North Pacific albacore stock against  $F_{SSB-ATHL50\%}$  for a 25-yr projection period.  $F_{SSB-ATHL50\%}$  is the fishing mortality, F, that will lead to future minimum SSB falling below the SSB-ATHL threshold level at least once during the projection period (2010-2035).

The assessment model estimates that SSB has likely fluctuated between 300,000 and 500,000 t between 1966 and 2009 and that recruitment has averaged 48 million fish annually during this period. The pattern of F-at-age shows fishing mortality increasing to its highest level on 3-yr old fish and then declining to a much lower and stable level in mature fish. Current F (geometric mean of 2006 to 2008,  $F_{2006-2008}$ ) is lower than  $F_{2002-2004}$  (current F in the 2006 assessment). Future SSB is expected to fluctuate around the historical median SSB (~405,000 t) assuming F remains constant at  $F_{2006-2008}$  and average historical recruitment levels persist.  $F_{2006-2008}$  is approximately 30% below  $F_{SSB-ATHL50\%}$  and there is about a 1 % risk that future SSB will fall below the SSB-ATHL threshold in at least one year in the projection period, i.e., current F is well below the 50% probability level.

The assessment concluded the North Pacific albacore stock is considered to be healthy at current levels of recruitment and fishing mortality. Since current  $F_{2006-2008}$  is about 71% of  $F_{SSB-ATHL}$  and the stock is expected to fluctuate around the long-term median SSB (~405,000 t) in the foreseeable future given average historical recruitment levels and constant fishing mortality at  $F_{2006-2008}$ , the conclusion is that overfishing is not occurring and that the stock likely is not in an overfished condition. However, recruitment is a key driver of the dynamics in this stock and a more pessimistic recruitment scenario increases the probability that the stock will not achieve the management objective of remaining above the SSB-ATHL threshold with a probability of 50%. Thus, if future recruitment declines about 25% below average historical recruitment levels due either to environmental changes or other reasons, then the impact of  $F_{2006-2008}$  on the stock is unlikely to be sustainable. Therefore, the assessment recommends maintaining present management measures, including not increasing fishing effort (IATTC C-05-02 and WCPFC CMM 2005-03).

**Table 2:** Potential reference points and estimated F-ratio using  $F_{CURRENT}$  ( $F_{2006-2008}$ ), associated spawning biomass and equilibrium yield.  $F_{SSBL-ATHL}$  is not equilibrium concept so SSB and yield are given as median levels. (WCPFC 2011b).

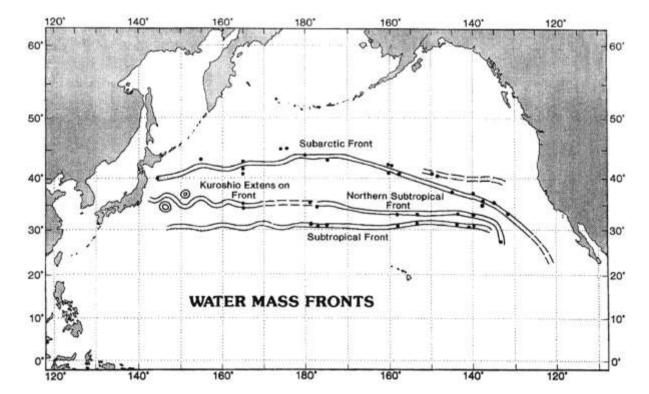
Reference Point	F <sub>2006-2008</sub> /F <sub>RP</sub>	SSB (t)	Equilibrium Yield (t)
F <sub>SSB-ATHL</sub>	0.71	346,382	101,426
F <sub>MAX</sub>	0.14	11,186	185,913
F <sub>0.1</sub>	0.29	107,130	170,334
F <sub>MED</sub>	0.99	452,897	94,080
F <sub>20%</sub>	0.38	171,427	156,922
F <sub>30%</sub>	0.52	257,140	138,248
F <sub>40%</sub>	0.68	342,854	119,094
F <sub>50%</sub>	0.91	428,567	99,643



The F-based reference point  $F_{SSB-ATHL}$  is one of a group of simulation-based biological reference points (BRP) using spawning biomass thresholds proposed for North Pacific albacore (ISC/05/ALBWG/06). Unlike other BRPs used in fisheries management,  $F_{SSB}$  is not an equilibrium concept and therefore does not assume that future SSB or yield will remain constant at some specified level. As a simulation-based BRP,  $F_{SSB-ATHL}$  can incorporate non-equilibrium dynamics, uncertainty in the stock size estimates, and other parameters from the assessment as well as uncertainty in recruitment in future years.

Estimates of  $F_{2006-2008}$  (current F) relative to several F-based reference points used in contemporary fisheries management are presented above in Table 2. The estimates are expressed as the ratio of  $F_{2006-2008}/F_{ref}$  point, which means that when the ratio is less than 1.0,  $F_{2006-2008}$  is below the reference point estimate. The  $F_{MAX}$ ,  $F_{MED}$  and  $F_{0.1}$  reference points are based on yield-per-recruit analysis while the F20-50% reference points are spawning biomass-based proxies of  $F_{MSY}$ . Since  $F_{2006-2008}$  is close to  $F_{MED}$  and well below the MSY proxy rates, the assessment infers that overfishing of the North Pacific albacore stock is unlikely at present. Therefore, the current fishing mortality is less than, and in some cases much less than, commonly applied F-based reference points.

#### 3.4 Principle Two: Ecosystem



### 3.4.1 Background

Figure 1: Schematic representation of the major fronts in the temperate zone of the North Pacific based upon numerous individual observations (dots). The transition zone lies between the fronts (Laurs & Lynn 1991).



Albacore inhabit the open-ocean, and spend most of their time in the upper layers above 250 m depth (Childers *et al.* 2011). Albacore distribution, relative abundance and availability to capture are closely associated with oceanic frontal structure, and the species migrates extensively within the North Pacific Transition Zone (NPTZ), the area that lies between the Subarctic and Subtropical Fronts (Laurs & Lynn 1991, and Figure 1). More specifically, contemporaneous catch, sea-surface temperature and chlorophyll data show that the distribution of albacore within the NPCT appears to be closely linked to the Transition Zone Chlorophyll Front, a permanent, sharp gradient in sea surface chlorophyll that shifts seasonally north and south through the NPTZ (Polovina *et al.* 2001), while in coastal regions their distribution is linked to coastal upwelling boundaries, with albacore being found on the oceanic side of the upwelling boundaries in warmer (>16<sup>o</sup>C) and clearer (<0.3 mgm-3 chlorophyll) water (Laurs *et al.* 1984).

Albacore are primarily daytime, visual predators, and are known to feed actively at the surface in coastal areas, thus making them susceptible to the pole and troll fishery (Childers *et al.* 2011). In the California Current off the west coast of the USA., juvenile albacore focus on northern anchovy while also feeding on other fish (mainly Pacific saury, *Cololabis saira*), cephalopod and crustacean species (Glaser 2009). Further offshore, albacore diet has been less intensively studied, but cephalopods and larval fish from the lanternfish and carangid families, as well as small-eye squaretail (Tetragonurus cuvieri) and amphipods appear to be important (Laurs & Lynn 1991). As well as humans, predators of adult albacore are believed to be large marine mammals, sharks, and billfishes, while young albacore may also be taken by other larger tunas and fish species (Kitchell *et al.* 1999).

#### 3.4.2 Retained and by-catch species

The pole & line and troll fishing gears employed in the AAFA North Pacific albacore fishery are highly selective; both are employed at the sea surface in deep water such that there is never any contact with the seabed, while the gears always remain attached to the vessel and must be actively fished. Because fish are hauled aboard immediately after they become hooked, fishermen are also quickly able to discern if an albacore shoal being targeted is made up of fish that are too small to be retained for economic or regulatory reasons. In such cases, lines can be pulled in quickly and the vessel moved in search of another shoal containing larger, marketable albacore. Few data are available on bycatch in the fishery, as there is no systematic observer program, but the latest FMP has recommended that the pole and troll fishery is observed in future, with NMFS to develop and review the observer sampling plans (PFMC 2011a).

Landings data from HMS-permitted vessels landing albacore are available from 1960's - 2010. Data for the years 1981 - 2010 are given (Table 1). It is important to note that these data are not solely from pole and troll vessels, as they include landings from all HMS-permitted vessels that landed albacore. For example, while it would be highly unusual for pole and troll albacore vessels to catch any swordfish, some albacore may be taken by swordfish boats while travelling to and from the swordfish grounds, at which point the targeted swordfish would be recorded in these data together with any albacore. As such, these data represent the worst case scenario for bycatch in the albacore pole and troll fishery. With that in mind, retained species in the pole and troll fishery may include very small amounts of yellowfin tuna (Thunnus albacares), bigeye tuna (Thunnus obesus), bluefin tuna (Thunnus thynnus), skipjack tuna (Katsuwonus pelamis), HMS sharks, dorado (Coryphaena hippurus) and unspecified coastal pelagic species. In the last 30 years, the landings of all species or species groups have not exceeded 0.14% by weight of the albacore catch (and this was for swordfish, which is unlikely to have come from the pole and troll fishery, as stated), while the maximum of any species or species group in the last 10 years has been 0.03% by weight of the albacore catch; these quantities are negligible and are considered to pose no risk to the stocks. Nevertheless, the PFMC maintains assessment and management oversight for the fisheries of tunas, billfishes and sharks undertaken in US waters (PFMC 2011b).



#### 3.4.3 The Northern anchovy baitfish fishery

Fishermen in the AAFA pole and troll fishery may utilise northern anchovy (*Engraulis mordax*) as chum. The northern anchovy may also be used occasionally as bait directly on the hooks, but more usually it is used solely as chum. When pole & line fishing, the northern anchovy are kept alive in tanks and are thrown overboard in small but regular quantities when albacore are located in order to aggregate the fish around the vessel and to excite them to strike artificial baits used on the fishing poles. On troll fishing vessels, northern anchovy are rarely kept alive in tanks, but are typically used frozen instead, with small quantities being thrown overboard when an albacore shoal is located in an attempt to hold the fish near to the surface. While this is not a common practice by troll fishermen, it may be occasionally used at the end of the fishing season. Following MSC guidance, the northern anchovy is considered in this assessment under the retained species components of the assessment (See Section CB3.5.5, MSC 2012).

Northern anchovy may be caught by AAFA fishermen or may be purchased from dedicated commercial bait fishermen who sell live or frozen northern anchovies to commercial and sport fishermen. AAFA fishermen use relatively small lampara nets which have no purse line, whereas commercial bait fishermen use larger nets of a purse seine design. Together, lampara and purse seine nets are termed 'roundhaul' nets, and are set around single-species northern anchovy schools that are visually targeted near to the surface. If being kept alive, the northern anchovy are carefully brailed from the roundhaul net to the bait tanks in small scoops to minimise the risk of any damage. This brailing, and the fact that roundhaul nets are not designed to come in to contact with the seabed at any time, ensures that bycatch and mortality of other species in the northern anchovy fishery is very low, with sardine making up by far the greatest bycatch in observer records of the purse seine fleet from 2004 – 2008 at approximately 5% of the northern anchovy catch (PFMC 2011c).

Northern anchovy can be divided in to northern, central and southern sub-populations. The northern population ranges from San Francisco north to Canada, while the central population extends from San Francisco south to Baja, California. Northern anchovy is managed by the PFMC as a 'monitored' species, meaning that harvest guidelines and quotas are not established, but landings are monitored and the number and capacity of vessels in the fishery is limited, while any changes in management are based on significant changes in the landings or the fishery (NMFS 2011b); a monitored fishery can become 'actively managed' if catches approach the acceptable biological catch (ABC) or maximum sustainable yield (MSY) levels, while overfishing of a monitored CPS stock is considered whenever current estimates or projections indicate that a minimum stock threshold will be realized within two years (PFMC 2011c).

While there is no up to date stock assessment and the most recent complete assessment was described in 1995, the PFMC adopted new management benchmarks for the northern and central subpopulations of northern anchovy in 2010 (PFMC 2011c). Catches have varied widely over time (Table 3), but the overfishing limits (OFLs) are based on past estimates of biomass and are considered a MSY proxy, while the ABC values account for a 75 % uncertainty buffer in the OFL. The annual catch limit (ACL) was then set at1500 t for the northern population (Table 4). It is considered that the northern anchovy stocks currently experience limited targeted fishing pressure and relatively low levels of landings, and are not overfished or experiencing overfishing (PFMC 2010).



Year	Northern anchovy (t)	Year	Northern anchovy (t)	Year	Northern anchovy (t)
1981	52,309	1991	4,068	2001	19,345
1982	42,155	1992	1,166	2002	4,882
1983	4,430	1993	2,003	2003	1,929
1984	2,899	1994	1,859	2004	7,019
1985	1,638	1995	2,016	2005	11,414
1986	1,557	1996	4,505	2006	12,960
1987	1,467	1997	5,779	2007	10,548
1988	1,518	1998	1,584	2008	14,654
1989	2,511	1999	5,311	2009	3,519
1990	3,259	2000	11,832	2010	1,284

Table 3: West coast landings (t) of northern anchovy, 1981 – 2010 (PFMC 2011d).

 Table 4: Catch limits for Pacific Fisheries Management Council monitored northern anchovy stocks (PFMC 2011c).

Stock	Overfishing Limit (OFL)	Acceptable Biological Catch	Annual Catch Limit (ACL)	Annual Catch Target (ACT)
Northern anchovy, northern subpopulation	39,000 mt	9,750 mt	Equal to ABC	1,500 mt
Northern anchovy, central subpopulation	100,000 mt	25,000 mt	Equal to ABC	

Albacore fishermen operating in waters off Washington and Oregon are required to report anchovy harvest through logbook submissions on albacore catches, but there is no such requirement in California. Because of this, and because the commercial bait catch may be used in other fisheries, there are no data available on the quantity of northern anchovy taken for use in the albacore pole and troll fishery. In order to quantify bait usage, three experienced AAFA fishermen were asked to estimate how much northern anchovy would be used by the AAFA fleet during a fishing year. Two of the fishermen interviewed principally operate pole & line gear, while the other fisherman principally operates trolling gear. The fishermen were asked to describe the pole & line and troll fishing operations with respect to the use of northern anchovy, including the season for using Northern anchovy, the average number of trips per year during which anchovy are used, and the amounts used per trip; their comments are recorded in Table 5, below.

By taking the greatest amounts estimated by the fishermen for each answer (number of trips, number of scoops and average scoop weight), and assuming that the bait tanks are filled to capacity and all the northern anchovy are used on each trip (which is not the case), an annual total of less than 250 t of northern anchovy would be used. However, by using the median answers to the questions, the total tonnage of northern anchovies used is approximately 130 t per year, again assuming that the bait tanks are filled to capacity that all the northern anchovy are used on each trip. These figures are small and represent no threat to the northern anchovy stocks in the context of the US fisheries that produce an estimated 1,000 t - 3,000 t of northern anchovy that are sold as dead bait to sport fishermen, and the approximately 4,000 t of mixed sardine and northern anchovy that are sold live to sport fishermen (PFMC 2011c).



Table 5: Bait usage by the AAFA fleet as estimated by experienced AAFA fishing captains.

	Captain 1 (Pole & Line)	Captain 2 (Pole & Line)	Captain 3 (Troll)
Number of P&L vessels	20 - 25 (varies according to year and how fish respond to bait)	20 - 25 (varies according to year and how fish respond to bait)	
Season for making (catching) bait for P&L vessels	End August - early November (season end depends on weather)	End August - early November (season end depends on weather)	
Number of fishing trips in P&L season	Up to 10 (but bait will not be 'made' (caught) before every trip)	Approximately 7	
Scoop weight	5 lb (scoop size is 8 lb officially, but smaller scoops are used to avoid damage to anchovy)	6 - 8 lb	
Number of scoops taken per trip across P&L fleet	Not asked	150 – 250 (large vessels may take more, but the average is probably at the low end)	
Maximum tonnes used by P&L vessels per annum (based on maximum values)	226 t (25 vessels x 10 trips x 250 scoops x 8 lb)/2205	159 t (25 vessels x 7 trips x 250 scoops x 8 lb )/2205	
Average tonnes used by P&L vessels per annum (based on answers)	104 t (23 vessels x 10 trips x 200 scoops x 5 lb)/2205	102 t (23 vessels x 7 trips x 200 scoops x 7 lb )/2205	
Number of Troll			30-50 % of the fleet
vessels using bait Amount of bait used per troll trip			(therefore 10 - 25 vessels) Average 180 lb (6 frozen boxes of 30 lb)
Number of troll trips where bait is used			Not asked (but assumed to be up to 10, as pole & line vessels)
Season for trolling with bait?			Common September to end of season. Uncommon earlier in the year.
Maximum tonnes used by troll vessels per annum (based on answers)			20 t (25 vessels x 10 trips x 180 lb ) /2205

#### 3.4.4 Endangered, threatened and protected (ETP) species

ETP species of potential relevance to the AAFA North Pacific albacore fishery include a variety of marine mammal, sea turtle and seabird species. These species and identified threats are listed in Table 6, below. Interactions between ETP species and the AAFA pole and troll fishery are highly unlikely, given the very high selectivity of the gear. In particular, the pole & line fishery is a sight-fishing fishery, where individual fish can be targeted, and so no ETP species should be taken. Trolling is also highly selective, and the jigs used should preclude the catching of any marine mammal or turtle species other than possibly through accidental snagging. However, this risk is minimal and the pole



and troll fisheries are not identified in any recovery or spotlight species action plan (Table 6). It is thought that perhaps one loggerhead turtle may be caught in the albacore pole and troll fishery per year (based on two observations in more than 1500 observed days of effort), but that no turtle would die as a result of an interaction with the fishery (NMFS 2004).

The US National Bycatch Report assessed the North Pacific albacore pole & line fishery as being a Tier 0 fishery for bycatch of fish, marine mammals and other protected species, while the troll fishery was deemed to be in Tier 1 for the same animal groups (NMFS 2011a). Tier 0 classification was stated as meaning that bycatch data collection programs have not been implemented, and that neither a method for estimating bycatch nor estimates of bycatch are available. Tier 1 classification is stated as typically meaning that bycatch estimates are based on outdated or unreliable information. However, the 2012 NOAA 'List of Fisheries', that as a requirement of the Marine Mammal Protection Act (1972) classifies US fisheries as being in Category I (*"frequent incidental mortality and serious injuries of marine mammals"*) or Category III (*"a remote likelihood or no known incidental mortality and serious injuries of marine mammals"*) assessed the North Pacific albacore pole and troll fisheries as Category III, with no marine mammal species or stocks killed or injured (NOAA 2011a).

Common Name	Scientific Name	ESA Conservation Status	Identified Threats	Albacore pole and troll fisheries identified?		
	Marine Mammals					
Blue whale	Balaenoptera musculus	Endangered	Identified human impacts including ship collision, disturbance by vessels, entanglement in nets and trap fishing gear, habitat degradation, and military operations (Reeves <i>et al.</i> 1998).	No		
Finback whale	Balaenoptera physalus	Endangered	"No conservation plans have been created for finback whale" (USFWS 2012a).	No		
Humpback whale	Megaptera novaeagliae	Endangered	Identified human impacts include entanglement in fishing gear, subsistence hunting, ship collision, acoustic disturbance, habitat degradation, and competition with humans for resources (NMFS 1991).	No		
Killer whale (Southern resident DPS)	Orcinus orca	Endangered	Identified impacts include prey availability, environmental contaminants, vessel effects including collision and sound, oil spills, alternative energy projects and disease (NMFS 2008a).	No		
Sei whale	Balaenoptera borealis	Endangered	"No conservation plans have been created for sei whale" (USFWS 2012b).	No		
Sperm whale	Physeter catodon	Endangered	"No conservation plans have been created for sperm whale" (USFWS 2012c).	No		
Guadalupe fur seal	Arctocephalus townsendi	Threatened	"No conservation plans have been created for Guadalupe fur seal" (USFWS 2012d).	No		
Steller sea- lion (Eastern	Eumetopias jubatus	Threatened (East of 144 <sup>0</sup> W. Longitude)	Identified impacts include intentional and illegal killing, incidental fishery take (gillnet, trawl, longlines and salmon trolling) (NMFS 2008b)	No		
Sea turtles						
Green turtle (East Pacific)	Chelonia mydas	Threatened	Identified impacts include directed take, coastal construction and light pollution, nest predation, habitat degradation, environmental contaminants, debris	No (but hook & line in list of gears that		

 Table 6: ETP species of potential relevance to the AAFA North Pacific albacore pole and troll fishery.



			entanglement and ingestion, incidental take in fisheries (trawls, gillnets, traps, pound nets, seines, driftnets and longlines), predation, power plant entrapment and boat collisions (NMFS 1998a).	<u>may</u> catch green turtles (NMFS 1998a))
Leatherback turtle	Dermochelys coriacea	Endangered	Identified impacts include directed take, coastal construction and light pollution, nest predation, habitat degradation, environmental contaminants, debris entanglement and ingestion, incidental take in fisheries (gillnets and longlines), predation and boat collisions (NMFS 1998b).	No
Loggerhead turtle	Caretta caretta	Threatened	Identified impacts include directed take, coastal construction and light pollution, nest predation, habitat degradation, environmental contaminants, debris entanglement and ingestion, incidental take in fisheries (trawls, gillnets, traps, pound nets, seines, driftnets and longlines), predation, power plant entrapment and boat collisions (NMFS 1998c).	No (but hook & line in list of gears that <u>may</u> catch loggerhead turtles (NMFS 1998c))
Olive Ridley turtle	Lepidochelys olivacea	Threatened	Identified impacts include directed take, coastal construction and light pollution, nest predation, habitat degradation, environmental contaminants, debris entanglement and ingestion, incidental take in fisheries (trawls, gillnets, traps, pound nets, seines, driftnets and longlines), predation, power plant entrapment and boat collisions (NMFS 1998d).	No (but hook & line in list of gears that <u>may</u> catch olive ridley turtles (NMFS 1998d))
	•	-	Seabirds	
Marbled murrelet	Brachyramphus marmoratu	Threatened	Primary identified cause of decline is loss of nesting habitat. Oil spills, gill-net fishing, marine pollution and predation are considered to be additional causes of decline (USFWS 2009a).	No
Short-tailed albatross	Phoebastria albatrus	Endangered	Identified threats include reduced productivity and competitive exclusion of chicks on breeding islands, contaminants, bycatch in commercial fisheries (longlining specifically identified) and predation (USFWS 2009b).	No

Bycatch of albatross was raised as a concern by an individual stakeholder during the third annual surveillance audit of the first AAFA North Pacific albacore fishery certificate (Powers *et al.* 2010). At that time, Southwest Fisheries Science Center (SWFSC) staff examined 37,750 daily logsheets from 2000 and 24,530 daily logsheets from 2005, and only two interactions between the North Pacific albacore pole and troll fisheries and albatross were found; in both cases, the birds were released. There was no information available on the species of albatross or on the condition of the birds upon release, but there is much greater potential for the birds to be released alive and in good health from pole and troll gears than from gears such as long-line or drift nets, because the pole and troll gears would be retrieved immediately upon hooking a bird. However, during the October 2011 reassessment meeting, SWFSC staff noted that there is a negligible potential for interactions between the AAFA North Pacific pole and troll fisheries and seabirds, while albacore pole and troll fisheries were not implicated in a 2005 review of RFMO performance against albatross bycatch (Small 2005).

In summary, the highly selective nature of the gear types, information provided in the various recovery and species action plans highlighted in Table 6, the lack of any recommendations made regarding a need to collect more data on catches in the North Pacific albacore pole and troll fisheries in the US National Bycatch Report (NMFS 2011a), and the 'List of Fisheries' assessment (NOAA 2011a), it is highly unlikely that the albacore pole and troll fisheries pose a threat to ETP species.



#### 3.4.5 Habitat and ecosystem effects

The AAFA pole and troll fishery is highly selective, and operates at the surface in deep, oceanic water; there is therefore no interaction with the seabed, while the gear comprises short lines with jigs or live bait attached, which at most can impact the surface pelagic habitat of the North Pacific in an imperceptible and highly transient manner. There is negligible catch of other retained or discarded species. The northern anchovy that is used for bait is an important forage fish species within the California Current System inshore, but the amounts used for bait in the AAFA pole and troll fishery are small relative to other uses. Please note, northern anchovy is considered to be a retained species, and there is no MSC requirement to assess the baitfish fishery itself (e.g., at PI 2.3.x [ETP species impacts]. PI 2.4.x [habitat impacts] or PI 2.5.x [ecosystem impacts]).

Albacore is an important predator of northern anchovy in coastal areas off the western USA, and it has been suggested that albacore consume 0.1 % - 5 % of juvenile northern anchovy annual recruitment biomass, a figure that is sufficiently high to be observed in the subsequent year's northern anchovy recruitment strength (Glaser 2009). However, there is no indication that the removal of albacore by the AAFA fleet adversely affects northern anchovy or other stocks of small, prey species. Conversely, albacore is also not a key prey item for any species in the North Pacific (Kitchell *et al.* 1999), and the fishery appears very unlikely to significantly impact other higher trophic-level predators.

#### 3.5 Principle Three: Management System

#### 3.5.1 Background

The North Pacific albacore resource is distributed in ocean areas that encompass multiple zones of national jurisdiction, as well as the high seas, and are exploited by fisheries of many Nations. As such, international agreement is necessary to conserve North Pacific albacore tuna stocks and to ensure the viability of the fisheries.

Article 64 of the United Nations Law of the Sea Convention mandates States to cooperate directly, or through appropriate international organizations, to ensure the conservation of tunas. International management of the North Pacific albacore tuna resource and fisheries operating on it are shared under the auspices of the Inter American Tropical Tuna Commission (IATTC) and the Western and Central Pacific Fisheries Commission (WCPFC). The Commissions formulate overarching resolutions based on recommendations from scientific committees or staff. Member states negotiate agreements on management mechanisms and, once agreed upon, the actual implementation is left to the individual member and cooperating countries.

The Northern Committee (NC) of the WCPFC makes recommendations on the implementation of conservation and management measures that may be adopted by the Commission for the area north of 20°N, including those for North Pacific albacore. The NC has also subsumed the Interim Scientific Committee (ISC), a forum to study the tuna and tuna-like species of the North Pacific Ocean, as its main source of scientific advice.

In 2005 the IATTC and the WCPFC adopted resolutions, which have been continued through the present time, for conservation of North Pacific albacore based on concerns that fishing effort may be approaching levels that are unsustainable in the long term. Resolutions adopted by both Commissions called upon their members and cooperating parties to take necessary measures to ensure that the level of fishing effort by their vessels fishing for North Pacific albacore is not increased beyond current



levels, and to report all catches of North Pacific albacore to the Commissions at 6-month intervals. IATTC C-05-02 (IATTC 2005) requires that:

- The total level of fishing effort for North Pacific albacore tuna in the Eastern Pacific Ocean not be increased beyond current levels. At the 2008 IATTC meeting it was recommended that the fishing mortality averaged for 2002-2004 be used as the "current" fishing mortality as applies to (1).
- The CPCs [IATTC parties, cooperating non-party, fishing entity or regional economic integration organization] shall take necessary measures to ensure that the level of fishing effort by their vessels fishing for North Pacific albacore tuna is not increased;
- All CPCs shall report all catches of North Pacific albacore tuna by gear type to the IATTC every six months. However, since the limit in the resolution is in terms of effort, the sixmonthly reports include information on effort as well as catch, in terms of the most relevant measures for a given gear type. The technical aspects of the effort data to be supplied could be established by the IATTC in collaboration with scientists of the interested member countries.

WCPFC CMM 2005-03 (WCPFC 2005) requires similar actions be followed by Commission Members, Cooperating Non-Members, and participating Territories that conduct fishing operations for albacore in the Convention area north of  $20^{\circ}$  N.

The Pacific Fishery Management Council (PFMC) has the lead to adopt management actions regarding the US West Coast albacore fishery. The US West Coast albacore fishery is managed under the PFMC Highly Migratory Species Fishery Management Plan (HMS FMP). The management measures presently in place on the fishery, which apply to vessels fishing for albacore in the EEZ off the West Coast as well as when fishing on the high seas and landing their catch in West Coast states, include the following:

- A Pacific HMS fishing permit, with an endorsement for a specific gear and other accompanying provisions, is required by all commercial and recreational charter fishing vessels fishing for North Pacific albacore. Permits are issued to the owner of a specific vessel for a 2-year term and are renewable.
- A High Seas Fishing Compliance Act valid permit is required by all commercial and recreational charter fishing vessels fishing for albacore on the high seas. Permits are issued to a specific vessel for a 5-year term and are renewable.
- All Pacific HMS permit holders must maintain and submit to NMFS a daily logbook of catch and effort and catch disposition.
- The HMS FMP prohibits all pelagic longline fishing within the West Coast EEZ as well as shallow-set longline fishing in the adjacent high seas areas.
- All U.S. fishing vessels operating in HMS fisheries may be required to carry a NMFS certified observer on board to collect scientific data when directed to do so by the NMFS Regional Administrator.
- A US-Canada Albacore Tuna Treaty, which was initially put into effect in 1981, codified by law in 1984, and amended several times, expired at the end of the 2011 and is not in effect



during the 2012 fishing season. The Treaty allowed, with conditions, fishing vessels of both countries to fish for North Pacific albacore in the respective EEZ waters outside 12 miles of the other county and to access certain ports to obtain supplies and services and to land their catch. The Treaty also called for exchange of fisheries data between the governments of the two nations and establishes regulations to ensure compliance by albacore tuna fishing vessel operators when operating in the other country's waters. Discussions to negotiate a new Treaty are currently (July 2012) underway.

- The US recreational albacore fishery is managed by daily bag limits of 10 albacore per angler south, and 25 albacore per angler north, of Point Conception, CA.
- The NOAA/NMFS compiles and makes reports to the respective Commissions of data on U.S. vessel fishing effort in compliance with IATTC C-05-02 and WCPFC CMM 2005-03.
- Oregon and California require State commercial fishing licenses to fish for or land albacore; Oregon also has an albacore fishing licence when landing only albacore. No State fishing license is required to fish for albacore in Washington.



# **4** Evaluation Procedure

### 4.1 Previous Assessments

The AAFA North Pacific albacore pole and troll fishery was previously certified against the MSC Principles and Criteria as sustainable in 2007. At that time, the fishery was assessed against the MSC Fishery Certification Methodology Version 6, and a non-standard assessment tree was used that defined 76 separate Performance Indicators (PIs) across the three MSC Principles. The three Principles were scored:

Principle 1 (Sustainability of the Exploited Stock):	82.0
Principle 2 (Maintenance of the Ecosystem):	92.0
Principle 3 (Effective Management System):	95.0

One Performance Indicator (PI), PI 1.1.4.1, Status of Stock, was scored at 75 in the 2007 assessment, and so a Condition of Certification was set against the fishery, as detailed below.

#### 2007 assessment of the AAFA North Pacific albacore fishery

Condition 1. Status of Stock (Relevant Scoring Indicator: 1.1.4.1 - Score 75)

Action required: The present stock assessment suggests that the stock may be "either fully exploited or sustaining fishing mortality above levels that are sustainable in the long term". Accordingly, management resolutions have been provided by IATTC/WCPFC for a cap on existing effort and expedited reporting of catches. Also, a re-examination of stock assessment data has been initiated by ISC. It is recognised that maintaining the stock at or above a precautionary reference limit is not under the control of AFA and therefore actions required of AAFA in this regard are:

- 1. AAFA to promote and support the management actions put forward, notably limitations on effort. Communications supporting such management measures should be made to appropriate organisations. Records should be provided by AAFA of communications and responses.
- 2. AAFA to provide a summary to Moody Marine on US's responses to IATTC/WCPFC management resolutions, as provided by NMFS and/or Pacific Fishery Management Council.
- 3. A meeting of ISC Albacore Working Group was held in December 2006, and is due to report in March 2007. This will provide updated information on stock status and, depending on the latest information, may make further recommendations for management actions.
- 4. Should the existing resolution be withdrawn following the ISC report, then this condition would be considered closed.

If additional resolutions are proposed, then these should be supported as in 1, above.

### Timescale:

Point 1. If still appropriate, should be pursued immediately upon certification.

Point 2. AAFA should provide this information within 6 months of certification.

Point 4. Should further resolutions be passed by IATTC/WCPFC in this regard, supportive actions should be initiated at the earliest possible opportunity thereafter.

This single Condition against the first AAFA certificate was closed out in the 2nd annual surveillance audit in 2009, at which point the following conclusion was made: Document: Peer Reviewer Template



"AAFA has exhibited extensive, broad, and consistent efforts in promoting and supporting both domestic and international responsible management actions regarding the North Pacific albacore resource. The stock status has also been revised as being at high abundance. All elements of this Condition of Certification have therefore been met."

No further Conditions were set against the AAFA North Pacific albacore pole and troll fishery during the period of the first assessment from 2007 - 2012. As such, the fishery was deemed to be meeting the MSC standard at the point at which it entered into reassessment on September 16<sup>th</sup> 2011.

#### 4.2 Harmonised Fishery Assessment

The MSC requires that assessments are harmonised for fisheries that overlap. An overlap occurs when some or all of the same stock, environmental and/or management concerns covered by MSC Principles 1, 2 and/or 3 are the same as that/those of another MSC certified fishery or fishery in assessment. In essence, harmonisation requires that the assessment trees used are the same or complementary, and that outcomes with respect to evaluation, scoring and conditions are consistent between the fisheries. Full details are available in the Section 27.4.13 and Annex CI of the CR (MSC 2012).

#### 4.2.1 Fisheries of potential harmonisation relevance

There are a number of MSC fisheries that may be considered to be of potential harmonisation relevance with respect to AAFA's North Pacific albacore pole and troll fishery. These are shown in Table 7, below. It is noted that the previous assessment of the AAFA North Pacific fishery cannot be compared directly, PI by PI, against this new assessment because the previous assessment was undertaken against a non-standard, pre-FAM assessment tree.

Table 7: MSC fisheries of potential	harmonisation	relevance t	o the	AAFA	North	Pacific	albacore
pole and troll fishery.							

Fishery	Species	Stock/Region	Certified	Relevant to harmonisation?
American Western Fishboat Owners albacore tuna	Albacore tuna (Thunnus alalunga)	North Pacific Ocean US EEZ and the North Pacific	Yes (March 2010)	Yes (Same stock)
Canadian Highly Migratory Species Foundation British Columbia albacore tuna	Albacore tuna ( <i>T. alalunga</i> )	North Pacific Ocean Canadian EEZ and the North Pacific	Yes (March 2010)	Yes (Same stock)
Tosakatsuo Suisan pole & line skipjack tuna	Skipkack tuna (Katsuwonus pelamis)	Central and North Pacific Ocean FAO statistical areas 61 and 71	Yes (November 2009)	No (Different species)
New Zealand albacore tuna troll	Albacore tuna (T. alalunga)	South Pacific Ocean Western coast of New Zealand, part of FAO statistical area 81, inside the NZ EEZ	Yes (May 2011)	Yes (Different stock but recent MSC condition setting guidance used)



	INTERNATI	ONAL		
Fiji albacore tuna	Albacore tuna	South Pacific Ocean	No	No
longline	(T. alalunga)	FAO statistical areas 71, 77 and 81	(In assessment)	(Different stock)
Mexico Baja	Yellowfin tuna (T. albacares)	Eastern Central Pacific	Yes	No
California pole &	(1. albacares)	Facilic	1 68	INO
line yellowfin and skipjack tuna	Skipjack tuna (K.pelamis)	FAO statistical area 77	(July 2012)	(Different species)

### 4.2.2 Harmonisation considerations

The American Western Fishboat Owners (WFOA) albacore fishery and the Canadian Highly Migratory Species Foundation (CHMSF) albacore fishery were certified in March 2010, using the Fishery Assessment Methodology (FAM) V.1 default assessment tree. The assessment results of these fisheries were considered in detail during the 2010 3<sup>rd</sup> annual surveillance audit of the AAFA North Pacific albacore fishery. The full report is available from the MSC website (Powers *et al.* 2010).

Key findings of the harmonisation review of the WFOA and CHMSF North Pacific albacore fisheries undertaken during the AAFA third surveillance audit in 2010 can be summarised as follows:

- In comparison, the substantive points of the AAFA and WFOA/CHMSF fishery conditions were near identical. AAFA and the WFOA/CHMSF were required to promote and support management actions, notably limitations on effort; communications were to be made to appropriate organisations; records of these communications were then to be provided to the certification bodies
- The action plans of the CHMSF and WFOA North Pacific fisheries appeared to be somewhat similar or very similar to the action plan of the AAFA North Pacific fishery.
- Overall, Moody Marine Ltd. considered that there was no reason why the certificate holders of the AAFA, WFOA and CHMSF fisheries should not function similarly in respect of their certificates for North Pacific albacore.

The WFOA and CHMSF fisheries overlap with the AAFA North Pacific albacore fishery, and their assessment findings were considered in detail by the team assessing the AAFA fishery. It was, though, noted that the CR (MSC 2012) contains guidance for condition setting, first introduced through the MSC TAB Directive 33 (MSC 2011b) that was not available for any of the fisheries of potential harmonisation relevance other than the New Zealand albacore troll fishery. The WFOA and CHMSF fisheries were certified prior to the publication of the MSC TAB Directive 33. As such, and although there is no strict requirement to harmonise with the New Zealand fishery because it targets a different albacore stock and therefore does not overlap with the AAFA North Pacific fishery, the assessment approach and findings of the New Zealand fishery were also studied carefully by the AAFA fishery's assessment team.

More details of the harmonisation review are provided in Table 14 on page 110 of this report. The assessment team can conclude that although there are a number of somewhat significant differences in scoring (i.e., when the score of a PI was  $\geq$  15 points different between fisheries, or when scores were awarded on different sides of the SG80 boundary), there were good reasons for those differences as reflected in the evidence available.



#### 4.3 Assessment Methodologies

This reassessment of the AAFA North Pacific albacore pole and troll fishery used the MSC Certification Requirements Version 1.2 (MSC 2012), while the report was based on the MSC Full Assessment Reporting Template Version 1.0. No changes were made to the default assessment tree in assessing the fishery against the MSC Principles and Criteria.

#### 4.4 Evaluation Processes and Techniques

#### 4.4.1 Site Visits

The site visit for AAFA's North Pacific albacore pole and troll fishery reassessment occurred from the  $26^{th} - 28^{th}$  October 2011. An advertisement was previously placed in the San Diego Daily Tribune on the  $26^{th} - 28^{th}$  September inclusive. The Daily Tribune was selected as a media outlet for the advertisement as a business-focussed newspaper with a readership estimated at over 50,000 people per day (EM 2012). Confirmation of the placement of the advertisement is shown in Appendix 3.

A site visit notification was also posted to the MSC website on the 14<sup>th</sup> October, as shown in Appendix 4. Because the notification was posted to the MSC website within 30 days of the site visit, alternative dates of the 23<sup>rd</sup> and 24<sup>th</sup> November were offered to stakeholders. It was not realised at the time that these alternative dates included Thanksgiving, an important US national holiday, but no stakeholders contacted the assessment team to ask for a meeting or teleconference on those dates or to ask for separate dates to be arranged.

During the site visit, meetings were held with AAFA, NMFS staff and with a member of the Pacific Fisheries Management Council. The dates, persons involved and issues discussed are shown in Table 8, below.

Date	Organisation	Attending	Issues Discussed
26/10/2011	AAFA Intertek Moody Marine Ltd Intertek Moody Marine Ltd Intertek Moody Marine Ltd	Mr. Chip Bissell Dr. Rob Blyth-Skyrme Dr. Norman Bartoo Dr. Mike Laurs	<ul> <li>Reassessment process</li> <li>AAFA fishery data</li> <li>The fishing method</li> <li>Albacore stock status</li> <li>Stakeholder concerns</li> <li>AAFA's engagement with fishery managers</li> </ul>
27/10/2011	AAFA Intertek Moody Marine Ltd Intertek Moody Marine Ltd Intertek Moody Marine Ltd SWFSC, NOAA SWFSC, NOAA SWFSC, NOAA SWFSC, NOAA SWFSC, NOAA SWFSC, NOAA SWFSC, NOAA SWFSC, NOAA	Mr. Chip Bissell Dr. Rob Blyth-Skyrme Dr. Norman Bartoo Dr. Mike Laurs Dr. Dale Sweetnam Dr. John Childers Dr. Steven Teo Dr. Stephen Stohs Dr. Russ Vetter Dr. Craig Heberer	<ul> <li>Reassessment process</li> <li>The fishing method</li> <li>Albacore stock status</li> <li>The stock assessment model</li> <li>Bycatch in the fishery</li> <li>Anchovy bait fishery</li> <li>ETP species interactions</li> <li>Observer coverage</li> <li>Management of the fishery</li> </ul>
27/10/2011	AAFA AAFA Intertek Moody Marine Ltd Intertek Moody Marine Ltd Intertek Moody Marine Ltd	Mrs. Natalie Webster Mr. Chip Bissell Dr. Rob Blyth-Skyrme Dr. Norman Bartoo Dr. Mike Laurs	<ul> <li>Reassessment process</li> <li>Harmonisation</li> <li>The fishing method</li> <li>AAFA fishery data</li> <li>Management of the fishery</li> </ul>

 Table 8: Meetings conducted during the 2011 reassessment site visit.



			• AAFA's engagement with fishery managers
28/10/2011	AAFA Intertek Moody Marine Ltd Intertek Moody Marine Ltd Intertek Moody Marine Ltd PFMC	Mr. Chip Bissell Dr. Rob Blyth-Skyrme Dr. Norman Bartoo Dr. Mike Laurs Ms. Marija Vojkovich	<ul> <li>Reassessment process</li> <li>Management of the fishery</li> <li>AAFA's engagement with fishery managers</li> </ul>

#### 4.4.2 Consultations

A number of stakeholders who previously expressed an interest in the AAFA North Pacific fishery certification were contacted prior to the commencement of the reassessment. Other potential new stakeholders were also contacted. The full list of those individuals and organisations contacted is contained below in Table 9.

**Table 9:** Stakeholders and potential stakeholders contacted by e-mail prior to the commencement of the AAFA North Pacific albacore fishery reassessment.

Date	Individual	Organisation
29/9/2010	Dr. Bill Fox	WWF
29/9/2010	John Hall	N/a
29/9/2010	Peter Flournoy	Western Fishboat Owners Association (WFOA)
29/9/2010	David Garforth	Global Trust Certification
30/9/2010	Susan Jackson	ISSF
30/9/2010	No named individual	IATTC
30/9/2010	No named individual	WCPFC
30/9/2010	Douglas Loder	Tuna Management Association of New Zealand

No stakeholders requested a meeting or teleconference with the team on either set of dates that was offered for the site visit. The World Wildlife Fund (WWF) and the International Seafood Sustainability Fund (ISSF) did, though, submit letters to the assessment team prior to the site visit; these letters are included as Appendix 7 and Appendix 8 respectively. The letter from WWF highlighted concerns regarding the absence of explicit reference points for management of the North Pacific albacore fishery, the closure of the Condition that was set on AAFA's North Pacific fishery when it was certified in 2007, the management of the anchovy baitfish fishery, and the structure and international nature of the albacore management regime. Similar concerns were expressed by the ISSF in their letter, with the exception of the first point.

#### 4.4.3 Evaluation Techniques

The team assessing the AAFA North Pacific albacore fishery include individuals with a demonstrably long history of involvement in albacore fishery science and management at a senior level. As such, there was no requirement for the assessment team to acquire a working knowledge of the management operation and sea-base prior to undertaking the assessment.

The scoring process for the assessment has involved undertaking a preliminary scoring review immediately following the site visit, where initial findings were discussed. As leads for Principle 1, 2 and 3, Dr. Bartoo, Dr. Blyth-Skyrme and Dr. Laurs led the scoring discussions for those Principles respectively. The team then wrote their sections of the report and provided scores for their PIs, before each team member reviewed and confirmed their agreement with the findings and the scores awarded



for the other sections. Hence, it is important to note that while each assessment team member led the assessment of the fishery for their Principle, the team as a whole has taken responsibility for the final score awarded to each PI.

With respect to setting the Conditions of Certification, the assessment team was guided by the CR (MSC 2012) while also closely considering the findings of the New Zealand albacore troll fishery (Medley *et al.* 2011).

The RBF was not used in scoring any PI of AAFA's North Pacific albacore fishery.



# 5 Traceability

## 5.1 Eligibility Date

It is intended that, if recertified, North Pacific albacore landed by the AAFA fleet will be eligible from the date on which the existing AAFA North Pacific albacore certificate expires, which is now December 24th, 2012, having been extended by four months from August 24<sup>th</sup> 2012 (http://www.msc.org/track-a-fishery/certified/pacific/aafa-pacific-albacore-tuna-north/reassessment-downloads-1/20120918\_Var\_Resp\_TUN3.pdf). This would maintain continuity in the fishery and allow for the AAFA to maintain an unbroken period of certification.

### **5.2 Traceability within the Fishery**

Traceability within the AAFA North Pacific albacore fishery is considered to be excellent. All albacore are landed as blast or brine frozen whole fish, and no processing takes place at sea. The limit of identification of landings is the landing of albacore by AAFA member vessels, or other US pole and troll vessels identified by AAFA as being part of the certified fishery.

The certified North Pacific albacore fishery covers the North Pacific albacore stock wherever it occurs and, while albacore are taken in the South Pacific, including by AAFA members, the AAFA South Pacific albacore fishery is currently certified and is seeking recertification, and vessels must transit thousands of miles from the US West Coast in order to fish on the South Pacific grounds. As such, there is considered to be very little incentive or potential for fish other than North Pacific albacore to enter the North Pacific albacore chain of custody.

In addition to MSC certification, AAFA is consistently focused on aspects of fish product quality, and every landing is coded and can be traced back to a specific vessel and date of landing, so allowing any quality concerns to be resolved quickly. This tracing supports the view that there is almost no potential for non-certified fish to be introduced to the supply chain.

### 5.3 Eligibility to Enter Further Chains of Custody

In 2010, 66 vessels participated in the AAFA North Pacific albacore fishery, and those vessels landed at a small number of unloading stations on the Washington, Oregon and California coasts, where appropriate recording and monitoring of catches takes place. For 2010, the unloading stations were identified as:

- Bornstein Seafood
- Caito Fisheries
- Coos Bay Trawlers Marketing Division
- Deep Water Seafood
- Driscoll's Wharf
- Trident Seafoods
- Western Fish Co.
- Westbay Marketing
- Westport Seafood

Fishery products are certified up to the point of landing, but will be eligible to enter further certified chains of custody.



# 6 Evaluation Results

## 6.1 Principle Level Scores

#### Table 10: Final Principle Scores

Final Principle Scores						
Principle	Score					
Principle 1 – Target Species	85.0					
Principle 2 - Ecosystem	95.3					
Principle 3 – Management System	94.4					

#### 6.2 Summary of Scores

Prin- ciple	Wt (L1)	Component	Wt (L2)	PI No.	Performance Indicator (PI)	Wt (L3)	Weight in Principle	Score
One	1	Outcome	0.5	1.1.1	Stock status	0.5	0.25	100
				1.1.2	Reference points	0.5	0.25	70
				1.1.3	Stock rebuilding			n/s
		Management	0.5	1.2.1	Harvest strategy	0.25	0.125	85
				1.2.2	Harvest control rules & tools	0.25	0.125	60
				1.2.3	Information & monitoring	0.25	0.125	100
				1.2.4	Assessment of stock status	0.25	0.125	95
Two	1	Retained	0.2	2.1.1	Outcome	0.333	0.0667	100
		species		2.1.2	Management	0.333	0.0667	100
				2.1.3	Information	0.333	0.0667	95
		Bycatch	0.2	2.2.1	Outcome	0.333	0.0667	100
		species		2.2.2	Management	0.333	0.0667	90
				2.2.3	Information	0.333	0.0667	80
		ETP species	0.2	2.3.1	Outcome	0.333	0.0667	100
				2.3.2	Management	0.333	0.0667	85
				2.3.3	Information	0.333	0.0667	80
		Habitats	0.2	2.4.1	Outcome	0.333	0.0667	100
				2.4.2	Management	0.333	0.0667	100
				2.4.3	Information	0.333	0.0667	100
		Ecosystem	0.2	2.5.1	Outcome	0.333	0.0667	100
				2.5.2	Management	0.333	0.0667	100
				2.5.3	Information	0.333	0.0667	100
Three	1	Governance and policy	0.5	3.1.1	Legal & customary framework	0.25	0.125	95
				3.1.2	Consultation, roles & responsibilities	0.25	0.125	100
				3.1.3	Long term objectives	0.25	0.125	100
				3.1.4	Incentives for sustainable fishing	0.25	0.125	100
		Fishery	0.5	3.2.1	Fishery specific objectives	0.2	0.1	100
		specific management		3.2.2	Decision making processes	0.2	0.1	90
		system		3.2.3	Compliance & enforcement	0.2	0.1	90
				3.2.4	Research plan	0.2	0.1	90
				3.2.5	Management performance evaluation	0.2	0.1	80



#### 6.3 Summary of Conditions

**Table 11**: Summary of Conditions

Condition number	Condition	Performance Indicator
1	By the end of the fourth year of certification, the SG 80 scoring requirements above must be met in full. This will be achieved if the limit	1.1.2
	reference point is set above the level at which there is an appreciable risk of	
	impairing reproductive capacity, and if the target reference point is such that the stock is maintained at a level consistent with $B_{MSY}$ or some measure	
	or surrogate with similar intent or outcome.	
2	By the end of the fourth year of certification, the SG 80 scoring requirements above must be met in full. This will be achieved if well	1.2.2
	defined harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference	
	points are approached, the selection of the harvest control rules takes into account the main uncertainties, and available evidence indicates that the	
	tools in use are appropriate and effective in achieving the exploitation levels	
	required under the harvest control rules.	

#### 6.3.1 Non-Binding Recommendation

1) It is noted that seabird protection measures are specified for longline vessels fishing under the US West Coast HMS FMP as amended (PFMC 2007b). However, these do not apply to the pole and troll albacore fleet, which can be taken as a reflection of the very low risk that is deemed to be posed by these gear types to seabird species. However, it would be good practice for AAFA members to be provided with and to follow the guidance for seabird handling, as required by longline vessels, in the very rare event that a seabird was taken aboard an AAFA vessel.

#### 6.4 Determination, Formal Conclusion and Agreement

At the Public Consultation Draft Report stage, the assessment team considers that AAFA's North Pacific albacore pole and troll fishery should be recertified. A formal determination and conclusion will be provided at a later stage of the assessment process.

The report shall include a formal statement as to the certification action taken by the CAB's official decision-makers in response to the Determination recommendation.

To be completed at a later stage.



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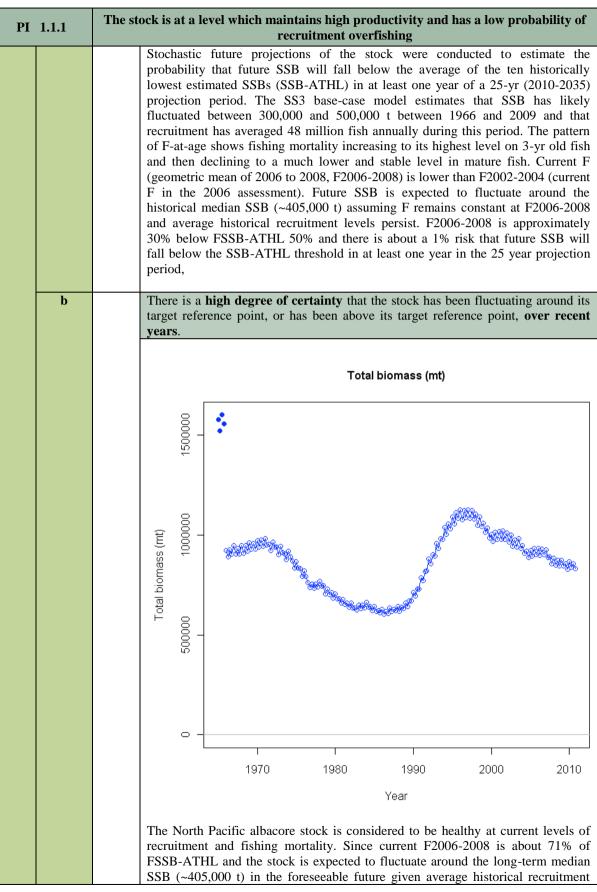


# Appendices

# **Appendix 1: Performance Indicator Scores and Rationales**

PI 1.1.1		The st	ock is at a level which main rec	tains high produc ruitment overfisl		a low probability of
SG	Issue	Met? (Y/N)		Justification/Ra	ationale	
60	a	Y	It is <b>likely</b> that the stock is a	bove the point wh	nere recruitmen	t would be impaired.
			The fishery exceeds this lev	el of performance		
80	a	Y	It is <b>highly likely</b> that the impaired.	stock is above th	e point where	recruitment would be
			The fishery meets this scori	ng issue at the SG	100 level.	
	b	Y	The stock is at or fluctuating	g around its target	reference point	
			The fishery meets this scori	ng issue at the SG	100 level.	
100	a	Y	There is a <b>high degree o</b> recruitment would be impai		the stock is al	pove the point where
			The current assessment concluded the North Pacific albacore stock is of to be healthy at current levels of recruitment and fishing mortality. Sin F2006-2008 is about 71% of $F_{SSB-ATHL}$ and the stock is expected to around the long-term median SSB (~405,000 t) in the foreseeable fur average historical recruitment levels and constant fishing mortality at F2 the conclusion is that overfishing is not occurring and that the stock lik in an overfished condition. Ref: WCPFC report. However a reference not been formally adopted by the management body. Table 1 sho performance relative to most used potential reference points. <b>Table 1:</b> Potential reference points and estimated F-ratio using Fcurr <sub>2008</sub> ), associated spawning biomass and equilibrium yield. $F_{SSBL-AT}$ equilibrium concept so SSB and yield are given as median levels. NC7_2011/IP-02).			
			Reference Point	$F_{2006\text{-}2008}/F_{RP}$	SSB (t)	Equilibrium Yield (t)
			F <sub>SSB-ATHL</sub>	0.71	346,382	101,426
			F <sub>MAX</sub>	0.14	11,186	185,913
			F <sub>0.1</sub>	0.29	107,130	170,334
			F <sub>MED</sub>	0.99	452,897	94,080
			F <sub>20%</sub>	0.38	171,427	156,922
			F <sub>30%</sub>	0.52	257,140	138,248
			$F_{40\%}$	0.68	342,854	119,094
			F <sub>50%</sub>	0.91		99,643









PI 1.1.1	The st	ock is at a level which	maintains high productivity recruitment overfishing	y and has a low probal	oility of
		overfishing is not or condition. Since the 500,000 t range com probability of recrui further contributing to above, although under stock to reach the precautionary manage The estimated total st	tock biomass over time is sho levels for the entire time per	likely is not in an overmained in the 300,00 of certainty regarding the transmission of transmission of the transmission of transmission o	verfished 0 mt to the low d stable in 100 a, 1 for the tive and biomass
References	5	WCPFC 2010, WCPF	FC 2011b.		
			elative to Reference Points	Current stock st	- <b>1</b>
		Type of reference point	Value of reference point	relative to referenc	e point
Target reference	point	F <sub>CURRENT</sub>	The $F_{CURRENT}$ reference point is the value of the ratio using Fcurrent ( $F_{2006}$ . $_{2008}$ ) to the F calculated for the average of the ten historically lowest estimated SSBs (SSB- ATHL) = $F_{CURRENT}/F_{SSB}$ . ATHL	The current value of 1 is 0.71; the current 2008 is about 71% <sub>ATHL</sub> and the stock is of to fluctuate around t term median SSB (~ t) in the foreseeabl given average fr recruitment levels constant fishing mon F2006-2008 (current	F2006- of F <sub>SSB</sub> - expected he long- 405,000 e future historical s and tality at
Limit reference point		F <sub>LIMIT</sub> Average minimum spawning biomass for the lowest 10 years in the time history, SSB- ATHL	The implied limit reference point is the lowest SSB in mt calculated as the average of the ten historically lowest estimated SSBs in the time series used (mid-1960's to the present) SSB-ATHL.	A SSB has remained in the 300,000 mt to 500,000 range (long term media t +405,000mt) contributing t a high degree of certaint	
OVERALL PER	FORMA	ANCE INDICATOR S	SCORE:	· · · · · · · · · · · · · · · · · · ·	100
CONDITION NU	U <b>MBER</b>	(if relevant):			N/A



### **Evaluation Table: PI 1.1.2**

PI	1.1.2		Limit and target r	eference points are	e appropriate :	for the stock
SG	Issue	Met? (Y/N)		Justification	/Rationale	
60	а	Y	Generic limit and targe practice appropriate for The fishery meets this s	the species categor	.у.	ustifiable and reasonable
			<b>D</b> (			
80	a	Y	<ul> <li>biological reference points</li> <li>North Pacific albacore.</li> <li>not an equilibrium context</li> <li>will remain constant at can incorporate non-equilibrium context</li> <li>and other parameters for future years.</li> <li>Estimates of F<sub>2006-2008</sub> (in contemporary fishe estimates are expressed ratio is less than 1.0, 11 F<sub>MED</sub> and F<sub>0.1</sub> reference 50% reference points are close to F<sub>MED</sub> and well overfishing of the Nor the current fishing more commonly applied F-bar</li> <li>Table 1: Potential reference</li> </ul>	e point F <sub>SSB-ATHL</sub> is ints (BRP) using spa Unlike other BRPs cept and therefore d some specified leve uilibrium dynamics rom the assessment current F) relative t ries management a l as the ratio of F <sub>200</sub> F <sub>2006-2008</sub> is below t points are based on spawning biomass- l below the MSY th Pacific albacore portality is less than ased reference point erence points and on ning biomass and	s one of a gr awning biomas a used in fisher loes not assum el. As a simulat , uncertainty in as well as unc to several F-ba are presented 6-2008/Fref point, W he reference p a yield-per-rect -based proxies proxy rates, tl stock is unlike a, and in som (s.	oup of simulation-based out of simulation-based for iss thresholds proposed for ies management, FSSB is e that future SSB or yield ion-based BRP, $F_{SSB-ATHL}$ the stock size estimates, certainty in recruitment in sed reference points used below in Table 1. The hich means that when the oint estimate. The $F_{MAX}$ , uit analysis while the $F_{20}$ of $F_{MSY}$ . Since $F_{2006-2008}$ is ne assessment infers that ely at present. Therefore, e cases much less than, tio using Fcurrent ( $F_{2006-}$ yield. $F_{SSBL-ATHL}$ is not
			Reference Point	F <sub>2006-2008</sub> /F <sub>RP</sub>	SSB (t)	Equilibrium Yield (t)
			F <sub>SSB-ATHL</sub>	0.71	346,382	101,426
			F <sub>MAX</sub>	0.14	11,186	185,913
			F <sub>0.1</sub>	0.29	107,130	170,334
			F <sub>MED</sub>	0.99	452,897	94,080
			F <sub>20%</sub>	0.38	171,427	156,922
			F <sub>30%</sub>	0.52	257,140	138,248
			F <sub>40%</sub>	0.68	342,854	119,094
			F <sub>50%</sub>	0.91	428,567	99,643
	b	N			evel at which the	nere is an appreciable risk
	b	N	of impairing reproducti	ve capacity.		here is an appreciable risk he implicit limit reference
	b	N	of impairing reproducti The fishery is under an point SSB-ATHL has	ve capacity. i implicit limit refer been has been o	rence point. Th considered in	ne implicit limit reference the formulation of the
	b	N	of impairing reproducti The fishery is under an point SSB-ATHL has WCPFC's current stoc	ve capacity. i implicit limit refer been has been o k management limi	rence point. The considered in ting fishing ef	ne implicit limit reference



PI	PI 1.1.2		Limit and target reference points are appropriate for the stock	
SG	Issue	Met? (Y/N)	Justification/Rationale	
			implicit, the fishery does not meet this level of performance.	
	c	N	The target reference point is such that the stock is maintained at a level co with $B_{MSY}$ or some measure or surrogate with similar intent or outcome. The $F_{CURRENT}$ reference point is the value of the ratio using Fcurrent ( $F_{200}$ the F calculated for the average of the ten historically lowest estimate (SSB-ATHL) = $F_{CURRENT}/F_{SSB-ATHL}$ The current value of $F_{CURRENT}$ is 0.71, i that current $F_{2006-2008}$ is about 71% of $F_{SSB-ATHL}$ , such that the stock is exp fluctuate around the long-term median SSB (~405,000 t) in the foreseeab given average historical recruitment levels and fishing mortality at the level. However, as this is only an implicit target, the fishery does not n level of performance.	ed SSBs meaning pected to le future current meet this
	d	N/A	Key low trophic level species, the target reference point takes into acceed on ecological role of the stock. Albacore tuna is not a low trophic level species and so this scoring issue been scored.	
100	b	N	The limit reference point is set above the level at which there is an appreciat of impairing reproductive capacity following consideration of <b>precautissues</b> . The limit reference point is only implicit and so the fishery does not n scoring issue.	itionary
	c	N	The target reference point is such that the stock is maintained at a level co with $B_{MSY}$ or some measure or surrogate with similar intent or outcor <b>higher level</b> , and takes into account relevant precautionary issues such ecological role of the stock with a <b>high degree of certainty</b> . The target reference point is implicit and the fishery does not meet this performance.	ne, or a h as the
-	Reference	s	WCPFC 2005, WCPFC 2010, WCPFC 2011b.	
OVER	ALL PER	FORMA	ANCE INDICATOR SCORE:	70
COND	DITION N	UMBER	(if relevant):	1



# **Evaluation Table: PI 1.1.3**

PI	1.1.3		Where the stock is depleted, there is evidence of stock rebuilding	
SG	Issue	Met? (Y/N)	Justification/Rationale	
60	a	N/A	Where stocks are depleted rebuilding strategies which have a reasonable exp of success are in place. The stock is not considered to be depleted, and so this performance indicat scored.	
	b		A rebuilding timeframe is specified for the depleted stock that is the short years or 3 times its generation time. For cases where 3 generations is les years, the rebuilding timeframe is up to 5 years.	
	С		Monitoring is in place to determine whether they are effective in rebuils stock within a <b>specified</b> timeframe.	ding the
80	a		Where stocks are depleted rebuilding strategies are in place.	
	b		A rebuilding timeframe is specified for the depleted stock that is the short years or <b>2 times its generation time</b> . For cases where 2 generations is less years, the rebuilding timeframe is up to 5 years.	
	с		There is <b>evidence</b> that they are rebuilding stocks, or it is <b>highly likely</b> is simulation modelling or previous performance that they will be able to relate stock within a <b>specified</b> timeframe.	
100	a		Where stocks are depleted, strategies are demonstrated to be rebuilding continuously and there is strong evidence that rebuilding will be complete <b>the specified timeframe</b> .	
	b		The shortest practicable rebuilding timeframe is specified which does not <b>one generation</b> time for the depleted stock.	t exceed
]	Referenc	es		
OVE	CRALL P	ERFOR	RMANCE INDICATOR SCORE:	N/A
CON	DITION	NUMB	BER (if relevant):	N/A



# Evaluation Table: PI 1.2.1

PI	1.2.1		There is a robust and precautionary harvest strategy in place
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	The harvest strategy is <b>expected</b> to achieve stock management objectives reflected in the target and limit reference points. Both the IATTC and the WCPFC have adopted management measures for this stock (IATTC resolution C-05-02; WCPFC Conservation and Management Measure (CMM) 2005-03). The fishery meets this scoring issue at the SG80 level.
	b	Y	The harvest strategy is <b>likely</b> to work based on prior experience or plausible argument. Effort limitations have been used successfully by the IATTC (yellowfin and bigeye tunas) and other fisheries to control fishing mortality and to maintain stocks at sustainable levels. In this fishery, there is good evidence since the measures were introduced that effort levels have been maintained and that the stock has not been overfished as a result. The fishery meets this scoring issue at the SG80 level.
	С	Y	Monitoring is in place that is expected to determine whether the harvest strategy is working. Annual data compilations and assessments are reviewed by both the IATTC and WCPFC. Data monitoring requirements are in place for all WCPFC members. For the US fishery, the PFMC maintains comprehensive landings data (PacFIN). US vessels fishing for albacore must comply with Federal logbook reporting requirements.
80	a	Y	<ul> <li>The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving management objectives reflected in the target and limit reference points.</li> <li>IATTC resolution C-05-02 adopted in 2005 remains in effect, namely that: the IATTC has resolved to limit fishing effort from increasing and to work with the WCPFC to the same end, specifically:</li> <li>1. The total level of fishing effort for North Pacific albacore tuna in the Eastern Pacific Ocean not be increased beyond current levels. At the 2008 IATTC meeting it was recommended that the fishing mortality averaged for 2002-2004 be used as the "current" fishing mortality as applies to (1).</li> <li>2. The CPCs [IATTC parties, cooperating non-party, fishing entity or regional economic integration organization] shall take necessary measures to ensure that the level of fishing effort by their vessels fishing for North Pacific albacore tuna is not increased;</li> <li>3. All CPCs shall report all catches of North Pacific albacore tuna by gear type to the IATTC every six months. However, since the limit in the resolution is in terms of effort, the six-monthly reports include information on effort as well as catch, in terms of the most relevant measures for a given gear type. The technical aspects of the effort data to be supplied could be established by the IATTC in collaboration with scientists of the interested member countries.</li> <li>Similarly, the WCPFC Conservation and Management Measure (CMM) 2005-03, which is very similar to IATTC C-05-02 also remains in effect. The stock status (overfishing is not occurring and the stock is not overfished) indicates that this has proved effective in achieving the objectives reflected in the reference points.</li> </ul>



PI	1.2.1		There is a robust and precautionary harvest strategy in place	
SG	Issue	Met? (Y/N)	Justification/Rationale	
	b	Y	The harvest strategy may not have been fully tested but monitoring is in p evidence exists that it is achieving its objectives. The performance of the harvest strategy is evaluated through the stock ass process. The models available and information are sufficient to fully eval strategy and the assessors should continue to evaluate the performance, w	essment uate the
			not been questioned after several years. The fishery meets this level of performed	
100	a	Ν	The harvest strategy is responsive to the state of the stock and is <b>desi</b> achieve stock management objectives reflected in the target and limit repoints.	eference
			Target and limit reference points have not been formally adopted, and so is be said that the harvest strategy is designed to achieve stock management of reflected in the target and limit reference points. As such, the fishery can this level of performance.	ojectives
	b	Ν	The performance of the harvest strategy has been <b>fully evaluated</b> and exists to show that it is achieving its objectives including being clearly maintain stocks at target levels.	able to
			The performance of the harvest strategy has not been fully evaluated, and fishery does not meet this level of performance.	d so the
	d	Y	The harvest strategy is periodically reviewed and improved as necessary.	
			U.S. law requires the PFMC to annually review it FMP and performance National Standard 1 and address any issues arising. Both the WCPFC and annually review management resolutions prior to extending same for ac- time.	IATTC
	References		IATTC 2005, WCPFC 2005.	
OVE	RALL PE	RFORM	IANCE INDICATOR SCORE:	85
CON	<b>DITION</b> I	NUMBE	R (if relevant):	N/A



# **Evaluation Table: PI 1.2.2**

PI	1.2.2		There are well defined and effective harvest control rules in place
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	Generally understood harvest rules are in place that are consistent with the harvest strategy and which act to reduce the exploitation rate as limit reference points are approached. The harvest control rule is generally understood as reducing harvest when the stock approaches or falls below the MSY point. However, the precise point when action will be taken and exactly what action will be taken is not defined, but would be proposed by the Commission based on the advice of the Scientific Committee at the time. This would likely be similar to the advice currently given, which is based around controlling fishing effort and capacity. An example of this approach is provided for big-eye tuna which is more heavily exploited. The scientific basis for decision making is well established and documented. The harvest control rules are currently based on B/BMSY and F/FMSY benchmarks The overarching harvest control rule to maintain stocks at or above MSY has been established and codified by the Commissions. Thus, this harvest control rule is generally consistent with reference points from the assessment and the limitations of data that are inputs to the assessment.
	С	Y	There is <b>some evidence</b> that tools used to implement harvest control rules are appropriate and effective in controlling exploitation. Tools, should they be needed, can be initiated through the IATTC and WCPFC. Currently, measures are in place in the Commissions to prevent increases of fishing effort on albacore. This is exemplified by the Conservation and Management Measure WCPFC-CMM-03 which went into place on Feb 16, 2006. Comparable actions have been taken by IATTC and WCPFC for other species (such as yellowfin and bigeye tunas), and evidence exists that some control is being exerted over the exploitation of these stocks. Catches in 2007 and 2008 were below the 2005 levels.
80	a	N	Well defined harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached. The harvest control is consistent with the aims of the harvest strategy standard and indicates that the exploitation rate will be reduced once the stock approaches $B_{MSY}$ . However, the lack of a well-defined harvest control rule prevents assessment of how precautionary it is or whether current tools are adequate in applying the rule, so the performance indicator is unable to meet the 80 guidepost requirements.
	b	N	The <b>selection</b> of the harvest control rules takes into account the <b>main</b> uncertainties. No harvest control rules have been formally adopted, and so the fishery cannot meet this level of performance.
	c	N	Available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the harvest control rules. No harvest control rules have been formally adopted, and so the fishery cannot meet this level of performance.
100	a	Ν	<b>Well defined</b> harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.



PI 1.2.2			There are well defined and effective harvest control rules in place		
SG	Issue	Met? (Y/N)	Justification/Rationale		
			The fishery does not meet this level of performance.		
	b	N	The <b>design</b> of the harvest control rules takes into account a <b>wide r</b> . uncertainties. The fishery does not meet this level of performance.	ange of	
		N		ring the	
	с	IN	<b>Evidence clearly shows</b> that the tools in use are effective in achieve exploitation levels required under the harvest control rules.	ing the	
			The fishery does not meet this level of performance.		
	Referenc	es	Campbell 2009, IATTC 2005, Preece <i>et al.</i> 2009, WCPFC 2005, WC 2008a, WCPFC 2008b, WCPFC 2011b.	PFC	
OVE	OVERALL PERFORMANCE INDICATOR SCORE:			60	
CON	CONDITION NUMBER (if relevant):			2	



# **Evaluation Table: PI 1.2.3**

PI	1.2.3		Relevant information is collected to support the harvest strategy
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	Some relevant information related to stock structure, stock productivity and fleet composition is available to support the harvest strategy. The fishery meets this scoring issue at the SG100 level.
	b	Y	Stock abundance and fishery removals are monitored and at least one indicator is available and monitored with sufficient frequency to support the harvest control rule. The fishery meets this scoring issue at the SG100 level.
80	a	Y	<b>Sufficient</b> relevant information related to stock structure, stock productivity, fleet composition and other data is available to support the harvest strategy. The fishery meets this scoring issue at the SG100 level.
	b	Y	Stock abundance and fishery removals are <b>regularly monitored at a level of</b> <b>accuracy and coverage consistent with the harvest control rule</b> , and one or more indicators are available and monitored with sufficient frequency to support the harvest control rule. The fishery meets this scoring issue at the SG100 level.
	c	Y	There is good information on all other fishery removals from the stock. Other non-commercial fishery removals such as sport fishing are documented and included in PFMC statistics reported annually to WCPFC. Non-commercial removals are considered very small.
100	a	Y	A comprehensive range of information (on stock structure, stock productivity, fleet composition, stock abundance, fishery removals and other information such as environmental information), including some that may not be directly related to the current harvest strategy, is available. The life history of albacore is understood, is very well documented and all life stages are identifiable. The species is highly migratory, making trans-oceanic migrations. North and South Pacific stocks are accepted as separate, distinct populations. Complete geographical range of the stocks, including ontogenic and seasonal patterns of migrations, is understood and verified by conventional and archival tagging studies. Seasonal variability in migrations are reasonably well described in the North Pacific. Reliable estimates are available on fecundity, growth rates, and length and weight at age, estimated by analysing hard parts, evaluations of size distributions of the landed catch, and tag-recapture studies. Fishery catches are reported annually, and size composition of landings, monitored since early 1960's, is used to detect and monitor spatial and temporal shifts and trends in age composition of catches. Although differential growth by sex has not been addressed in peer reviewed literature to the assessment team's knowledge, these data are not required for the stock assessment model used in the North Pacific. Nevertheless, the assessment will be further strengthened when and if such information becomes available.



PI	1.2.3		Relevant information is collected to support the harvest strategy	
SG	Issue	Met? (Y/N)	Justification/Rationale	
	b	Y	All information required by the harvest control rule is monitored wi frequency and a high degree of certainty, and there is a good understar inherent uncertainties in the information [data] and the robustness of ass and management to this uncertainty. Continuous logbook records for the US fishery since 1961 provide dependent CPUE indices for estimating and monitoring the relative ab composition of the stock. Fishery dependent information from the US fis well as from foreign fisheries harvesting North Pacific albacore have been North Pacific Albacore Workshops, held usually bi-annually since 1974, to and evaluate trends in North Pacific albacore stock status. Conventional tagging studies have been carried out in the North Pacific. results are not directly incorporated in assessment at present because recover limited and not well distributed in space and time. Considerable evaluation of the robustness and appropriateness of the infor providing trends in abundance (CPUEs) have been conducted in the context stock assessment. These uncertainties were examined through the st standardization of the CPUEs and through exploration of alternative formulations. While uncertainties still remain in some of the data sets, the are considered useful for elucidating resource trends. The impact of uncertainties is considered when the overall scientific advice is formulated indices are considered reliable and indicative of stock status Although there is no harvest control rule (HCR) formally in place for th Pacific albacore fishery, information collected would be adequate to support HCRs if they were introduced, and so the fishery meets this level of perform	rmation to f those d. Thus, e North t formal
-	References     PFMC 2011b, WCPFC 2011b.			
OVE	OVERALL PERFORMANCE INDICATOR SCORE: 100			100
CON	DITION	NUMBE	R (if relevant):	N/A



# **Evaluation Table: PI 1.2.4**

PI	PI 1.2.4		There is an adequate assessment of the stock status
SG	Issue	Met? (Y/N)	Justification/Rationale
60	b	Y	The assessment estimates stock status relative to reference points.
			Annual assessments are conducted by the Albacore Working Group (ALBWG) of the WCPFC. Although explicit reference points have not been established for this stock, the assessment has considered stock status in comparison to a variety of potential reference points, including the implicit management target of $B_{SSB-ATHL}$ .
	с	Y	The assessment <b>identifies major sources</b> of uncertainty.
			The fishery meets this level of performance at the SG100 level.
80	a	Y	The assessment is appropriate for the stock and for the harvest control rule.
			The fishery meets this level of performance at the SG100 level.
	с	Y	The assessment takes uncertainty into account.
			Analyses were carried out to assess the sensitivity of the results to assumptions including data-weighting (both between data types and relative weightings of different sources within a data type), biology (stock-recruitment relationship, natural mortality, growth), and fishery selectivity patterns. The fishery exceeds this level of performance.
	e	Y	The assessment of stock status is subject to peer review.
			The assessment results are internally reviewed by the Albacore Working Group (ALBWG). The results are then presented and reviewed by the WCPFC Scientific Committee, so meeting this scoring issue.
100	a	Y	The assessment is appropriate for the stock and for the harvest control rule and takes into account the major features relevant to the biology of the species and the nature of the fishery. The current assessment of the status and future trends in the north Pacific albacore tuna ( <i>Thunnus alalunga</i> ) stock was completed in June 2011 using fishery data through 2009. This assessment was conducted using the Stock Synthesis modeling platform (Version 3.11b) and is based on the assumption that there is a single well- mixed stock of albacore in the north Pacific Ocean. Analyses were carried out to assess the sensitivity of the results to assumptions including data-weighting (both between data types and relative weightings of different sources within a data type), biology (stock-recruitment relationship, natural mortality, growth), and fishery selectivity patterns. Stochastic future projections of the stock were conducted to estimate the probability that future SSB will fall below the average of the ten historically lowest estimated SSBs (SSB-ATHL) in at least one year of a 25-yr (2010-2035) projection period. It is considered that the assessment is appropriate for the stock, takes into account the major features of the species and, although there is only an implicit harvest control rule in place, would be appropriate for managing with the fishery against a harvest control rule if one was introduced.
	C	Y	The assessment takes into account uncertainty and is evaluating stock status relative to reference points in a <b>probabilistic</b> way. The Albacore Working Group (ALBWG) developed a seasonal, length-based, age- structured, forward-simulation population model with a focus on providing reliable estimates of population dynamics and stock abundance. Analyses were carried out to assess the sensitivity of the results to assumptions including data-weighting (both



PI	1.2.4		There is an adequate assessment of the stock status		
SG	Issue	Met? (Y/N)	Justification/Rationale		
			between data types and relative weightings of different sources within a da biology (stock-recruitment relationship, natural mortality, growth), and selectivity patterns. Stochastic future projections of the stock were conducted	fishery	
	d	Y	The assessment has been tested and shown to be robust. Alternative hypotheassessment approaches have been rigorously explored.		
			Sensitivity and retrospective analyses assessed the impact of alternative assu on the assessment results. These analyses revealed scaling differences in e biomass (total and SSB) and, to a lesser extent, recruitment, but few differ overall trends. Relative F-at-age patterns were not affected by different assur except when the growth curve parameters from the 2006 assessment were u F2006-2008 was consistently lower than F2002-2004. Although t considerable uncertainty in absolute estimates of biomass and fishing morta estimated trends in both quantities are robust and advice-based on FSSI affected by this uncertainty.	stimated ences in mptions, sed, and here is ality, the	
	е	N	The assessment has been <b>internally and externally</b> peer reviewed.		
			The assessment results are internally reviewed by the Albacore Working (ALBWG). The results are then presented and reviewed by the WCPFC S Committee, but this can still only be considered an internal review.		
	References         PFMC 2011b, WCPFC 2011b.				
OVE	OVERALL PERFORMANCE INDICATOR SCORE:95				
CON	CONDITION NUMBER (if relevant): N/A			N/A	



#### Evaluation Table: PI 2.1.1

PI 2.1.1		The fi	shery does not pose a risk of serious or irreversible harm to the retained species and does not hinder recovery of depleted retained species
SG	Issue	Met? (Y/N)	Justification/Rationale
60	а	Y	Main retained species are <b>likely</b> to be within biologically based limits (if not, go to scoring issue d below).
			As the catch of no retained species exceeds 5% of the total albacore landings, it is considered that there are no main retained species in AAFA's North Pacific albacore fishery.
	с	Y	If main retained species are outside the limits there are <b>measures</b> in place that are <b>expected</b> to ensure that the fishery does not hinder recovery and rebuilding of the depleted species.
			There are no main retained species in the fishery.
	d	Y	If the status is poorly known there are measures or practices in place that are expected to result in the fishery not causing the retained species to be outside biologically based limits or hindering recovery. There are no main retained species in the fishery.
80	a	Y	Main retained species are <b>highly likely</b> to be within biologically based limits (if not, go to scoring issue c below). There are no main retained species in the fishery.
	c	Y	If main retained species are outside the limits there is a <b>partial strategy</b> of <b>demonstrably effective</b> management measures in place such that the fishery does not hinder recovery and rebuilding. There are no main retained species in the fishery.
100	a	Y	There is a <b>high degree of certainty</b> that retained species are within biologically
			based limits and fluctuating around their target reference points. Northern anchovy, a forage fish species used as a bait/chum for albacore, is considered in this assessment under the retained species performance indicators. There are no official statistics available on the total quantities of northern anchovy used by the AAFA fleet but, based on the estimates of bait usage provided by experienced AAFA fishermen, it is thought that approximately 150 t of northern anchovy is used annually. As approximately $5,000 \text{ t} - 6,000 \text{ t}$ of albacore is landed annually by the AAFA fleet, the 150 t of northern anchovy equates to $2.5\% - 3\%$ of the total albacore catch by weight.
			Northern anchovy are a monitored species, so catch records are maintained. The total catch of northern anchovy in the 2000s in California, Oregon and Washington has ranged between 1,676 and 19,277 t. The estimated usage by the AAFA fleet therefore represents a small percentage of the total catch. Overfishing limits (OFLs) as MSY proxies were established in 2010, and while the last full assessment of the stock was in 1995, it is considered that the fishing pressure is limited and the stocks are not overfished or experiencing overfishing (PFMC 2010).
			In the last 10 years, on average, no retained highly migratory species (HMS) fish species or species group landed while targeting albacore has made up more than 0.03% of the total albacore catch by weight; such catches are therefore considered to be rare events and negligible in their impact. As such, an understanding of the stock status of those species with respect to biological reference points is not considered to be required for this assessment (MSC 2012).
	b	Y	Target reference points are defined for retained species.



PI 2.1.1 The		The fi	ishery does not pose a risk of serious or irreversible harm to the retained species and does not hinder recovery of depleted retained species		
SG	Issue	Met? (Y/N)	Justification/Rationale		
			The PFMC adopted new management benchmarks for the northern and subpopulations of northern anchovy in 2010 (PFMC 2011c). Catches have widely over time, but the overfishing limits (OFLs) are based on past estimates biomass and are considered an MSY proxy, while the acceptable biologic values account for a 75 % uncertainty buffer in the OFL. The annual catch lisset at 1500 t for the northern subpopulation. As only negligible quantities of other HMS fish species are taken while the albacore, this scoring guidepost can be met without knowing the status of species with respect to biological reference points (MSC 2012). Neverther, stocks of bluefin, bigeye, skipjack and yellowfin tuna, that together make largest bycatch group (tunas), as well as for swordfish, shortfin mako a shark, are assessed at least periodically, and reference points have been desen not necessarily adopted by managers in all cases (PFMC 2011b).	e varied nates of al catch mit was argeting of those less, the e up the nd blue	
	ReferencesMSC 2012, PFMC 2010, PFMC 2011b, PFMC 2011c, PFMC 2012.				
OVE	OVERALL PERFORMANCE INDICATOR SCORE:100				
CON	CONDITION NUMBER (if relevant): N/A			N/A	



#### Evaluation Table: PI 2.1.2

PI 2.1.2			is a strategy in place for managing retained species that is designed to ensure the shery does not pose a risk of serious or irreversible harm to retained species
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	There are <b>measures</b> in place, if necessary, that are expected to maintain the main retained species at levels which are highly likely to be within biologically based limits, or to ensure the fishery does not hinder their recovery and rebuilding. As the catch of no retained species exceeds 5% of the total albacore landings, it is considered that there are no main retained species in AAFA's North Pacific albacore fishery.
	b	Y	The measures are considered <b>likely</b> to work, based on plausible argument (e.g., general experience, theory or comparison with similar fisheries/species). There are no main retained species in the fishery.
80	a	Y	There is a <b>partial strategy</b> in place, if necessary that is expected to maintain the main retained species at levels which are highly likely to be within biologically based limits, or to ensure the fishery does not hinder their recovery and rebuilding. There are no main retained species in the fishery.
	b	Y	There is some <b>objective basis for confidence</b> that the partial strategy will work, based on some information directly about the fishery and/or species involved. There are no main retained species in the fishery.
	C	Y	There is <b>some evidence</b> that the partial strategy is being <b>implemented successfully.</b> There are no main retained species in the fishery.
100	8	Y	There is a strategy in place for managing retained species. The northern anchovy that are used as bait are deliberately targeted for use in the AAFA North Pacific albacore fishery. Northern anchovy is managed by the PFMC as a 'monitored' species, meaning landings are monitored, OFLs (MSY proxies) are established, and the number and capacity of vessels in the fishery is limited. Any changes in management are based on significant changes in the landings or the fishery (PFMC 2011e). The measures as laid out in the CPS Fishery Management plan are considered to constitute a strategy to manage this species. The pole and troll method of fishing ensures that the capture of species other than albacore is a rare event and poses no risk to those species. This is demonstrated through the negligible quantities of other species taken in the fishery, with a maximum average of 0.03 % of the weight of the albacore catch being recorded for any species or species group in the last 10 years. Over the last 30 years, the maximum catch of any retained species in any single year was for swordfish in 1993, when it amounted to 1.55 % of the albacore catch. The gear is clearly designed for and is successful at catching albacore rather than other species and, together with the Magnuson-Stevens Act requirements to minimize bycatch (e.g. PFMC 2011a), this is considered to constitute an operational strategy for managing retained species.
	b	Y	<b>Testing</b> supports <b>high confidence</b> that the strategy will work, based on information directly about the fishery and/or species involved. The OFL for the northern subpopulation of the northern anchovy was established in 2010 (PFMC 2011e). There have been a number of northern anchovy stock status reviews over time and, with Pacific sardine, is considered to be the coastal pelagic species that is least vulnerable to becoming overfished (PFMC 2010). It is



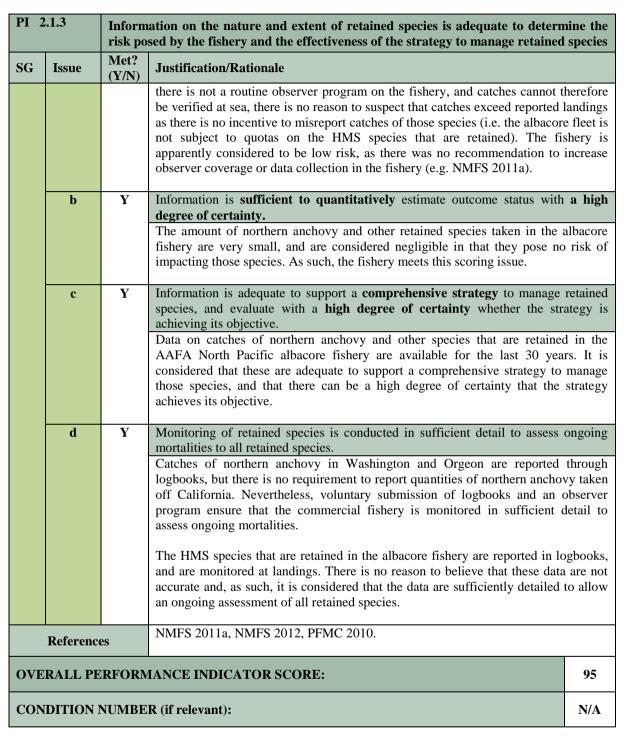
PI	PI 2.1.2 TI		is a strategy in place for managing retained species that is designed to ens shery does not pose a risk of serious or irreversible harm to retained speci		
SG	Issue	Met? (Y/N)	Justification/Rationale		
			considered that the northern anchovy strategy has been tested and the confidence exists that it will work.	nat high	
			The 30 years of retained species data show that other species are not and/o be taken in large quantities by the pole and troll gears used in the fishe considered that these data show that the strategy works to keep the catch of species at very limited, negligible levels.	ery. It is	
	c	Y	There is <b>clear evidence</b> that the strategy is being <b>implemented successfully</b>	•	
			Catch records for northern anchovy are available for at least the last 3 Catches must be reported and the number of licenses is limited (PFMC 201 considered that this constitutes clear evidence that the strategy for m northern anchovy is being implemented successfully. Retained HMS species data show clearly that the amounts of catch of speci than albacore are very limited. The levels have declined over time, such average for the last 10 years for all named species or species groups has h comparison to the average for the last 30 years. Only the catch of 'other' species has been maintained at the same level (0.02 % of the albacore cate maintenance of the bycatch at very low levels shows that the fishery continu successful in targeting albacore.	1c). It is nanaging ies other that the alved in retained ch). The	
	d	Y	There is some <b>evidence</b> that the strategy is <b>achieving its overall objective</b> .		
			Catch records for northern anchovy are monitored and are available, and the not considered to be overfished or to be experiencing overfishing (PFMC 20 Catch records for the pole and troll fishery are available for at least 30 years.	10).	
			show the retained catch of species other than albacore is maintained at v levels.		
	References         PFMC 2010, PFMC 2011c, PFMC 2011e.				
OVE	OVERALL PERFORMANCE INDICATOR SCORE:100			100	
CON	CONDITION NUMBER (if relevant): N/A			N/A	



# **Evaluation Table: PI 2.1.3**

PI 2.1.3			ation on the nature and extent of retained species is adequate to determine the sed by the fishery and the effectiveness of the strategy to manage retained species
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	<b>Qualitative information</b> is available on the amount of main retained species taken by the fishery.
			As the catch of no retained species exceeds 5% of the total albacore landings, it is considered that there are no main retained species in AAFA's North Pacific albacore fishery.
	b	Y	Information is <b>adequate to qualitatively</b> assess outcome status with respect to biologically based limits.
			There are no main retained species in the fishery.
	с	Y	Information is adequate to support <b>measures</b> to manage <b>main</b> retained species.
			There are no main retained species in the fishery.
80	a	Y	<b>Qualitative information</b> and <b>some quantitative information</b> are available on the amount of main retained species taken by the fishery. There are no main retained species in the fishery.
	b	Y	Information is <b>sufficient to estimate</b> outcome status with respect to biologically
	b	1	based limits. There are no main retained species in the fishery.
	c	Y	Information is adequate to support a <b>partial strategy</b> to manage <b>main</b> retained species.
			There are no main retained species in the fishery.
	d	Y	Sufficient data continue to be collected to detect any increase in risk level (e.g. due to changes in the outcome indicator score or the operation of the fishery or the effectiveness of the strategy)
			There are no main retained species in the fishery.
100	а	Ν	Accurate and verifiable information is available on the catch of all retained species and the consequences for the status of affected populations.
			The northern anchovy fishery is monitored, licenses are limited, and catches in the commercial anchovy fishery are required to be reported. Albacore fishermen operating in Washington and Oregon waters are also required to report anchovy harvest through logbook submissions on albacore catches, but there is no such requirement in California. There is an observer program on the commercial bait fishery, but this does not include the albacore vessels. It is therefore not clear that accurate and verifiable information on northern anchovy catches is available and the fishery cannot meet this level of performance. Therefore, while anchovy are thought to be abundant (NMFS 2012), there is no current information on the status of northern anchovy populations as the stock has not been assessed since 1995. Anchovy fisheries are managed based on annual harvest data, and the harvest has been low in recent years. Although not being recently assessed, the northern anchovy stock is not considered to be overfished or experiencing overfishing (PFMC 2010).
			Catches of retained HMS species in the albacore fishery are reported through a 100% logbook program and are monitored at landing sites (PFMC 2011a). While







# **Evaluation Table: PI 2.2.1**

Livara	Evaluation Table: PI 2.2.1 The fishery does not pose a risk of serious or irreversible harm to the bycatch species or			
Ы	2.2.1		ties groups and does not hinder recovery of depleted bycatch species or species	
11	<i>2.2.</i> 1	spec	groups	
SG	Issue	Met?	Justification/Rationale	
	Issue	(Y/N)		
60	a	Y	Main bycatch species are <b>likely</b> to be within biologically based limits (if not, go to scoring issue b below). The pole & line and troll fishing gears employed in the AAFA North Pacific albacore fishery are highly selective; both are employed at the sea surface in deep water such that there is never any contact with the seabed, while the gears always remain attached to the vessel and must be actively fished. As such, while there are	
			very low levels of retained species (PFMC 2011b), there will also inevitably be very low levels of bycatch, almost all of which will be albacore or, more rarely, other targeted HMS species. Because fish are hauled aboard immediately after they become hooked, fishermen are also quickly able to discern if an albacore shoal being targeted is made up of fish that are too small to be retained for economic or regulatory reasons. In such cases, lines can be pulled in quickly and the vessel moved in search of another shoal containing larger, marketable albacore.	
			There is little information on actual bycatch levels, but preliminary analysis of limited observer data suggest that albacore less than 59cm in length accounted for approximately 5% of the total catch, and of those, 10% are returned (i.e. $<0.5$ % of the total catch is discarded) (PFMC 2007a). Albacore make up the vast majority of the catch, and so there are no main bycatch species in the AAFA North Pacific albacore pole and troll fishery.	
	b	Y	If main bycatch species are outside biologically based limits there are mitigation <b>measures</b> in place that are <b>expected</b> to ensure that the fishery does not hinder recovery and rebuilding. There are no main bycatch species in the fishery.	
	с	Y	If the status is poorly known there are measures or practices in place that are	
	C	1	expected to result in the fishery not causing the bycatch species to be outside biologically based limits or hindering recovery.	
			There are no main bycatch species in the fishery.	
80	а	Y	Main bycatch species are <b>highly likely</b> to be within biologically based limits (if not, go to scoring issue b below).	
			There are no main bycatch species in the fishery.	
	b	Y	If main bycatch species are outside biologically based limits there is a <b>partial strategy</b> of <b>demonstrably effective</b> mitigation measures in place such that the fishery does not hinder recovery and rebuilding. There are no main bycatch species in the fishery.	
100	a	Y	There is a <b>high degree of certainty</b> that bycatch species are within biologically based limits. Bycatch species are understood to be the same as those listed under retained species (e.g. PFMC 2007a), but individuals will be smaller than those that are retained.	
			Post-release survival is likely to be relatively high in comparison to most other fisheries because of the rapid retrieval and ability to release, although survival will not be 100% and tagging studies showed that the survival was better with albacore hooked in the lower jaw rather than the upper jaw (PFMC 2007a).	
			Importantly, the pole and troll mode of fishing ensures that bycatch and discarding	



			hery does not pose a risk of serious or irreversible harm to the bycatch sp ties groups and does not hinder recovery of depleted bycatch species or sp groups		
SG	Issue	Met? (Y/N)	Justification/Rationale		
			of fish is a rare event and is negligible in its impact.		
	ReferencesPFMC 2007a, PFMC 2011b.				
OVE	OVERALL PERFORMANCE INDICATOR SCORE:10				
CONDITION NUMBER (if relevant):					



#### Evaluation Table: PI 2.2.2

PI	2.2.2		is a strategy in place for managing bycatch that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to bycatch populations
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	There are <b>measures</b> in place, if necessary, which are expected to maintain main bycatch species at levels which are highly likely to be within biologically based limits or to ensure that the fishery does not hinder their recovery. As the catch of no bycatch species exceeds 5% of the total albacore landings, it is considered that there are no main bycatch species in AAFA's North Pacific albacore fishery.
	b	Y	The measures are considered <b>likely</b> to work, based on plausible argument (e.g. general experience, theory or comparison with similar fisheries/species). There are no main bycatch species in the fishery.
80	a	Y	There is a <b>partial strategy</b> in place, if necessary, for managing bycatch species at levels which are highly likely to be within biologically based limits or to ensure that the fishery does not hinder their recovery. There are no main bycatch species in the fishery.
	b	Y	There is <b>some objective basis for confidence</b> that the partial strategy will work, based on some information directly about the fishery and/or the species involved. There are no main bycatch species in the fishery.
	С	Y	There is <b>some evidence</b> that the partial strategy is being implemented successfully. There are no main bycatch species in the fishery.
100	a	Y	There is a strategy in place for managing and minimising bycatch. The pole and troll method of fishing ensures that the capture of species other than albacore is a rare event and poses no risk to those species. There are negligible quantities of other species taken in the fishery, and bycatch of undersized albacore is unlikely to constitute anything approaching a significant number at around 0.5% of the retained albacore catch. The rapid return of the fish after hooking will allow for a relatively high proportion of these bycatch albacore to survive post-release. The gear is clearly designed for and is successful at catching albacore rather than other species and, together with the Magnuson-Stevens Act requirements to minimize bycatch (e.g. PFMC 2011a) this is considered to constitute an operational strategy for managing bycatch species.
	b	Y	<b>Testing</b> supports <b>high confidence</b> that the strategy will work, based on information directly about the fishery and/or species involved. The 30 years of retained species data show that other species are not and/or cannot be taken in large quantities by the pole and troll gears used in the fishery. Although quantitative bycatch data are very limited, it is considered that, in combination with the retained species data, they show that the strategy works to keep the catch of bycatch species at very limited, negligible levels.
	c	N	There is <b>clear evidence</b> that the strategy is being implemented successfully. The information available on bycatch levels is very limited, and little of that is publicly available, quantitative data. As such, it cannot be said there is clear evidence that the strategy is being implemented successfully.
	d	Ν	There is some <b>evidence</b> that the strategy is achieving its objective.



			is a strategy in place for managing bycatch that is designed to ensure the does not pose a risk of serious or irreversible harm to bycatch population				
SG	Issue	Met? (Y/N)	.Iustification/Rationale				
			The information available on bycatch levels is very limited, and little of that is publicly available, quantitative data. As such, it cannot be said there is some evidence that the strategy is achieving its objective.				
	Reference	es	PFMC 2011a.				
OVE	OVERALL PERFORMANCE INDICATOR SCORE:     9						
CONDITION NUMBER (if relevant):			N/A				



#### Evaluation Table: PI 2.2.3

PI 2.2.3			nation on the nature and the amount of bycatch is adequate to determine the risk posed by the fishery and the effectiveness of the strategy to manage bycatch
SG	Issue	Met? (Y/N)	Justification/Rationale
60	а	Y	<b>Qualitative information</b> is available on the main bycatch species affected by the fishery.
			No bycatch species exceeds 5% of the total albacore landings, and so it is considered that there are no main bycatch species in AAFA's North Pacific albacore fishery.
	b	Y	Information is <b>adequate</b> to <b>broadly understand</b> outcome status with respect to biologically based limits
			There are no main bycatch species in the fishery.
	с	Y	Information is adequate to support <b>measures</b> to manage bycatch.
			There are no main bycatch species in the fishery.
80	а	Y	<b>Qualitative information and some quantitative information</b> are available on the amount of main bycatch species affected by the fishery.
			There are no main bycatch species in the fishery.
	b	Y	Information is <b>sufficient to estimate</b> outcome status with respect to biologically based limits.
			There are no main bycatch species in the fishery.
	С	Y	Information is adequate to support a <b>partial strategy</b> to manage main bycatch species.
			There are no main bycatch species in the fishery.
	d	Y	Sufficient data continue to be collected to detect any increase in risk to main bycatch species (e.g., due to changes in the outcome indicator scores or the operation of the fishery or the effectively of the strategy).
			There are no main bycatch species in the fishery.
100	a	Ν	Accurate and verifiable information is available on the amount of all bycatch and the consequences for the status of affected populations. Although it is understood that bycatch levels are very limited such that they are effectively negligible, the information available on bycatch levels is also very limited, and little of that is publicly available, quantitative data. Although stock assessment information on HMS species taken in the fishery is available and could confirm that the AAFA bycatch is very unlikely to have any impact, it cannot be said that accurate and verifiable information on the amount of all bycatch is available. As such, the AAFA North Pacific albacore fishery cannot meet this scoring issue.
	b	N	Information is <b>sufficient</b> to quantitatively estimate outcome status with respect to biologically based limits with a <b>high degree of certainty</b> . Although it is understood that bycatch levels are very limited such that they are effectively negligible, the information available on bycatch levels is also very limited, and little of that is publicly available, quantitative data. Therefore, it cannot be said that information is sufficient to quantitatively estimate outcome status with respect to biologically-based limits with a high degree of certainty.



			nation on the nature and the amount of bycatch is adequate to determine to bosed by the fishery and the effectiveness of the strategy to manage bycatc	
SG	Issue	Met? (Y/N)	Justification/Rationale	
	c	N	Information is adequate to support a <b>comprehensive strategy</b> to manage and <b>evaluate</b> with a <b>high degree of certainty</b> whether a strategy is <b>achie</b> <b>objective</b> . Although it is understood that bycatch levels are very limited such that effectively negligible, the information available on bycatch levels is al limited, and little of that is publicly available, quantitative data. As such, i be said that information is adequate to support a comprehensive strategy to bycatch, and to evaluate with a high degree of certainty whether the str achieving its objective.	they are so very t cannot manage
	d	N	Monitoring of bycatch data is conducted in sufficient detail to assess mortalities to all bycatch species. Although it is understood that bycatch levels are very limited such that effectively negligible, the information available on bycatch levels is al limited, and little of that is publicly available, quantitative data. As such, i be said that monitoring of bycatch data is conducted in sufficient detail t ongoing mortalities to all bycatch species.	they are lso very t cannot
	ReferencesPFMC 2011a.			
OVE	OVERALL PERFORMANCE INDICATOR SCORE:80			
CON	CONDITION NUMBER (if relevant): N/A			



# Evaluation Table: PI 2.3.1

	The f	3.1 ishery meets national and international requirements for the protection of ETP	
2.3.1	species The fishery does not pose a risk of serious or irreversible harm to ETP species and does not hinder recovery of ETP species		
Issue	Met? (Y/N)	Justification/Rationale	
а	Y	Known effects of the fishery are <b>likely</b> to be within limits of national and international requirements for protection of ETP species.	
		A variety of protected marine mammal, turtle and seabird species occur in the area in which the AAFA North Pacific albacore fishery occurs (Table 6). However, the pole and troll fishery is highly selective with the gear always being attached and worked in very close proximity to the vessel, so the potential for interaction with any ETP species is considered to be very low. The use of barbless hooks helps to minimise the potential for mortality to occur in the event that any ET species were captured. The pole and troll fishery is not identified in any recovery or spotlight species action plan for marine mammals, turtles or seabirds (e.g. NMFS 1998a, NMFS 1998b, NMFS 2008b, Reeves <i>et al.</i> 1998, USFWS 2009a, USFWS 2009b). The 2012 NOAA 'List of Fisheries', assessed the North Pacific albacore pole and troll fisheries as Category III fishery (i.e. " <i>a remote likelihood or no known incidental mortality and serious injuries of marine mammals</i> "), with no marine mammal species killed (NOAA 2011a). The fishery exceeds the requirements of this scoring issue.	
b	Y	Known direct effects are <b>unlikely</b> to create <b>unacceptable impacts</b> to ETP species. Although there is very limited observer coverage in the fishery, when discussed during the site visit in 2011, SWFSC scientists who had participated in at-sea research and fishing surveys of the albacore stock were not unaware of any significant interaction issues between the fishery and ETP species. It is thought that perhaps one loggerhead turtle may be caught in the whole US west coast albacore pole and troll fishery (i.e. not just AAFA vessels) per year, but that no turtle would die as a result of an interaction with the fishery (NMFS 2004). Analysis of more than 60,000 daily log sheets from the whole pole and troll fishery in 2000 and 2005 showed only two interactions with albatross species, both of which were released (although the species and condition on release were not listed) (SWFSC pers. comm.). A single humpback whale was reportedly snagged off California in 1997 by a trolling vessel (not necessarily an AAFA vessel), but the injury was not considered serious (PFMC 2007b). The fishery exceeds the requirements of this scoring issue.	
a	Y	The effects of the fishery are known and are <b>highly likely</b> to be within limits of national and international requirements for protection of ETP species. The nature of the fishing gear used in the pole and troll fishery ensures that the potential for the fishery to interact with ETP species is very low. The fishery is assessed as a Category III fishery in the 2012 NOAA List of Fisheries (NOAA 2011a), and the fishery was not identified in any recovery or spotlight species action plan. The fishery exceeds the requirements of this scoring issue.	
b	Y	Direct effects are <b>highly unlikely</b> to create <b>unacceptable impacts</b> to ETP species. There is a very low possibility of direct interactions of the fishery with marine mammals, or of entanglement with turtles and albatross. All such interactions are considered to be rare events (estimated 1 loggerhead turtle per year in the whole US west coast albacore pole and troll fishery- NMFS 2004, and an average of 1 albatross per year reported from the whole pole and troll fishery - SWFSC pers. comm.), and the nature of the gear provides captured animals with a good chance of survival. The fishery exceeds the requirements of this scoring issue.	
	a	2.3.1 The fis Issue Met? (Y/N) a Y b Y b Y	





	c	Y	Indirect effects have been considered and are thought to be unlikely to unacceptable impacts. Potential routes for the AAFA pole and troll fishery to indirectly impa species are through the capture of northern anchovy or albacore that otherwise be consumed by ETP species, or through becoming entangle ingesting lost gear. Fishing pressure on northern anchovy is limited and the are not overfished or experiencing overfishing (PFMC 2010). The albacore the North Pacific is also not overfished or experiencing overfishing. Beca pole and troll gear is always attached to the vessel, the potential for gear loss Even if gear is lost, though, the lines are short and the attached hook or jig	act ETP t would d in or e stocks stock in ause the s is low.			
100		<b>V</b> 7	ensure that any lost lines quickly sink to the seabed, rather than continuir available to ETP species such as seabirds or turtles near to the surface considered that the fishery exceeds the requirements of this scoring issue.	e. It is			
100	a	Y	There is a <b>high degree of certainty</b> that the effects of the fishery are within a national and international requirements for protection of ETP species. There has been very limited observer coverage of the US west coast albace and troll fishery, and there is no observer plan currently in place. Neverthe nature of the fishery (the use of barbless hooks and the gear always being a and worked in very close proximity to the vessel), its assessment as a Cate fishery for marine mammal bycatch (NOAA 2011a), as well as the various r or spotlight species action plans for marine mammals, turtles or seabirds that consider the pole and troll fishery to be an impacting factor, provide a high of certainty that the fishery's effects are within limits of national and interrequirements for ETP species protection.	ore pole less, the attached gory III ecovery t do not n degree			
	b	Y	There is a <b>high degree of confidence</b> that there are no significant <b>detr</b> <b>direct effects</b> of the fishery on ETP species. There is only one known direct interaction of the whole US west coast albac and troll fishery with a marine mammal, but there is the possibility of entan with turtles and albatross. However, these are considered to be rare (estimated 1 loggerhead turtle per year for the whole fishery- NMFS 2004 average of 1 albatross per year reported for the whole fishery- SWFS comm.). The nature of the gear also provides captured animals with a good of survival. It is considered that the fishery meets this scoring issue.	ore pole glement events , and an C pers.			
	c	Y	There is a <b>high degree of confidence</b> that there are no significant <b>detr</b> <b>indirect effects</b> of the fishery on ETP species. Potential indirect effects of the fishery on ETP species are considered to be the capture of northern anchovy or albacore that would otherwise be consu ETP species, and through those species becoming entangled in or ingest gear. The status of northern anchovy and albacore, and the nature of the fish that all but eliminates the potential for entanglement or ghost fishing, pro- high degree of confidence that there are no significant detrimental indirect ef- the fishery on ETP species.	through imed by ing lost ing gear ovides a			
]	References         NMFS 1998a, NMFS 1998b, NMFS 2004, NMFS 2008b, PFMC 2010, Reeves et 1998, USFWS 2009a, USFWS 2009b.			ves <i>et al</i> .			
OVE	RALL PE	RFORM	IANCE INDICATOR SCORE:	100			
CON	DITION	NUMBE	CONDITION NUMBER (if relevant): N/A				



		The fis	hery has in place precautionary management strategies designed to:
		•	Meet national and international requirements;
PI	2.3.2	•	Ensure the fishery does not pose a risk of serious harm to ETP species;
		•	Ensure the fishery does not hinder recovery of ETP species; and
		•	Minimise mortality of ETP species.
SG	Issue	Met? (Y/N)	Justification/Rationale
60	а	Y	There are <b>measures</b> in place that minimise mortality, and are expected to be <b>highly likely to achieve</b> national and international requirements for the protection of ETP species.
			The pole and troll albacore fishery is highly selective with the gear always being attached and actively worked in very close proximity to the vessel, while the gear is retrieved as soon as anything is hooked and barbless hooks are used. The lines are short and loss of fishing gear is likely to be relatively rare, with any lost gear likely to quickly drop to the seafloor. The northern anchovy and albacore fisheries are monitored and are not considered to be overfished or experiencing overfishing.
			These features of the fishery minimise the potential for any direct interactions with ETP species, while also minimising the potential for mortality in the event that anything was hooked but subsequently released. The rare likelihood of gear loss and the status of the northern anchovy and albacore stocks minimise the potential for indirect impacts. Together, these features combine to form an operational strategy for managing the fishery's impact on ETP species, and so the fishery exceeds the requirements of this scoring guidepost.
	b	Y	The measures are <b>considered likely</b> to work, based on <b>plausible argument</b> (e.g., general experience, theory or comparison with similar fisheries/species). The HMS FMP states that " <i>Protected species interactions with the other gear types</i> (i.e. the pole and troll fishery) <i>are not major issues</i> " (PFMC 2007a), while the pole and troll fishery for albacore is not listed in any of the relevant recovery or spotlight species action plan for marine mammals, turtles or seabirds (e.g. NMFS 1998a, NMFS 1998b, NMFS 2008b, Reeves <i>et al.</i> 1998, USFWS 2009a, USFWS 2009b), and additional measures are not specified in the HMS FMP (PFMC 2007a), such that it can be concluded that the that the operational strategy will work and the fishery meets this scoring issue.
80	a	Y	There is a <b>strategy</b> in place for <b>managing the fishery's impact</b> on ETP species, including measures to minimise mortality, that is designed to be <b>highly likely to achieve</b> national and international requirements for the protection of ETP species. All sea turtles taken in US HMS fisheries are required to be handled in accordance with US Federal Regulations (i.e. to be released if active or dead, or to be resuscitated if comatose or inactive) (NOAA 2011b). This regulation, and the features of the fishery described under SG60a, are considered to constitute a strategy for managing the fishery's impact on ETP species that is highly likely to achieve national and international requirements for the protection of ETP species.
	b	Y	There is an <b>objective basis for confidence</b> that the strategy will work, based on <b>information</b> directly about the fishery and/or the species involved. The features of the pole and troll fishery, in particular that the lines are always attached and actively worked in close proximity to the vessel, and are retrieved as soon as anything is hooked, provide an objective basis for confidence that the strategy will work. The fishery meets this scoring issue.
	c	Y	There is <b>evidence</b> that the strategy is being implemented successfully.





PI	2.3.2	•	hery has in place precautionary management strategies designed to: Meet national and international requirements; Ensure the fishery does not pose a risk of serious harm to ETP species; Ensure the fishery does not hinder recovery of ETP species; and Minimise mortality of ETP species.	
SG	Issue	Met? (Y/N)	Justification/Rationale	
			Sea turtle interactions with the whole US west coast albacore pole and troll fis considered to be very rare (NMFS 2004), logbook data and the personal exper the SWFSC scientists who participated in the site visit indicate that a interactions are very rare, and there is only one known interaction between th pole and troll fishery and a marine mammal (a humpback that was not thoug seriously injured (PFMC 2007b). It is considered that this provides evidence strategy is being implemented successfully.	tience of albatross albatross whole to be
100	а	N	There is a <b>comprehensive strategy</b> in place for managing the fishery's im ETP species, including measures to minimise mortality that is designed to <b>above</b> national and international requirements for the protection of ETP species. The MSC defines a comprehensive strategy as "a complete and tested strate, up of linked monitoring, analyses, and management measures and response operational strategy that the AAFA pole and troll fishery maintains can considered to be comprehensive because of the lack of an ongoing observer p This prevents the fishery from meeting the monitoring requirement comprehensive strategy.	achieve es. gy made es." The nnot be program.
	b	Y	The strategy is mainly based on information directly about the fishery and/or involved, and a <b>quantitative analysis</b> supports <b>high confidence</b> that the strat work. The Biological Opinion on the West Coast HMS fisheries (NMFS 2004) was on a quantitative analysis of the anticipated incidental take of listed (ETP) The whole US west coast albacore pole and troll fishery was thought likely one loggerhead turtle per year, but that mortality as a result of the interact unlikely. The analysis confirmed that the incidental take was not likely to jeopardy of loggerhead, or of other sea turtle or marine mammal species therefore considered that the fishery meets this scoring issue.	egy will formed species. to catch ion was result in
	с	Ν	There is <b>clear evidence</b> that the strategy is being implemented successfully.	
			There has been very limited observer coverage of the US west coast albacore troll fishery, and there is no observer plan currently in place. In the abs independent data, the fishery cannot meet this scoring indicator.	
	d	N	There is evidence that the strategy is achieving its objective.	
			There has been very limited observer coverage of the US west coast albacore p troll fishery, and there is no observer plan currently in place. In the abs independent data, the fishery cannot meet this scoring indicator.	
References			NMFS 1998a, NMFS 1998b, NMFS 2004, NMFS 2008b, NOAA 2011b, 2007a, PFMC 2007b, Reeves <i>et al.</i> 1998, USFWS 2009a, USFWS 2009b.	, PFMC
OVE	RALL P	PERFOR	MANCE INDICATOR SCORE:	85
CON	CONDITION NUMBER (if relevant): N/A			



PI 2.3.3		<ul> <li>ble: PI 2.3.3</li> <li>Relevant information is collected to support the management of fishery impacts on ETP species including: <ul> <li>Information for the development of the management strategy;</li> <li>Information to assess the effectiveness of the management strategy; and</li> <li>Information to determine the outcome status of ETP species.</li> </ul></li></ul>			
SG	Issue	Met? (Y/N)	Justification/Rationale		
60	а	Y	Information is sufficient to qualitatively estimate the fishery related mortality of ETP species. The nature of the fishery, including the gear types in use and the method of working the gear, provides sufficient information to infer that the AAFA fishery poses almost no risk to ETP turtle, seabird or marine mammal species. The fishery meets this scoring issue.		
	b	Y	Information is <b>adequate</b> to <b>broadly understand</b> the impact of the fishery on ETP species. The nature of the fishery, including the gear types in use and the method of working the gear, is adequate to understand that the AAFA fishery poses almost no risk to ETP turtle, seabird or marine mammal species. The fishery meets this scoring issue.		
	с	Y	Information is adequate to support <b>measures</b> to manage the impacts on ETP species. The nature of the fishery, including the gear types in use and the method of working the gear, provides adequate information to confirm that the operational strategy in use is effective at minimising the risk posed by the fishery to ETP turtle, seabird or marine mammal species. The fishery meets this scoring issue.		
80	a	Y	<ul> <li>Sufficient data are available to allow fishery related mortality and the impact of fishing to be quantitatively estimated for ETP species.</li> <li>Comprehensive logbook data are available and can be interrogated to provide quantitative information on fishery interactions with ETP species. Independent observer data are available for a very limited number of trips within the albacore pole and troll fishery. The fishery meets this scoring issue.</li> </ul>		
	b	Y	Information is <b>sufficient</b> to determine whether the fishery may be a threat to protection and recovery of the ETP species. There are very few known interactions between the US west coast albacore pole and troll fishery and ETP turtles, seabirds or marine mammals. The Biological Opinion confirmed that the incidental take was not likely to result in jeopardy of loggerhead, or of other sea turtle or marine mammal species (NMFS 2004). It is considered that the information is sufficient to determine that the fishery is not a threat to protection and recovery of the ETP species.		
	c	Y	Information is sufficient to measure trends and support a full <b>strategy</b> to manage impacts on ETP species. Fishermen continue to be required to submit logbooks within 24 hours of making a landing. Comprehensive logbook data are available for a number of decades and can be interrogated to provide quantitative information on fishery interactions with ETP species. The fishery meets this scoring issue.		
100	a	N	Information is <b>sufficient</b> to <b>quantitatively</b> estimate outcome status of ETP species with a high degree of certainty. There has been very limited observer coverage of the US west coast albacore pole and troll fishery, and there is no observer plan currently in place. In the absence of independent data, the fishery cannot meet this scoring indicator.		





		species •	nt information is collected to support the management of fishery impacts including: Information for the development of the management strategy; Information to assess the effectiveness of the management strategy; and Information to determine the outcome status of ETP species.	
SG	Issue	Met? (Y/N)	Justification/Rationale	
	b	N	Accurate and verifiable information is available on the magnitude of all i mortalities and injuries and the consequences for the status of ETP species	
			There has been very limited observer coverage of the US west coast albac and troll fishery, and there is no observer plan currently in place. In the abs independent data, the fishery cannot meet this scoring indicator.	
	C	N	Information is adequate to support a <b>comprehensive strategy</b> to manage minimise mortality and injury of ETP species, and evaluate with a <b>high de</b> <b>certainty</b> whether a strategy is achieving its objectives.	
			There has been very limited observer coverage of the US west coast albace and troll fishery, and there is no observer plan currently in place. In the ab- independent data, the fishery cannot meet this scoring indicator.	
References		es	NMFS 2004.	
OVE	OVERALL PERFORMANCE INDICATOR SCORE:       80			80
CONDITION NUMBER (if relevant):			R (if relevant):	N/A



#### Evaluation Table: PI 2.4.1

PI 2.4.1		The fishery does not cause serious or irreversible harm to habitat structure, considered on a regional or bioregional basis and function			
SG	Issue	Met? (Y/P/ N)	Justification/Rationale		
60	a	Y	The fishery is <b>unlikely</b> to reduce habitat structure and function to a poin there would be serious or irreversible harm. The AAFA North Pacific albacore pole and troll fishery operates entirel surface in deep, oceanic water. There is therefore no risk that the fishery con seabed, and any impacts on the pelagic habitat would be imperceptible and transient. Please note, as the northern anchovy is considered against the retained spec there is no further requirement to assess the baitfish fishery (e.g., here, again habitat PIs).	y at the tacts the d highly cies PIs, ainst the	
80	a	Y	The fishery is <b>highly unlikely</b> to reduce habitat structure and function to a point where there would be serious or irreversible harm. The AAFA North Pacific albacore pole and troll fishery operates entirely at the surface in deep, oceanic water. There is therefore no risk that the fishery contacts the seabed, and any impacts on the pelagic habitat would be imperceptible and highly transient.		
100	a	Y	There is <b>evidence</b> that the fishery is highly unlikely to reduce habitat structure and function to a point where there would be serious or irreversible harm. The AAFA North Pacific albacore pole and troll fishery operates entirely at the surface in deep, oceanic water. The nature of the gear, the areas in which the fishery operates and the species that are landed all provide evidence that the fishery is highly unlikely to ever come in to contact with the seabed, while there is no mechanism by which the fishery could impact pelagic habitats in anything other than an imperceptible and highly transient manner. As such, the fishery is not considered to impact habitat structure and function in any way.		
	Reference	es			
OVE	RALL PE	RFORM	IANCE INDICATOR SCORE:	100	
CON	CONDITION NUMBER (if relevant):       N/A			N/A	



#### Evaluation Table: PI 2.4.2

PI	2.4.2	There	is a strategy in place that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to habitat types
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	There are <b>measures</b> in place, if necessary, that are expected to achieve the Habitat Outcome 80 level of performance. The AAFA North Pacific albacore pole and troll fishery operates entirely at the
			surface in deep, oceanic water. The fishery does not contact the seabed and any pelagic habitat impacts will be imperceptible and highly transient. No additional measures are therefore needed in order to achieve the habitat outcome 80 level of performance.
			Please note, as the northern anchovy is considered against the retained species PIs, there is no further requirement to assess the baitfish fishery (e.g., here, against the habitat PIs).
	b	Y	The measures are considered <b>likely</b> to work, based on plausible argument (e.g. general experience, theory or comparison with similar fisheries/habitats).
			The fishery operates entirely at the surface in deep, oceanic water.
80	a	Y	There is a <b>partial strategy</b> in place, if necessary, that is expected to achieve the Habitat Outcome 80 level of performance or above. The fishery operates entirely at the surface in deep, oceanic water. The fishery does
			not contact the seabed and any pelagic habitat impacts will be imperceptible and highly transient. An additional partial strategy is therefore unnecessary in order to achieve the habitat outcome 80 level of performance.
	b	Y	There is some <b>objective basis for confidence</b> that the partial strategy will work, based on <b>information directly about the fishery and/or habitats</b> involved.
			The fishery operates entirely at the surface in deep, oceanic water.
	с	Y	There is <b>some evidence</b> that the partial strategy is being implemented successfully. The fishery operates entirely at the surface in deep, oceanic water.
100		N/	
100	a	Y	There is a <b>strategy</b> in place for managing the impact of the fishery on habitat types. The fishery operates entirely at the surface in deep, oceanic water. The nature of the gear, the habits of the target species and the areas in which the fishery operates mean that there is no possibility of the fishery contacting the seabed, while any pelagic impacts will be imperceptible and highly transient. These features of the fishery can be considered to constitute an operational strategy for managing the impact of the fishery on habitat types.
	b	Y	<b>Testing</b> supports <b>high confidence</b> that the strategy will work, based on <b>information</b> <b>directly about the fishery and/or habitats</b> involved. To the knowledge of the assessment team, there has been no specific testing to determine if the AAFA albacore fishery impacts habitats, but the nature of the gear and the area in which the fishery operates (i.e. deep, oceanic water) makes any testing unnecessary. The fishery is considered to meet this scoring issue.
	c	Y	There is <b>clear evidence</b> that that strategy is being implemented successfully. The fishery operates entirely at the surface in deep, oceanic water. The nature of the



PI 2.4.2		There	is a strategy in place that is designed to ensure the fishery does not pose a serious or irreversible harm to habitat types	risk of
SG	Issue	Met? (Y/N)	Justification/Rationale	
			gear, the habits of the target species, the areas in which the fishery operates retained species profile provide clear evidence that the strategy is implemented successfully.	
	d	Y	There is some evidence that the strategy is achieving its objective.	
			Habitat impacts from this fishery are not monitored. However, there is no po of the fishery contacting the seabed, while any pelagic impacts will be imper and highly transient. As such, it is considered that this scoring issue is met.	
	Reference	es		
OVE	OVERALL PERFORMANCE INDICATOR SCORE: 10			100
CON	CONDITION NUMBER (if relevant):			N/A



#### Evaluation Table: PI 2.4.3

PI	2.4.3		nation is adequate to determine the risk posed to habitat types by the fishery and the effectiveness of the strategy to manage impacts on habitat types
SG	Issue	Met? (Y/N)	Justification/Rationale
60	а	Y	There is <b>basic understanding</b> of the types and distribution of main habitats in the area of the fishery.
			The AAFA North Pacific albacore pole and troll fishery operates entirely at the surface in deep, oceanic water, along fronts and upwelling boundaries within the North Pacific Transition Zone (NPTZ) and the California Current System (CCS) off the US West Coast (Laurs & Lynn 1991). As the fishery does not contact the seabed, only the sea surface pelagic habitat of the North Pacific can be considered to be a main habitat type. These pelagic systems cover very extensive areas.
			Please note, as the northern anchovy is considered against the retained species PIs, there is no further requirement to assess the baitfish fishery (e.g., here, against the habitat PIs).
	b	Y	Information is adequate to broadly understand the nature of the main impacts of gear use on the main habitats, including spatial overlap of habitat with fishing gear.
			The surface pelagic habitat within and around the NPTZ and the CCS constitute the main habitat of the albacore that are targeted in the AAFA fishery. The nature of the pole and troll gear means that no seabed habitats will be impacted, while any impacts to the surface pelagic habitat will be imperceptible and highly transient.
80	а	Y	The nature, distribution and <b>vulnerability</b> of all main habitat types in the fishery are known at a level of detail relevant to the scale and intensity of the fishery.
			The areas in which the pole and troll fishery occurs are closely linked to the NPTZ and to coastal upwelling sites within the CCS (Laurs <i>et al.</i> 1984, Laurs & Lynn 1991, Childers <i>et al.</i> 2011). These systems have been described and well studied (e.g. Ayers & Lozier 2010, Miller <i>et al.</i> 1999), and it must be concluded that these surface pelagic habitats are not vulnerable to fishing activities of the scale and intensity of the AAFA pole and troll fishery.
	b	Y	Sufficient data are available to allow the nature of the impacts of the fishery on habitat types to be identified and there is reliable information on the spatial extent of interaction, and the timing and location of use of the fishing gear. The surface pelagic habitat within the NPTZ and the CCS where the AAFA fishery operates is very extensive. The impact of the vessel passage and gear use in the surface waters must be considered imperceptible and highly transient.
	c	Y	Sufficient data continue to be collected to detect any increase in risk to habitat (e.g. due to changes in the outcome indicator scores or the operation of the fishery or the effectiveness of the measures). The AAFA North Pacific albacore pole and troll fishery operates at the surface, and the nature and distribution of the target species ensures that there is no chance that the operation of the fishery can change significantly, or that the risk to the pelagic or seabed habitats will increase.
100	a	Y	The distribution of habitat types is known over their range, with particular attention to the occurrence of vulnerable habitat types. The NPTZ and the CCS with its associated upwelling fronts have been studied (e.g. Ayers & Lozier 2010, Laurs & Lynn 1991, Miller et al. 1999). These are not vulnerable systems in the context of surface pelagic fishing activity.





	b	Y	The physical impacts of the gear on the habitat types have been quantified fur. The nature of the pole and troll albacore gears means that there is consider no risk to seabed or pelagic habitats. Essentially, nothing the AAFA pole a fleet does or can do will physically impact the seabed or pelagic systems in a other than an imperceptible and highly transient manner.	ed to be and troll
	c	Y	Changes in habitat distributions over time are measured.	
			The NPTZ and the CCS with its associated upwelling fronts have been stud Ayers & Lozier 2010, Laurs & Lynn 1991, Miller <i>et al.</i> 1999). The loca nature of the NPTZ and CCS are known to vary over time, but this var driven by climate and physical forcing (e.g. from wind) rather than as a fishing activity.	tion and iation is
	Reference	es	Ayers & Lozier 2010, Laurs et al. 1984, Laurs & Lynn 1991, Miller et al. 19	99.
OVERALL PERFORMANCE INDICATOR SCORE:				100
CON	CONDITION NUMBER (if relevant):			N/A



#### Evaluation Table: PI 2.5.1

PI	2.5.1	The fis	hery does not cause serious or irreversible harm to the key elements of ecosystem structure and function
SG	Issue	Met? (Y/P/ N)	Justification/Rationale
60	a	Y	The fishery is <b>unlikely</b> to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.
			Key elements of the AAFA North Pacific albacore fishery ecosystem are considered to be the northern anchovy as a forage fish and bait species, albacore as a high trophic-level predator, other HMS species as competitors and predators of albacore, and the NPTZ and CCS as the key habitat of albacore in the parts of the North Pacific fished by the AAFA fleet.
			The nature of the gear employed in the fishery, the negligible quantities of retained species and bycatch, the status of northern anchovy (not overfished or experiencing overfishing) and the large area of the NPTZ and CCS over which the fishery operates mean that it is considered that the fishery is unlikely to disrupt key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.
80	a	Y	The fishery is <b>highly unlikely</b> to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.
			The nature of the gear employed in the fishery, the negligible quantities of retained species and bycatch, the status of northern anchovy (not overfished or experiencing overfishing) and the large area of the NPTZ and CCS over which the fishery operates mean that it is considered that the fishery is highly unlikely to disrupt key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.
100	a	Y	There is <b>evidence</b> that the fishery is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.
			The quantity of northern anchovy bait that is used by the AAFA fleet is small in comparison to other fisheries, and it is considered that the northern anchovy stocks currently experience limited targeted fishing pressure and relatively low levels of landings, and are not overfished or experiencing overfishing (PFMC 2010).
			The North Pacific albacore stock is currently not overfished or experiencing overfishing, and albacore is not a keystone predator or prey species in the North Pacific (Kitchell <i>et al.</i> 1999). More information on the impact of albacore fishery removals at the ecosystem level would be useful but is not considered a requirement in order for the fishery to meet this level of performance at this time, given the stock status.
			While the impact of albacore feeding on northern anchovy can be detected in the subsequent recruitment to northern anchovy stocks (Glaser 2009), there is no indication that the removal of albacore by the AAFA fishery impacts northern anchovy recruitment.
			The surface pelagic habitat of the NPTZ and the CCS covers an enormous area and these features are affected only by climate and physical forcing (i.e., weather, water currents, etc.); there is nothing that the AAFA fishery can do that would impact the nature of those habitats in anything other than an imperceptible and highly transient way.



PI	PI 2.5.1 The f		hery does not cause serious or irreversible harm to the key elements of eco structure and function	osystem
SG	Issue	Met? (Y/P/ N)	Justification/Rationale	
			It is considered that there is evidence that the AAFA North Pacific albacore is highly unlikely to disrupt the key elements underlying ecosystem struct function to a point where there would be a serious or irreversible harm.	
	References		Glaser 2009, Kitchell et al. 1999, PFMC 2010.	
OVE	OVERALL PERFORMANCE INDICATOR SCORE: 10			100
CON	CONDITION NUMBER (if relevant): N/A			N/A



#### Evaluation Table: PI 2.5.2

PI	2.5.2	The	re are measures in place to ensure the fishery does not pose a risk of serious or irreversible harm to ecosystem structure and function
SG	Issue	Met? (Y/N)	Justification/Rationale
60	а	Y	There are <b>measures</b> in place, if necessary.
			Key elements of the AAFA North Pacific albacore fishery ecosystem are considered to be the northern anchovy as a forage fish and bait species, albacore as a high trophic-level predator, other HMS species as competitors and predators of albacore, and the NPTZ and CCS as the key habitat of albacore in the parts of the North Pacific fished by the AAFA fleet.
			It is considered that there is evidence that the fishery is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm. As such, it is considered that no additional measures are needed in order to achieve the ecosystem outcome 80 level of performance.
	b	Y	The <b>measures</b> take into account potential impacts of the fishery on key elements of the ecosystem.
			It is considered highly unlikely that the fishery poses a risk to key elements of the ecosystem.
	с	Y	The measures are considered likely to work, based on <b>plausible argument</b> (e.g., general experience, theory or comparison with similar fisheries/ecosystems).
			It is considered highly unlikely that the fishery poses a risk to key elements of the ecosystem.
80	a	Y	There is a <b>partial strategy</b> in place, if necessary.
			It is considered that there is evidence that the fishery is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm. As such, it is considered that a partial strategy is not necessary in order to achieve the ecosystem outcome 80 level of performance.
	b	Y	The partial strategy takes into account <b>available information and is expected to</b> <b>restrain impacts</b> of the fishery on the ecosystem so as to <b>achieve</b> the Ecosystem Outcome 80 level of performance. It is considered highly unlikely that the fishery poses a risk to key elements of the ecosystem.
	с	Y	The partial strategy is considered likely to work, based on <b>plausible argument</b> (e.g.,
			general experience, theory or comparison with similar fisheries/ecosystems). It is considered highly unlikely that the fishery poses a risk to key elements of the ecosystem.
	d	Y	There is <b>some evidence</b> that the measures comprising the partial strategy are being <b>implemented successfully.</b>
			It is considered highly unlikely that the fishery poses a risk to key elements of the ecosystem.
100	a	Y	There is a <b>strategy</b> that consists of a <b>plan</b> , in place.
			The HMS Fishery Management Plan and the CPS Fishery Management Plan list a range of objectives and goals which together form a plan to minimise and manage er Template



PI	PI 2.5.2		re are measures in place to ensure the fishery does not pose a risk of serio irreversible harm to ecosystem structure and function	us or
SG	Issue	Met? (Y/N)	Justification/Rationale	
			impacts of the fishery on the ecosystem. For example, these include i) that strategies are implemented which achieve optimal yield for long-term sus harvest levels, ii) to minimize bycatch and avoid discard and implement mea adequately account for total bycatch and discard mortalities, and iii) to n restore or enhance the current quantity and productive capacity of hal increase fishery productivity for the benefits of the resource and commer recreational fisheries for highly migratory species.	stainable asures to naintain, pitats to
			It is considered that there is evidence in the form of the nature of the gear en- in the fishery, the negligible quantities of retained species and bycatch, the a northern anchovy and the large area of the NPTZ and CCS over which the operates that these objectives have been made operational and that the fi- highly unlikely to disrupt the key elements underlying ecosystem struct function to a point where there would be a serious or irreversible harm.	status of fishery shery is
	b	Y	The <b>strategy</b> , which consists of a <b>plan</b> , contains measures to <b>address a</b> <b>impacts of the fishery</b> on the ecosystem, and at least some of these measure place. The plan and measures are <b>based on well-understood</b> fur relationships between the fishery and the Components and elements ecosystem. This plan provides for <b>development of a full strategy that restrains imp</b>	es are in inctional of the
			the ecosystem to ensure the fishery does not cause serious or irreversible har. The HMS and CPS Fishery Management Plans contain measures to address impacts of the fishery on the ecosystem, and the measures are in place considered that the measures are based on well-understood functional relate between the fishery and the ecosystem, and that impacts are restrained to en- fishery does not cause serious or irreversible harm. As such, the fishery measures scoring issue.	m. all main ce. It is ionships ssure the
	с	Y	The measures are considered likely to work based on <b>prior experience</b> , pargument or <b>information</b> directly from the fishery/ecosystems involved.	olausible
			There is a plan and an operational strategy that, based on information direc the fishery, is considered to be working to manage all the main impact fishery on the ecosystem. As such, this scoring issues has been met	
	d	Y	There is evidence that the measures are being <b>implemented successfully</b> .	
			The fishery is considered to have minimal potential to cause serious or irrecharm, and the HMS and CPS Fishery Management Plans are operational. As is considered that the measures are being implemented successfully, and the meets this scoring issue.	such, it
	References         PFMC 2011a, PFMC 2011e.			
OVE	OVERALL PERFORMANCE INDICATOR SCORE: 100			100
CON	CONDITION NUMBER (if relevant): N/A			N/A



#### **Evaluation Table: PI 2.5.3**

PI	PI 2.5.3		There is adequate knowledge of the impacts of the fishery on the ecosystem
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	Information is adequate to <b>identify</b> the key elements of the ecosystem (e.g., trophic structure and function, community composition, productivity pattern and biodiversity). Key elements of the AAFA North Pacific albacore fishery ecosystem can be identified and are considered to be the northern anchovy as a forage fish and bait species, albacore as a high trophic-level predator, other HMS species as competitors and predators of albacore, and the NPTZ and CCS as the key habitat of albacore in the parts of the North Pacific fished by the AAFA fleet.
	b	Y	Main impacts of the fishery on these key ecosystem elements can be inferred from existing information, and <b>have not been investigated in detail</b> . The main impacts of the fishery on the key ecosystem elements can be inferred from
			existing information. There is specific and detailed information, however, allowing the fishery to meet and exceed the requirements of this scoring issue.
80	a	Y	Information is adequate to <b>broadly understand</b> the key elements of the ecosystem. Northern anchovy have been studied for many years and a body of knowledge exists that exceeds the requirements of this scoring issue (e.g. PFMC 2010, PFMC 2011c). Albacore is an important commercial and recreational target fish species, and again a body of knowledge exists that exceeds the requirements of this scoring issue (e.g. Childers <i>et al.</i> 2011, Laurs & Lynn 1991, PFMC 2011a). Other HMS species including billfish, tuna and shark species are managed and assessed in a detail that exceeds the requirements of this scoring issue (e.g. PFMC 2011a), while the NPTZ and CCS are important oceanographic features that have been well studied over time (e.g. Ayers & Lozier 2010, Miller <i>et al.</i> 1999).
	b	Y	<ul><li>Main impacts of the fishery on these key ecosystem elements can be inferred from existing information and some have been investigated in detail.</li><li>It is considered that the fishery exceeds the requirements of this scoring issue, and so the key information is provided under SG100b.</li></ul>
	c	Y	The main functions of the Components (i.e., target, Bycatch, Retained and ETP species and Habitats) in the ecosystem are <b>known</b> . It is considered that the fishery exceeds the requirements of this scoring issue, and so the key information is provided under SG100c.
	d	Y	Sufficient information is available on the impacts of the fishery on these Components to allow some of the main consequences for the ecosystem to be inferred. It is considered that the fishery exceeds the requirements of this scoring issue, and so the key information is provided under SG100d.
	e	Y	Sufficient data continue to be collected to detect any increase in risk level (e.g., due to changes in the outcome indicator scores or the operation of the fishery or the effectiveness of the measures). Monitoring of the northern anchovy, albacore and other HMS stocks and fisheries is ongoing, and results are reported on annually, while the AAFA fishery poses no risk to the physical functioning of the NPTZ or CCS. The fishery meets this scoring issue.



PI	2.5.3	ŗ	There is adequate knowledge of the impacts of the fishery on the ecosystem	1
SG	Issue	Met? (Y/N)	Justification/Rationale	
100	b	Y	Main interactions between the fishery and these ecosystem elements can be i from existing information, and <b>have been investigated</b> .	nferred
			Northern anchovy and the North Pacific albacore are currently not overfis experiencing overfishing (PFMC 2010, PFMC 2011a). There are very quantities of retained and bycatch species taken in the fishery (PFMC 2011 those quantities are considered to be negligible in their impact, while albacor considered to be a keystone predator or prey species in the North Pacific (Kit <i>al.</i> 1999). The NPTZ and CCS are enormous oceanographic features that impacted by any fishing activity. It is considered that the fishery me requirements of this scoring issue.	limited a), and e is not chell <i>et</i> are not
	с	Y	The impacts of the fishery on target, Bycatch and ETP species are <b>identified</b> main functions of these Components in the ecosystem are <b>understood</b> .	and the
			Northern anchovy is an important forage fish species that has been studie number of decades, while the role of albacore and other HMS species wit pelagic foodweb has been studied (Kitchell <i>et al.</i> 1999). The role of the NP CCS in enhancing productivity is well established (e.g. Ayers & Lozier 2010 & Lynn 1991).	hin the TZ and
	d	Y	Sufficient information is available on the impacts of the fishery on the Comp and elements to allow the main consequences for the ecosystem to be inferre	
			The quantity of northern anchovy bait that is used by the AAFA fleet is s comparison to other fisheries, but in any case it is considered that the n anchovy stocks currently experience limited targeted fishing pressure and rel low levels of landings, and are not overfished or experiencing overfishing 2010). The North Pacific albacore stock is currently not overfished or experioverfishing, and albacore is not a keystone predator or prey species in the Pacific (Kitchell <i>et al.</i> 1999). While the impact of albacore feeding on n anchovy can be detected in the subsequent recruitment to northern anchovy (Glaser 2009), there is no indication that the removal of albacore by the fishery impacts northern anchovy recruitment.	orthern latively (PFMC iencing e North orthern y stocks
			The surface pelagic habitat of the NPTZ and the CCS covers an enormous a these features are affected only by climate and physical forcing; there is nothing the AAFA fishery can do that would impact the nature of those habitats in an other than an imperceptible and highly transient way.	ing that
	e	Y	Information is sufficient to support the development of strategies to necosystem impacts.	manage
			There is considered to be an operational strategy in place for managing the im the AAFA fishery on the ecosystem. There is also considered to be su information available to support the strategy. As such, the fishery meets this issue.	ifficient
		es	Ayers & Lozier 2010, Childers <i>et al.</i> 2011, Kitchell <i>et al.</i> 1999, Laurs & Lyn Miller <i>et al.</i> 1999, PFMC 2010, PFMC 2011a, PFMC 2011c.	n 1991,
OVE	OVERALL PERFORMANCE INDICATOR SCORE:100			100
CON	DITION	NUMBE	R (if relevant):	N/A



#### Evaluation Table: PI 3.1.1

PI         3.1.1         The management system exists within an appropriate legal and/or customary framework which ensures that it:         •         Is capable of delivering sustainable fisheries in accordance with MSC Principles I and 2;         •         Observes the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood; and         •         Incorporates an appropriate dispute resolution framework.           50         Issue         Mcf?         Justification/Rationale         •           60         a         Y         The management system is generally consistent with local, national or international laws or stundards that are aimed at achieving sustainable fisheries in accordance with MSC Principles I and 2.           60         a         Y         The management of the North Pacific albacore resource and fisheries or pertaing on the resource is harded by the IATTC and the WCPTC RFMOs. The Conventions of the IATTC and WCPFC incorporate the relevant principles of international law related to the conservation and management of living marine resources in accordance with MSC Principles I and 2.           b         Y         The management Council (PFMC), established by the Margunson-Event. Fishery Conservation and Management Act (MSA) for domestic management of Us policies and other laws, e.g., NEPA, ESA, MMPA, and others etc., incorporate the relevant principles related to the conservation and management of living marine resources in accordance with MSC Principles I and 2.           b         Y         The management system is guestimable by the Margunson Stevent, e.g., WCPHC Convention Annex J. Esablishes a	Livan	uation Tai		
PI 3.1.1       • Is capable of delivering sustainable fisheries in accordance with MSC Principles I and 2;         • Observes the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood; and         SG       Issue       Met?         60       a       Y         The management system is generally consistent with local, national or international laws or standards that are aimed at achieving sustainable fisheries in accordance with MSC Principles I and 2.         International management of the North Pacific albacore resource and fisheries operating on the resource is shared by the IATTC and the WCPTC RFMOs. The Conventions of the IATTC and WCPFC incorporate the relevant principles of international law related to the conservation and management of Ilving marine resources in accordance with MSC Principles I and 2.         Domestic management of the US North Pacific albacore fishery is by the Pacific Fishery Management Council (PFMC), established by the Magnuson-Stevens Fishery Conservation and Management of USA for domestic management of US regional fisheries. Standards set forth in MSA and amendments, as well as US policies and other laws, e.g., NEPA, ESA, MMPA, and others etc., incorporate the relevant principles related to the conservation and management of living marine resources in accordance with MSC Principles 1 and 2.         b       Y       The management system incorporates or is subject by law to a mechanism for the resolution of legal disputes arising within the system. At the international level, the Conventions of the respective RFMOs establish mechanisms for resolution of legal disputes arising within the system of the Commisision to settle dispute asong members of the Commissi				
P1 3.1.1       and $\hat{z}$ • Observes the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood; and         SG       Issue       Met?         SG       Issue       Met?         60       a       Y       The management system is generally consistent with local, national or international laws or standards that are aimed at achieving sustainable fisheries in accordance with MSC Principles I and 2.         International management of the North Pacific albacore resource and fisheries operating on the resource is shared by the IATTC and the WCPTC RFMOs. The Conventions of the IATTC and WCPFC incorporate the relevant principles of international nangement of the US North Pacific albacore fishery is by the Pacific Fishery Management Council (PFMC), established by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) for domestic management of US regional fisheries. Standards set forth in MSA and amendments, as well as US policies and other laws, e.g., NEPA, ESA, MMPA, and others etc., incorporate the relevant principles related to the conservation and management of living marine resources in accordance with MSC Principles I and 2.         b       Y       The management system incorporates raising within the system, e.g., WCPFC Conventions of the system. At the international level, the Conventions of the respective RFMOs establish mechanisms for resolution of legal dispute arising within the system, e.g., WCPFC Convention Annex II establishes authority to set up a Review Panel to review decisions and by the Commission to settle disputes among members of the Commission, and the IATTC Antigua Convention Part VII Article 25 addresses the settlement of disputes.				
• Observes the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood; and           SG         Issue         Met2 (YAN)         Justification/Rationale           60         a         Y         The management system is generally consistent with local, national or international laws or standards that are aimed at achieving sustainable fisheries in accordance with MSC Principles 1 and 2.           61         a         Y         The management of the North Pacific albacore resource and fisheries operating on the resource is shared by the LATTC and the WCPTC RFMOs. The Conventions of the LATTC and WCPFC incorporate the relevant principles of international law related to the conservation and management of Ilving marine resources in accordance with MSC Principles 1 and 2.           Domestic management of the US North Pacific albacore fishery is by the Pacific Fishery Management Conucil (PFMC), established by the Magnon-Stevens Fishery Conservation and Management of INAS of domestic management of US regional fisheries. Standards set forth in MSA and amendments, as well as US policies and other laws, e.g., NEPA, ESA, MMPA, and others etc., incorporate the relevant principles related to the conservation and management of Ilving marine resources in accordance with MSC Principles 1 and 2.           b         Y         The management system incorporates or is subject by law to a mechanism for the resolution of legal disputes arising within the system. At the international level, the Convention and management of Ilving marine resource in short of the cominision to settle disputes among members of the Commission, and the LATTC Antigua Convention Part VII Article 25 addresses the settlement of disputes.      <				• • •
dependent on fishing for food or livelihood; and         dependent on fishing for food or livelihood; and           SG         Issue         Met? (YN)         Justification/Rationale           60         a         Y         The management system is generally consistent with local, national or international laws or standards that are aimed at achieving sustainable fisheries in accordance with MSC Principles 1 and 2.           International management of the North Pacific albacore resource and fisheries operating on the resource is shared by the IATTC and the WCPTC REMOs. The Conventions of the IATTC and WCPFC incorporate the relevant principles of international law related to the conservation and management of living marine resources in accordance with MSC Principles 1 and 2.           Domestic management for the US North Pacific albacore fishery is by the Pacific Fishery Management Council (PFMC), established by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) for domestic management of US regional fisheries. Standards set forth in MSA and amendments, as well as US policies and other laws, e.g., NEPA, ESA, MMPA, and others etc., incorporate the relevant principles related to the conservation and management of living marine resources in accordance with MSC Principles 1 and 2.           b         Y         The management system incorporates or is subject by law to a mechanism for the resources in accordance with MSC Principles 1 and 2.           c         Y         The management and they establishe wechanisms for resolution of legal disputes arising within the system. ext the international level, the Conventions of the respective RFMOs establish mechanisms, and the IATTC Antigua Convention Part VII Article 25 addresses th	PI	3.1.1		· ·
•         Incorporates an appropriate dispute resolution framework.           SG         Issue         Met? (YN)         Justification/Rationale           60         a         Y         The management system is generally consistent with local, national or international laws or standards that are aimed at achieving sustainable fisheries in accordance with MSC Principles 1 and 2.           International management of the North Pacific albacore resource and fisheries operating on the resource is shared by the IATTC and the WCPTC RFMOs. The Conventions of the IATTC and WCPFC incorporate the relevant principles of international law related to the conservation and management of living marine resources in accordance with MSC Principles 1 and 2.           Domestic management Council (PFMC), established by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) for domestic management of Us regional fisheries. Standards set forth in MSA and amendments, as well as US policies and other laws, e.g., NEPA, ESA, MMPA, and others etc., incorporate the resources in accordance with MSC Principles 1 and 2.           b         Y         The management system incorporates or is subject by law to a mechanism for the resources in accordance with MSC Principles 1 and 2.           c         Y         The management and the asystem. At the international level, the Conventions of the respective RFMOs establish mechanisms for resolution of legal disputes arising within the system, e.g., WCPFC Convention Amex II establishes authority to set up a Review Panel to review decisions made by the Continuison to settle disputes among members of the Commission, and the IATTC Antigua Convention Part VIII Article 25 addresses the settlement of disputes. <th></th> <th></th> <th></th> <th></th>				
SG         Issue         Met? (Y/N)         Justification/Rationale           60         a         Y         The management system is generally consistent with local, national or international laws or standards that are aimed at achieving sustainable fisheries in accordance with MSC Principles 1 and 2.           International management of the North Pacific albacore resource and fisheries operating on the resource is shared by the IATTC and the WCPTC RFMOS. The Conventions of the IATTC and WCPTC incorporate the relevant principles of international law related to the conservation and management of living marine resources in accordance with MSC Principles 1 and 2.           Domestic management of the US North Pacific albacore fishery is by the Pacific Fishery Conservation and Management Act (MSA) for domestic management of US regional fisheries. Standards set forth in MSA and amendments, as well as US policies and other laws, e.g., NEPA, ESA, MMPA, and others etc., incorporate the relevant principles related to the conservation and management of living marine resources in accordance with MSC Principles 1 and 2.           b         Y         The management system incorporates or is subject by law to a mechanism for the resolution of legal disputes arising within the system. At the international level, the Conventions of the respective RFMOs establish mechanisms for resolution of legal disputes arising within the system. At the domestic level, the MSA and amendments and other FMC bylaws provide measures for resolution of legal disputes.           c         Y           At the domestic level, the MSA and amendments and other FMC bylaws provide measures for resolution of legal disputes.           d         Y      <			de	pendent on fishing for food or livelihood; and
Ste         Issue         (V/N)         Justification/Rationale           60         a         Y         The management system is generally consistent with local, national or international laws or standards that are aimed at achieving sustainable fisheries in accordance with MSC Principles 1 and 2.           International management of the North Pacific albacore resource and fisheries operating on the resource is shared by the IATTC and the WCPTC RFMOs. The Conventions of the IATTC and WCPFC incorporate the relevant principles of international law related to the conservation and management of living marine resources in accordance with MSC Principles 1 and 2.           Domestic management of the US North Pacific albacore fishery is by the Pacific Fishery Management Council (PFMC), established by the Magnuson-Stevens Fishery Conservation and Management AC (MSA) for domestic management of US regional fisheries. Standards set forth in MSA and amendments, as well as US policies and other laws, e.g., NEPA, ESA, MMPA, and others etc., incorporate the relevant principles related to the conservation and management of living marine resources in accordance with MSC Principles 1 and 2.           b         Y         The management system incorporates or is subject by law to a mechanism for the resolution of legal disputes arising within the system, e.g., WCPFC Convention Annex II establishes authority to set up a Review Pauel to review decisions made by the Commission to settle disputes among members of the Commission, and the IATTC Antigua Convention Part VII Article 25 addresses the settlement of disputes.           c         Y         At the domestic evolution of legal disputes.           d         Y         The management authority or fis			• Inc	corporates an appropriate dispute resolution framework.
Ste         Issue         (V/N)         Justification/Rationale           60         a         Y         The management system is generally consistent with local, national or international laws or standards that are aimed at achieving sustainable fisheries in accordance with MSC Principles 1 and 2.           International management of the North Pacific albacore resource and fisheries operating on the resource is shared by the IATTC and the WCPTC RFMOs. The Conventions of the IATTC and WCPFC incorporate the relevant principles of international law related to the conservation and management of living marine resources in accordance with MSC Principles 1 and 2.           Domestic management of the US North Pacific albacore fishery is by the Pacific Fishery Management Council (PFMC), established by the Magnuson-Stevens Fishery Conservation and Management AC (MSA) for domestic management of US regional fisheries. Standards set forth in MSA and amendments, as well as US policies and other laws, e.g., NEPA, ESA, MMPA, and others etc., incorporate the relevant principles related to the conservation and management of living marine resources in accordance with MSC Principles 1 and 2.           b         Y         The management system incorporates or is subject by law to a mechanism for the resolution of legal disputes arising within the system, e.g., WCPFC Convention Annex II establishes authority to set up a Review Pauel to review decisions made by the Commission to settle disputes among members of the Commission, and the IATTC Antigua Convention Part VII Article 25 addresses the settlement of disputes.           c         Y         At the domestic evolution of legal disputes.           d         Y         The management authority or fis			Mot?	
60       a       Y       The management system is generally consistent with local, national or international laws or standards that are aimed at achieving sustainable fisheries in accordance with MSC Principles 1 and 2.         International management of the North Pacific albacore resource and fisheries operating on the resource is shared by the LATTC and the WCPTC RFMOS. The Conventions of the IATTC and WCPFC incorporate the relevant principles of international law related to the conservation and management of living marine resources in accordance with MSC Principles 1 and 2.         Domestic management of the US North Pacific albacore fishery is by the Pacific Fishery Management Council (PFMC), established by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) for domestic management of US regional fisheries. Standards set forth in MSA and amendments, as well as US policies and other laws, e.g., NEPA, ESA, MMPA, and others etc., incorporate the relevant principles related to the conservation and management of living marine resources in accordance with MSC Principles 1 and 2.         b       Y         The management system incorporates or is subject by law to a mechanism for the resolution of legal disputes arising within the system, e.g., WCPFC Convention Anner II establishes authority to set up a Review Panel to review decisions made by the Commission to settle disputes among members of the Commission, and the IATTC Antigua Convention Part VII Article 25 addresses the settlement of disputes.         c       Y         A the domestic level, the MSA and amendments and other FMC bylaws provide measures for resolution of legal disputes.         A the domestic level, the MSA and amendments and other FMC bylaws provide measures for resolution of	SG	Issue		Justification/Rationale
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c       Y       Although the management authority or fishery may be subject to continuing court challenges, it is not indicating a disrespect or defiance of the law by repeatedly violating the same law or regulation necessary for the sustainability of the fishery. The auditors are not aware of any legal challenges and related binding judicial decisions at the domestic or international levels regarding North Pacific albacore.         d       Y       The management system has a mechanism to generally respect the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the objectives of MSC Principles 1 and 2. At the international level, WCPFC Convention Article 10 specifies that the needs of small developing States, territories, etc. whose economies, food supplies, and livelihoods are dependent of the exploitation of marine resources must be taken in to account, <u>inter alia</u> and Article 30 recognises the special requirements of developing states. IATTC provides a framework for working with developing countries through training and building technical capacity and cooperation.         At the domestic level the PFMC is mandated to observe the legal rights and customs of peoples dependent on fishing for food or livelihood. The laws and rights affecting the US North Pacific fishery and fishers are clearly defined through the				settement of disputes.
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affecting the US North Pacific fishery and fishers are clearly defined through the				
	Deer	ment: Poo	r Review	





PI	3.1.1	<ul> <li>The management system exists within an appropriate legal and/or customary framework which ensures that it:</li> <li>Is capable of delivering sustainable fisheries in accordance with MSC Principles 1 and 2;</li> <li>Observes the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood; and</li> <li>Incorporates an appropriate dispute resolution framework.</li> </ul>		
SG	Issue	Met? (Y/N)	Justification/Rationale	
			MSA, amendments to the MSA and other relevant Acts, and through case law developed through litigation.	
80	b	Y	The management system incorporates or is subject by law to a <b>transparent</b> <b>mechanism</b> for the resolution of legal disputes which is <b>considered to be effective</b> in dealing with most issues and that is appropriate to the context of the fishery. At the international level, the <i>Antigua Convention (Article XXVI)</i> and <i>WCPFC</i> <i>Convention (Article XXI)</i> specify that the IATTC and the WCPFC, respectively, shall promote transparency in the implementation of their respective <i>Conventions</i> in decision making procedures and other activities. In both the mechanisms are considered effective in dealing with most issues and are appropriate in the context of the US North Pacific albacore fishery. At the domestic level, the PFMC is mandated by law to conduct legal disputes in a	
			transparent manner. The US North Pacific albacore fishery has not be subject to legal dispute, however, experiences involving several other fisheries has demonstrated the mechanisms to be effective.	
	С	Y	The management system or fishery is attempting to comply in a timely fashion within binding judicial decisions arising from any legal challenges. The auditors are not aware of any legal challenges and related binding judicial decisions at the domestic or international levels regarding North Pacific albacore.	
	d	Y	The management system has a mechanism to <b>observe</b> _the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the objectives of MSC Principles 1 and 2. Both the international and domestic systems for management have mechanisms to observe_the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the objectives of MSC Principles 1 and 2.	
			At the international level WCPFC <i>Convention Article X</i> specifies the needs of small developing States, territories, etc. whose economies, food supplies, and livelihoods are dependent of the exploitation of marine resources must be taken in to account, <u>inter alia</u> , in developing criteria for allocation of TACs or total level of fishing effort or other management actions; <i>Article XXX</i> recognises the special requirements of developing states. The IATTC <i>Antigua Convention Part VI Article XXIII</i> provides specifies that Commission shall seek to adopt measures to assist developing countries fulfil their obligations under the <i>Convention</i> and enhance their ability to develop fisheries under their respective national jurisdictions and to participate in high seas fisheries on a sustainable basis.	
			At the domestic level, the PFMC is mandated by the MSA that conservation and management measures shall take into account the importance of fishery resources to fishing communities to provide for the sustained participation of, and minimize adverse impacts to such communities, consistent with conservation requirements.	
100	b	N	The management system incorporates or subject by law to a <b>transparent</b> mechanism for the resolution of legal disputes that is appropriate to the context of the fishery and has been <b>tested and proven to be effective</b> .	





PI 3.1.1		framev Is and Ob dej	nanagement system exists within an appropriate legal and/or cus vork which ensures that it: capable of delivering sustainable fisheries in accordance with MSC Prin d 2; oserves the legal rights created explicitly or established by custom of pendent on fishing for food or livelihood; and corporates an appropriate dispute resolution framework.	ciples 1
SG	Issue	Met? (Y/N)	Justification/Rationale	
			The management system at the international level incorporates tran- mechanisms in decision making processes and other activities. IATTC <i>Arti</i> of <i>Antigua Convention</i> outlines dispute settlement; WCPFC <i>Convention A</i> establishes the authority to set up a Review Panel to review decisions made Commission to settle disputes among members of the Commission. At the d level US policy and law, e.g., MSA amendments, NEPA, ESA, etc., measures for resolution of legal disputes.	<i>cle XXV</i> <i>Annex II</i> e by the lomestic provide
			be effective; at the domestic level the mechanism has been tested and effective in other fisheries. The fishery therefore doesn't fully meet this issue.	
	с	Y	The management system or fishery acts proactively to avoid legal disp rapidly implements binding judicial decisions arising from legal challenges. The auditors are not aware of any legal challenges and related binding	
			decisions at the domestic or international levels.	
	d	Y	The management system has a mechanism to <b>formally commit</b> to the legal created explicitly or established by custom of people dependent on fishing is and livelihood in a manner consistent with the objectives of MSC Principles. At the international level, both RFMOs observe rights created explicitly of dependent on fishing for food or livelihood. WCPFC <i>Convention Article X</i> is the needs of small developing States, territories, etc. whose economies supplies, and livelihoods are dependent of the exploitation of marine resource be taken in to account, inter alia, in developing criteria for allocation of T total level of fishing effort or other management actions; <i>Article XXX</i> recogn special requirements of developing states. IATTC <i>Antigua Convention Article XXIII</i> specifies that Commission shall seek to adopt measures to developing countries fulfil their obligations under the Convention and enhar ability to develop fisheries under their respective national jurisdictions participate in high seas fisheries on a sustainable basis.	for food 1 and 2. f people specifies es, food es must CACs or hises the <i>Part VI</i> to assist nee their and to
			At the domestic level, PFMC is mandated by the MSA that specific conservation and management measures shall take into account the import fishery resources to fishing communities to provide for the sustained partion, and minimize adverse impacts to such communities, consistent with conservative requirements.	tance of cipation
	Reference	es	WCPFC Convention, Antigua Convention, Magnuson-Stevens Fishery Const and management Act and amendments.	ervation
OVE	OVERALL PERFORMANCE INDICATOR SCORE: 95			
CON	CONDITION NUMBER (if relevant): N/A			



## Evaluation Table: PI 3.1.2

Lyun	lation 1 at		anagement system has effective consultation processes that are open to interested
PI	3.1.2		and affected parties. oles and responsibilities of organisations and individuals who are involved in the management process are clear and understood by all relevant parties
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are <b>generally understood</b> .
			• Organizations and individuals involved in the management process have been identified and their respective functions, roles and responsibilities explicitly defined and well understood for key areas of responsibility and interactions at the international level [IATTC <i>Antigua Convention Articles VI, VII, and X-XIII</i> ; WCPFC <i>Convention IX-XVI, and XXIII and XIV</i> ]; and at the domestic level [MSA and several amendments].
	b	Y	The management system includes consultation processes that obtain <b>relevant</b> <b>information</b> from the main affected parties, including local knowledge, to inform the management system.
			• The management system at both the international and domestic levels includes consultation processes that provides for all interested and affected parties to be involved at the domestic level.
			• At the international level the IATTC <i>Antigua Convention Article XVI</i> specifies that stakeholders including representatives of industry, NGOs, and representatives of member countries, and other interested bodies and individuals are included in the IATTC processes, may attend meetings, and actively participate in data collection; <i>Antigua Convention Annex 2</i> lists principles and criteria for the participation of observers at meetings of the IATTC. WCPFC <i>Convention Article XXII</i> provides that the Commission will consult, cooperate and collaborate with other relevant organizations, particularly those with related objectives and which can contribute to the attainment of the objective of the Convention. At the domestic level PFMC is mandated by the MSA to follow a transparent process for vetting domestic regulations and related actions that includes all interested stakeholders.
80	а	Y	<ul> <li>Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are explicitly defined and well understood for key areas of responsibility and interaction.</li> <li>Organizations and individuals involved in the management process have been</li> </ul>
			identified and their respective functions, roles and responsibilities explicitly defined and well understood for key areas of responsibility and interactions at the international [IATTC <i>Antigua Convention Articles VI, VII, and X – XIII;</i> WCPFC <i>Convention IX-XVI, XXXIII</i> and <i>XXIV</i> ] and at the domestic levels [MSA and several amendments].
		Y	The management system includes consultation processes that <b>regularly seek and</b> <b>accept relevant</b> information, including local knowledge. The management system demonstrates consideration of the information obtained.
			<ul> <li>The management system at both the international and domestic levels includes consultation processes that regularly seek and accept information including local knowledge and demonstrate consideration of the information obtained.</li> <li>At the international level the IATTC <i>Antigua Convention Article XVI</i> specifies that stakeholders including representatives of industry, NGOs, and representatives of member countries, and other interested bodies and individuals are included in the IATTC processes, may attend meetings, and actively participate in data collection; <i>Antigua Convention Annex 2</i> lists</li> </ul>
Docu	ment: Pee	Review	principles and criteria for the participation of observers at meetings of the er Template





PI 3.1.2			anagement system has effective consultation processes that are open to interested and affected parties. oles and responsibilities of organisations and individuals who are involved in the management process are clear and understood by all relevant parties
SG	Issue	Met? (Y/N)	Justification/Rationale
		Y	<ul> <li>IATTC. WCPFC <i>Convention Article XXII</i> provides that the Commission will consult, cooperate and collaborate with other relevant organizations, particularly those with related objectives and which can contribute to the attainment of the objective of the Convention.</li> <li>At the domestic level PFMC is mandated by the MSA to follow a transparent process for vetting domestic regulations and related actions that includes all interested stakeholders. Agendas for all PFMC meetings are published in advanced on the web and local newspapers.</li> <li>The consultation process provides opportunity for all interested and affected</li> </ul>
	c	Ŷ	parties to be involved.
			<ul> <li>The consultation process of the management systems at both the international and domestic levels provides opportunities for all interested and affected parties to be involved.</li> <li>At the international level the IATTC Antigua Convention Article XVI specifies that stakeholders including representatives of industry, NGOs, and representatives of member countries, and other interested bodies and individuals are included in the IATTC processes, may attend meetings, and actively participate in data collection; Antigua Convention Annex 2 lists principles and criteria for the participation of observers at meetings of the IATTC.WCPFC Convention Article XXII provides that the Commission will consult, cooperate and collaborate with other relevant organizations, particularly those with related objectives and which can contribute to the attainment of the objective of the Convention. Subject to Commission rules and procedures; and, are permitted to give oral presentations and distribute papers through the Secretariat. Agendas for all meetings related to consultative processes are published in advance on the respective RFMO websites and other media.</li> </ul>
100	a	Y	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are <b>explicitly defined and well understood for key areas</b> of responsibility and interaction.
			• At the international level the organizations and individuals involved in the management process have been identified and their respective functions, roles and responsibilities explicitly defined and well understood for key areas of responsibility and interactions by the respective <i>Conventions</i> of the RFMOs: IATTC <i>Antigua Convention Articles VI, VII</i> , and <i>X-XIII</i> ; WCPFC <i>Convention Articles IX-XVI</i> and XXIII-XXIV. At the domestic level, the functions, roles and responsibilities of the various elements of the PFMC are explicitly defined and well understood for key areas of responsibility and interaction as mandated by the MSA and amendments to the MSA.
	b	Y	The management system includes consultation processes that <b>regularly seek and</b> <b>accept relevant</b> information, including local knowledge. The management system demonstrates consideration of the information and <b>explains how it is used or not</b> <b>used</b> .





PI 3.1.2 Th		The re	anagement system has effective consultation processes that are open to int and affected parties. oles and responsibilities of organisations and individuals who are involved management process are clear and understood by all relevant parties	
SG	Issue	Met? (Y/N)	Justification/Rationale	
			<ul> <li>The management systems at both the international and domestic levels consultation processes that regularly seek and accept relevant info including local knowledge and demonstrate consideration of the info and explains how it is used or not used.</li> <li>At the international level the IATTC <i>Antigua Convention Article XVI</i> p for stakeholders including representatives of industry, NGC representatives of member countries, and other interested bod individuals to be included in the IATTC processes and attend meeting IATTC; stakeholders may also actively participate in data collect research involvement is limited as all stock assessments are carried secretariat staff; involvement of stakeholders is coordinated by the stat secretariat. <i>Antigua Convention Annex 2</i> lists principles and criteria participation of observers at meetings of the IATTC. WCPFC <i>Co. Article XXII</i> provides that the Commission will consult, cooper collaborate with other relevant organizations, particularly those with objectives and which can contribute to the attainment of the objective Convention.</li> <li>At the domestic level PFMC is mandated by the MSA and follows processes to regularly seek and accept relevant information, includi knowledge, and defines how it is or is not to be used</li> </ul>	rmation, provides bs, and ies and gs of the ion, but l out by ff of the for the <i>nvention</i> ate and a related es of the regular
	c	Y	<ul> <li>The consultation process provides opportunity and encouragement interested and affected parties to be involved, and facilitates their of engagement.</li> <li>The management system includes consultation processes that provide interested and affected parties to be involved at the domestic and interlevels.</li> <li>IATTC Antigua Convention Article XVI provides for stakeholders in representatives of industry, NGOs, and representatives of member co and other interested bodies and individuals to be included in the processes and attend meetings of the IATTC; stakeholders may also participate in data collection, but research involvement is limited as a assessments are carried out by secretariat. Antigua Convention Anne. principles and criteria for the participation of observers at meeting: IATTC. WCPFC Convention Article XXII provides that the Commiss consult, cooperate and collaborate with other relevant organ particularly those with related objectives and which can contribute attainment of the objectives of the Convention.</li> <li>At the domestic level, the PFMC follows a transparent process for domestic regulations and related actions that includes all ir stakeholders.</li> </ul>	s for all national necluding puntries, IATTC actively all stock plders is $x \ 2$ lists s of the tion will izations, e to the vetting necessed
OVE	OVERALL PERFORMANCE INDICATOR SCORE: 100			100
CON				

N/A

**CONDITION NUMBER (if relevant):** 



#### Evaluation Table: PI 3.1.3

	3.1.3	The r	nanagement policy has clear long-term objectives to guide decision-making that onsistent with MSC Principles and Criteria, and incorporates the precautionary approach
SG	Issue	Met? (Y/P/ N)	Justification/Rationale
60	a	Y	<ul> <li>Long-term objectives to guide decision-making, consistent with the MSC Principles and Criteria and the precautionary approach, are implicit within management policy</li> <li>Clear long-term objectives that guide decision-making at the international and domestic levels are consistent with MSC Principles and Criteria and the precautionary approach are explicit within and required by management policy at the international and domestic management levels.</li> <li>IATTC: <i>Antigua Convention Article IV</i> specifies that the application of the Precautionary Approach shall apply as described in the relevant provisions of the Code of Conduct and/or the 1995 UN Fish Stocks Agreement for the conservation, management, and sustainable use of fish stocks covered by the <i>Convention</i>.</li> <li>WCPFC: <i>Convention Article VI</i> specifies that the Precautionary Approach shall be followed and provides guidelines for doing so.</li> <li>PFMC: Precautionary management is a guiding theme in the PFMC HMS/FMP. Also, NMFS incorporated precautionary concepts to ensure compliance with the Sustainable Fisheries Act 1996 that includes three National Standards for conservation and management of fisheries in the United States [Darcy, G.H. and G.C. Matlok 1999].</li> </ul>
80	a	Y	<ul> <li>Clear long-term objectives that guide decision-making, consistent with MSC Principles and Criteria and the precautionary approach are explicit within management policy.</li> <li>Clear long-term objectives that guide decision-making, consistent with MSC Principles and Criteria and the precautionary approach, are explicit within and required by management policy at the international and domestic management levels.</li> <li>IATTC Antigua Convention Article IV specifies that the application of the Precautionary Approach shall apply as described in the relevant provisions of the Code of Conduct and/or the 1995 UN Fish Stocks Agreement, for the conservation, management, and sustainable use of fish stocks covered by the Convention.</li> <li>WCPFC Convention Article VI specifies that the Precautionary Approach shall be followed and provides guidelines for doing so.</li> <li>PFMC: Precautionary management is a guiding theme in the PFMC HMS/FMP. Also, NMFS incorporated precautionary concepts to ensure compliance with the Sustainable Fisheries Act 1996 that includes three National Standards for conservation and management of fisheries in the United States [Darcy, G.H. and G.C. Matlok 1999].</li> </ul>
100	а	Y	<ul> <li>Clear long-term objectives that guide decision-making, consistent with MSC Principles and Criteria and the precautionary approach, are explicit within and required by_management policy.</li> <li>Clear long-term objectives that guide decision-making, consistent with MSC Principles and Criteria and the precautionary approach, are explicit within and required by management policy at the international and domestic management levels.</li> <li>IATTC Antigua Convention Article IV specifies that the application of the Precautionary Approach shall apply as described in the relevant provisions of</li> </ul>



			nanagement policy has clear long-term objectives to guide decision-makin onsistent with MSC Principles and Criteria, and incorporates the precauti approach	
SG	Issue	Met? (Y/P/ N)	Justification/Rationale	
			<ul> <li>the Code of Conduct and/or the 1995 UN Fish Stocks Agreement, conservation, management, and sustainable use of fish stocks covered <i>Convention</i>.</li> <li>WCPFC <i>Convention Article VI</i> specifies that the Precautionary Approa be followed and provides guidelines for doing so.</li> <li>PFMC: Precautionary management is a guiding theme in the HMS/FMP. Also, NMFS incorporated precautionary concepts to compliance with the Sustainable Fisheries Act 1996 that includes three I Standards for conservation and management of fisheries in the Unite [Darcy, G.H. and G.C. Matlock 1999].</li> </ul>	l by the tch shall PFMC ensure National
ReferencesWCPFC Convention, Antigua Convention Amendments, Magnuson-Steven Conservation and management amendments, Darcy & Matlock 1999		Fishery		
OVE	OVERALL PERFORMANCE INDICATOR SCORE:100			100
CON	CONDITION NUMBER (if relevant): N/A			N/A



#### Evaluation Table: PI 3.1.4

PI	3.1.4		anagement system provides economic and social incentives for sustainable fishing and does not operate with subsidies that contribute to unsustainable fishing
SG	Issue	Met? (Y/P/ N)	Justification/Rationale
60	a	Y	<ul> <li>The management system provides for incentives that are consistent with achieving the outcomes expressed by MSC Principles 1 and 2.</li> <li>The management system at the international and domestic levels provide for incentives that are consistent with achieving outcomes expressed by MSC Principles 1 and 2. At the international level, fundamental duties of both RFMOs are to promote conservation, sustainability and optimal utilization of HMS fish stocks using science-based information. The IATTC and WCPFC are tasked with developing and adopting specific measures to promote these objectives, as detailed in the <i>Antigua Convention Articles</i> and <i>Convention Articles IV and VI</i>, respectively.</li> <li>At the domestic level the PFMC HMS/FMP details specific measures promoting sustainable fishing and the resulting stability and security for the fisheries helps to ensure that negative incentives do not arise.</li> <li>There are no subsidies in the US west coast albacore fishery.</li> </ul>
80	а	Y	<ul> <li>The management system provides for incentives that are consistent with achieving the outcomes expressed by MSC Principles 1 and 2, and seeks to ensure that perverse incentives do not arise.</li> <li>The management system at the international and domestic levels provide for incentives that are consistent with achieving outcomes expressed by MSC Principles 1 and 2. Fundamental duties of both RFMOs to promote conservation, sustainability and optimal utilization of HMS fish stocks are supported by science-based information. The IATTC and WCPFC are tasked with developing and adopting specific measures to promote these objectives, as detailed in the Antigua Convention Articles and Convention Articles IV and VI, respectively.</li> <li>At the domestic level the PFMC HMS FMP details similar specific measures. Sustainable fishing is promoted and the resulting stability and security for the fisheries helps to ensure that negative incentives do not arise.</li> <li>There are no subsidies in the US west coast North Pacific albacore fishery.</li> </ul>
100	a	Y	<ul> <li>The management system provides for incentives that are consistent with achieving the outcomes expressed by MSC Principles 1 and 2, and explicitly considers incentives in a regular review of management policy or procedures to ensure they not contribute to unsustainable fishing practices.</li> <li>The management system at both the international and domestic levels provides for incentives that are consistent with achieving the outcomes expressed by MSC Principles 1 and 2 and ensures that management policies do not contribute to unsustainable fishing practices.</li> <li>At the international level Scientific Committees established by the Conventions of each RFMO have duties which include reviews as needed of management policies to ensure that stocks managed by the respective RFMO are being managed using science-based information in a manner that promotes conservation, sustainability and optimal utilization.</li> <li>At the domestic level the PFMC HMS FMP Safe Report provides a regular review that explicitly considers incentives of the management policy to ensure that they do not contribute to unsustainable fishing practices.</li> </ul>
	Reference	es	WCPFC Convention; Antigua Convention; Magnuson-Stevens Fishery



PI 3.1.4 The			anagement system provides economic and social incentives for sustainable fishing and does not operate with subsidies that contribute to unsustainable fishing				
SG	Issue	Met? (Y/P/ N)	(Y/P/ Justification/Rationale				
Conservation and management Act and amendments; PFMC HMS/FMP							
OVERALL PERFORMANCE INDICATOR SCORE:							
CON	CONDITION NUMBER (if relevant): N/A						



#### Evaluation Table: PI 3.2.1

PI	3.2.1	The fis	shery has clear, specific objectives designed to achieve the outcomes expre MSC's Principles 1 and 2	ssed by
SG	Issue	Met? (Y/P N)	Justification/Rationale	
60	a	Y	<ul> <li>Objectives, which are broadly consistent with achieving the outcomes expression MSC's Principles 1 and 2, are implicit within the fishery's management system.</li> <li>The fishery exceeds this level of performance.</li> </ul>	
80	а	Y	<ul> <li>Short and long-term objectives, which are consistent with achieving the orexpressed by MSC's Principles 1 and 2, are explicit within the management system.</li> <li>The fishery exceeds this level of performance.</li> </ul>	
100	a	Y	<ul> <li>Well defined and measurable short and long-term objectives, wh demonstrably consistent with achieving the outcomes expressed by Principles 1 and 2, are explicit within the fishery's management system.</li> <li>The fishery management systems have clear, specific objectives desi achieve the outcomes expressed by MSC Principles 1 and 2 both international and domestic levels. At the international level the IAT WCPFC have clear, well-defined fishery management objectives, spectheir respective conventions, which promote outcomes expressed by P1 and 2.</li> <li>The IATTC's Antigua Convention entered into force on August 2 replaces the original convention signed in 1949 and substantially impr regulatory framework that governs IATTC and updates the legal frame accordance with UNCLOS, Agenda 21 and Rio Declaration, the Compliance Agreement, the Code of Conduct and the UNFSA It in the concepts of the Precautionary Approach in Article IV of the Convention, the Ecosystem Approach to Fisheries Management envise Articles II and VII of the Antigua Convention, and compatibility of man measures between high seas and Exclusive Economic Zones in Article Antigua Convention. IATTC management actions have included ecc effects of fishing; protecting biodiversity and promoting ecosyster approaches to management; and minimizing waste, pollution and imp both target and non-target or associated or dependent species.</li> <li>The WCPFC Convention has similar explicit statements.</li> <li>At the domestic level the PFMC HMS/FMP includes explicit, well short and long-term objectives which are consistent with achiev outcomes express by MSC Principles 1 and 2.</li> </ul>	MSC's igned to a at the 'TC and cified in rinciples 7, 2010 oves the ework in the FAO troduces <i>Antigua</i> saged in agement <i>V</i> of the osystem n based pacts on defined
	ReferencesWCPFC Convention, Antigua Convention, Magnuson-Stevens Fishery Conservation and Management Act and amendments, PFMC HMS FMP, AAFA website:  www.americanalbacore.com			
OVE	OVERALL PERFORMANCE INDICATOR SCORE: 100			100
CON	DITION N	NUMBE	R (if relevant):	N/A



#### Evaluation Table: PI 3.2.2

PI	3.2.2	The f	ishery-specific management system includes effective decision-making processes that result in measures and strategies to achieve the objectives
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	There are <b>some</b> decision-making processes in place that result in measures and strategies to achieve the fishery-specific objectives.
			• The fishery exceeds this level of performance.
	b	Y	<ul> <li>Decision-making processes respond to serious issues_identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take some account of the wider implications of decisions.</li> <li>The fishery exceeds this level of performance.</li> </ul>
80	a	Y	<ul> <li>There are established decision-making processes that result in measures and strategies to achieve the fishery-specific objectives.</li> <li>There are established decision-making processes at the international and domestic levels that result in measures and strategies to achieve the fishery-specific objectives.</li> <li>At the international level the Conventions of both RFMOs require that decision-making to be by consensus, with few exceptions, which are well-defined and explained, IATTC Antigua Convention Article IX and WCPFC Convention Article XX, respectively.</li> <li>At the domestic level, PFMC management decision-making processes are clearly outlined in the MSA and amendments and HMS/FMP.</li> </ul>
	b	Y	<ul> <li>Decision-making processes respond to serious and other important issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.</li> <li>Decision-making processes at both the international and domestic levels respond to serious and other important issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.</li> <li>Decision-making processes at both the international and domestic levels respond to serious and other important issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.</li> <li>For example, at the international level, each RFMO followed the precautionary approach and coordinated with each other in placing caps on the fishing capacity of Members, Cooperating Non-members, and Participating Territories whose fishing vessels harvest North Pacific albacore in their respective Convention Areas (IATTC <i>C-05-02</i> and WCPFC <i>CMM 2005-3</i>). Although the RFMOs operate by consensus, these actions were taken in a timely manner in response to findings and recommendations made by the ISC ALBWG (ref) using best available scientific information.</li> <li>At the domestic level, the PFMC undertook necessary actions in response to the measures taken by the RFMOs, for US vessels operating in the west coast North Pacific albacore fishery to comply with the RFMO regulations.</li> </ul>
	C	Y	<ul> <li>Decision-making processes use the precautionary approach and are based on best available information.</li> <li>The precautionary approach and use of best scientific evidence available are used in decision-making processes at the international level as specified for IATTC by <i>Antigua Convention Article IV</i> and <i>Article VII</i>, respectively; and for WCPFC by <i>Convention Articles V(c)</i> and <i>VI</i> and <i>V(b)</i>, respectively.</li> <li>The precautionary approach and use of best scientific information available are used in decision-making processes at the domestic level by PFMC as mandated by MSA amendments, US policy, etc., and by the HMS/FMP.</li> </ul>



PI	3.2.2	The f	ishery-specific management system includes effective decision-making pro that result in measures and strategies to achieve the objectives	ocesses
SG	Issue	Met? (Y/N)	Justification/Rationale	
	d	Y	<ul> <li>Explanations are provided for any actions or lack of action associated with a and relevant recommendations emerging from research, monitoring, evaluate review activity.</li> <li>Explanations are provided for any actions or lack of action associate findings and relevant recommendations emerging from research, more evaluation and review activity. Both RFMOs and the PFMC maintain assessable websites where meeting minutes, reports, and scientific reprosted and are freely available for download.</li> </ul>	tion and ed with hitoring, publicly orts are
100	b	N	<ul> <li>Decision-making processes respond to all issues identified in relevant r monitoring, evaluation and consultation, in a transparent, timely and a manner and take account of the wider implications of decisions.</li> <li>There are established decision-making processes at the internation domestic levels for responding to important issues.</li> <li>However, not all issues identified in relevant research, monitoring, evand consultation are addressed in a transparent, timely and adaptive mar take account of the wider implications of decisions, and so the fishery of meet this level of performance.</li> </ul>	adaptive nal and aluation ner and
	d	Y	<ul> <li>Formal reporting to all interested stakeholders describes how the mana system responded to findings and relevant recommendations emergin research, monitoring, evaluation and review activity.</li> <li>Formal reporting to all interested stakeholders describes how the mana systems at both the international and domestic levels responded to finding relevant communications emerging from research, monitoring, evaluation review activity. Both RFMOs and the PFMC maintain publicly as websites where meeting minutes, reports, and scientific reports are postare freely available for download.</li> </ul>	g from agement ngs and ion, and sessable
	References         WCPFC Convention, Antigua Convention, IATTC C-05-02, WCPFC CMM 2005- Magnuson-Stevens Fishery Conservation and management Act and amendmen PFMC HMS/FMP			
OVE	OVERALL PERFORMANCE INDICATOR SCORE:90			90
CON	DITION 1	NUMBE	R (if relevant):	N/A



#### **Evaluation Table: PI 3.2.3**

PI	3.2.3	Mon	itoring, control and surveillance mechanisms ensure the fishery's management measures are enforced and complied with
SG	Issue	Met? (Y/N)	Justification/Rationale
Art icle 60	a	Y	<ul> <li>Monitoring, control and surveillance <u>mechanisms</u> exist are implemented in the fishery under assessment and there is a reasonable expectation that they are effective.</li> <li>The fishery exceeds this level of performance.</li> </ul>
	b	Y	<ul> <li>Sanctions to deal with non-compliance exist and there is some evidence that they are applied.</li> <li>The fishery exceeds this level of performance.</li> </ul>
	С	Y	<ul> <li>Fishers are generally thought to comply with the management system for the fishery under assessment, including, when required, providing information of importance to the effective management of the fishery.</li> <li>The fishery exceeds this level of performance.</li> </ul>
80	a	Y	<ul> <li>A monitoring, control and surveillance system has been implemented in the fishery under assessment and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.</li> <li>Monitoring, control and surveillance mechanisms exist and are implemented in the fishery at the international and domestic levels under assessment and there is a reasonable expectation that they are effective.</li> <li>At the international level, the IATTC Antigua Convention Article XVIII specifies implementation, compliance and enforcement by parties, the WG on Compliance reviews compliance of vessels and reports issues identified to the Commission, and the Committee for Review of Implementation of Measures adopted by the Commission reviews monitors compliance with conservation and management measures. WCPFC Convention Article XXV establishes that each member of the Commission shall enforce the provisions of the Convention and any conservation and management measures issued by the Commission, Article XXVI establishes boarding and inspection procedures, Article XXVII establishes port-state inspection procedures which allows the port-state to prohibit landings and transhipment of catch and transhipment of catch taken through non-compliance, and Article XXIX outlines procedures for in-port and at-sea transhipment. Members of the WCPFC shall not grant a vessel authorization to fish if it is on the respective Convention's IUU vessel list. However, enforcement capabilities at the international levels are limited and the area of responsibility is huge.</li> <li>At the domestic level, compliance with US regulations and violations of these are regularly monitored through the NOAA Fisheries Enforcement Office, US Coast Guard, and NOAA General Council Office, and in some cases by the Department of Justice. Compliance includes marine safety requirements, as well as fishery regulation, and enforcement is supported by training programs.</li> </ul>
	b	Y	<ul> <li>Sanctions to deal with non-compliance exist, are consistently applied and thought to provide effective deterrence.</li> <li>Sanctions to deal with non-compliance exist, are consistently applied and are believed to provide effective deterrence. This is especially the case at the domestic level. Actions available include a comprehensive scale of warnings; fines; forfeiture of catch, permits, and vessels; and incarnation.</li> </ul>



PI 3.2.3		Monitoring, control and surveillance mechanisms ensure the fishery's management measures are enforced and complied with		
SG	Issue	Met? (Y/N)	Justification/Rationale	
	c	Y	<ul> <li>Some evidence exists to demonstrate fishers comply with the management system under assessment, including, when required, providing information of importance to the effective management of the fishery.</li> <li>Evidence exists to demonstrate that US North Pacific albacore fishers comply with the management system under assessment, including, when required, providing information of importance to the effective management of the fishery. There is ample evidence that US albacore troll and jig fishers comply with the management system, including fishers providing information of importance to the effective management of the fishery. There is ample evidence that US albacore troll and jig fishers comply with the management system, including fishers providing information of importance to the effective management of the fishery. Each distribution of importance to the effective management system, including fishers providing information of importance to the effective management of the fishery, e.g., daily logbook records, participation in conventional and electronic tagging programs, participation in collection of various data projects. Compliance reports are routinely prepared by the NOAA Fisheries Enforcement and NOAA General Council Offices and US Coast Guard and presented to the PFMC meetings.</li> </ul>	
	d	Y	There is no evidence of systematic non-compliance.	
			There is no evidence of systematic non-compliance by the US North Pacific albacore troll and jig fishery.	
100	a	N	<ul> <li>A comprehensive monitoring, control and surveillance system has been implemented in the fishery under assessment and has demonstrated a consistent ability to enforce relevant management measures, strategies and/or rules.</li> <li>Comprehensive monitoring, control and surveillance mechanisms exist and are implemented in the fishery at the levels under assessment and there is a reasonable expectation that they are effective. However, monitoring is not comprehensive at the international level. As such, the fishery cannot meet this level of performance.</li> <li>At the international level, IATTC Antigua Convention Article XVIII specifies implementation, compliance and enforcement by parties, the WG on Compliance reviews compliance of vessels and reports issues identified to the Commission, and the Committee for Review of Implementation of Measures adopted by the Commission reviews monitors compliance with conservation and management measures. WCPFC Convention Article XXV establishes that each member of the Commission shall enforce the provisions of the Convention and any conservation and management measures issued by the Commission, Article XXVI establishes boarding and inspection procedures, Article XXVII establishes port-state inspection procedures which allows the port-state to prohibit landings and transhipment of catch and transhipment of catch taken through non-compliance, and Article XXIX outlines procedures for in-port and at-sea transhipment. Members of both RFMOs shall not grant a vessel authorization to fish if it is on the respective Convention's IUU vessel list.</li> <li>At the domestic level, compliance with US regulations and violations of these are regularly monitored through the NOAA Fisheries Enforcement Office, US Coast Guard, and NOAA General Council Office, and in some cases by the Department of Justice. Compliance includes marine safety requirements, as well as fishery regulation, and enforcement is supported by training programs.</li> </ul>	
	b	N	<ul> <li>Sanctions to deal with non-compliance exist, are consistently applied and demonstrably provide effective deterrence.</li> <li>Sanctions to deal with non-compliance exist, are consistently applied and demonstratively provide effective deterrence. This is especially the case at the domestic level. Actions available include a comprehensive scale of warnings; fines; forfeiture of catch, permits, and vessels; and incarnation. Sanctions exist</li> </ul>	



PI	PI 3.2.3		Monitoring, control and surveillance mechanisms ensure the fishery's management measures are enforced and complied with			
SG	Issue	Met? (Y/N)	Justification/Rationale			
			at the international level, however, due to the huge geographic area fisheries surveillance it is difficult to conclude that they demonstrably effective deterrence. As such, the fishery does not meet this l performance.	provide		
	с	Y	There is a <b>high degree of confidence</b> that fishers comply with the many system under assessment, including, providing information of importance effective management of the fishery.			
			• There is a high degree of confidence that fishers comply with the many system under assessment, including providing information of importance effective management of the fishery. Also, there is ample evidence albacore pole and troll fishers comply with the management system, in fishers providing information of importance to the effective management fishery, e.g., daily logbook records, participation in conventional and el tagging programs, participation in collection of various data proj addition, excellent record exists of the fishers providing reports of IUU activities and gillnet-marked fish to US Coast Guard, NMFS enfo officers, and other authorities.	that US ncluding nt of the ectronic ects. In		
	References         WCPFC Convention, Antigua Convention, HMS FMP and Compliance Gui posted on the NMFS SWR website at: <u>http://swr.nmfs.noaa.gov</u>			e Guide		
OVE	RALL PE	RFORM	IANCE INDICATOR SCORE:	90		
CON	CONDITION NUMBER (if relevant): N/A			N/A		



#### Evaluation Table: PI 3.2.4

PI	3.2.4	The f	ishery has a research plan that addresses the information needs of management
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	<b>Research</b> is undertaken, as required, to achieve the objectives consistent with MSC's Principles 1 and 2.
			• The fishery exceeds this level of performance.
	b	Y	Research results are <b>available</b> to interested parties.
			• At both the international and domestic levels research results are readily available to interested parties. All research results are presented at meetings of the respective organization and/or sub-group and are posted on freely available websites available for download.
80	a	Y	A <b>research plan</b> provides the management system with a strategic approach to Prior t research and <b>reliable and timely information</b> sufficient to achieve the objectives consistent with MSC's Principles 1 and 2.
			<ul> <li>Research is undertaken to achieve the objectives consistent with MSC Principles 1 and 2 at the international and domestic levels.</li> <li>At the international level, the IATTC scientific activities are planned and prioritised by the Director and conducted mostly by the permanent scientific staff, with review provided by the Scientific Advisory Committee as established by <i>Antigua Convention Annex IV</i>. WCPFC strategic planning for albacore research is the responsibility of the ISC ALBWG which reports to the Northern Committee of the WCPTC. To support robust science within the ISC there is additional review by the Scientific Committee and external peer review (WCPFC-NC6/WP-05). The IATTC collaborates with the ISC on research, stock assessment, and other related activities related to North Pacific albacore and other species in the northern area.</li> <li>Strategic planning for domestic albacore research is guided by the program planning by the ISC ALBWG; US scientists are members of the ALBWG and play key leadership roles. The HMS/Advisory Committee and HMS/ Management Team are involved in identifying and developing research projects in support of domestic management of the North Pacific resource by the PFMC; the PFMC/Science and Statistical Committee play a review role.</li> </ul>
	b	Y	Research results are disseminated to all interested parties in a timely_fashion.         • The fishery exceeds this level of performance.
100	a	N	A <b>comprehensive research plan</b> provides the management system with a coherent
100			<ul> <li>and strategic approach to research across P1, P2 and P3, and reliable and timely information sufficient to achieve the objectives consistent with MSC's Principles 1 and 2.</li> <li>The research plan is not fully comprehensive, and so the fishery cannot meet this level of performance.</li> </ul>
	b	Y	<ul> <li>Research plan and results are disseminated to all interested parties in a timely fashion and are widely and publicly available.</li> <li>Research plan and results are disseminated to all interested parties in a timely</li> </ul>
			fashion and are widely and publicly available. Research results are disseminated to all interested parties in a timely fashion at the international and domestic
Deer	manti Daai	Deview	levels of the management system. All research results and related topics are



	posted on the respective RFMO and the PMFC websites, and are wide publicly available for download. Many of the research results are also public in peer reviewed scientific journals and as government reports.	•	
References	WCPFC-NC6/WP-05		
OVERALL PERFORMANCE INDICATOR SCORE:     90			
CONDITION NUMBER (if relevant): N/A			



#### **Evaluation Table: PI 3.2.5**

		There	is a system of monitoring and evaluating the performance of the fishery-specific
PI	3.2.5	m	management system against its objectives
			nere is effective and timely review of the fishery-specific management system
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	The fishery has in place mechanisms to evaluate <b>some</b> parts of the management system.
			• The fishery exceeds this level of performance.
	b	Y	The fishery-specific management system is subject to <b>occasional internal</b> review.
			• The fishery exceeds this level of performance.
80	a	Y	The fishery has in place mechanisms to evaluate key parts of the management system
			• The fishery has in place mechanisms to evaluate key parts of the management system at the international and domestic levels.
			• At the international level this evaluation may occur at numerous points in both RFMOs. For the WCPFC this includes 1) Scientific Committee with
			representatives of the Oceanic Fisheries Program of the Pacific Community,
			the IATTC, and frequently other scientific experts; 2) the Technical and Compliance Committee; 3) ISC Albacore Working Group and Northern
			Committee; 3) testimony received from stakeholders at WCPFC meetings. For the IATTC this includes1) Scientific Advisory Committee; 2) Committee
			for the Review of Implementation of Measures; 3) external scientific experts as
			needed; 4) testimony received from stakeholders at IATTC meetings. At the domestic level this includes several PFMC committees: 1) SSC; 2)
			HMS/Management Team; 3) HMS/Advisory Subpanel; 4) NMFS albacore fisheries scientists on ISC Albacore Working Group; 5) testimony received
			from stakeholders at PMFC meetings.
	b	Y	The fishery-specific management system is subject to regular internal and
			occasional external review.
			• The fishery-specific management system is subject to regular internal and occasional external review at the international and domestic levels.
			<ul> <li>At the international level, the scientific system supporting the management is</li> </ul>
			subject to numerous internal and external reviews including, but not limited to:
			1) those by the Scientific Committee established by WPCFC <i>Convention Article</i>
			<i>XII</i> with representatives of the Oceanic Fisheries Program of the Pacific Community, the IATTC, and frequently other scientific experts to review stock
			assessments, status of target, non-target and associated stocks, and scientific
			information and advice that may be provided by the Commission; 2) the Technical and Compliance Committee established by <i>Convention Article XIV</i>
			provides the Commission with information, technical advice, and
			recommendations related to the implementation and compliance with Conservation and Management Measures (CMMs); 3) <i>Convention Article XIII</i>
			provides for the Commission to engage external scientific experts to carry out
			periodic peer reviews of scientific information and advice provided by the Commission; 4) Members transmit to the Commission an annual statement of
			compliance measures, including imposition of sanctions it has taken for any
			violations; 5) the business and meetings of the WCPFC are transparent and
			conducted annually and as a consequence, the status of conservation and management objectives are the subject of review of public opinion and
			subsequent political ramifications; and 6) scientific advice and review specific
			to North Pacific albacore are provided by the ISC to the Northern Committee.





	References       WCPFC Convention, Antigua Convention, IATTC and WCPFC MOU, IATTC stock status report, ISC science reviews, PFMC HMS/FMP, SSC science reviews for PFMC, PFMC SAFE Reports.			
	b	N	<ul> <li>The fishery-specific management system is subject to regular internexternal review.</li> <li>The fishery-specific management system is subject to regular internal review domestic level, but only occasional external review at the international Therefore, the fishery does not meet this level of performance for this issue.</li> </ul>	eview at w at the al level.
100	a	N	<ul> <li>The fishery has in place mechanisms to evaluate all parts of the mana system.</li> <li>The fishery has in place mechanisms to evaluate all parts of the mana system, except those related to control rules and reference points although they have been investigated and specific recommendation mad ISC ALBWG, have yet to be adopted by the RFMOs. The PFMC I formally requested that the U.S. delegation push for the adoption of app reference points for all managed stocks in the WCPFC by 2014. On ba is considered that the fishery does not meet the SG 100 level of perform this scoring issue.</li> </ul>	agement , which le by the has also propriate lance, it
			<ul> <li>The IATTC also has numerous internal and occasional external including, but not limited to: 1) comprehensive review function responsibilities of the Scientific Advisory Committee (established Antigua Convention Article XI) are set forth in Annex 4 of the Convention; 2) review functions and responsibilities of the Committee Review of Implementation of Measures (established under Antigua Convention, Commission may engage external scientific experts to carry out perior reviews of scientific information and advice provided by the Commissian and 4) the business and meetings of the IATTC are transparent and co annually and as a consequence, the status of conservation and mana objectives are the subject of review of public opinion and subsequent ramifications.</li> <li>At the domestic level, the scientific system supporting management PFMC is also subject to numerous internal and external reviews include not limited to: 1) those conducted by the SSC; 2) the HMS/FMP SAFI provided for initial and final decision making on the need for new specifications and management measures; 3) peer review by outside exspecific management actions and particularly controversial issues; 4) including the HMS/FMP, are subject to NMFS oversight; and 5) external oversight of the Fishery Management Councils is provided Secretary of Commerce.</li> </ul>	ons and d under Antigua e for the <i>nvention</i> ; 3) the dic peer on may; onducted agement political t by the ling, but E report harvest sperts of ) FMPs, ultimate



# **Appendix 2: Conditions**

Table 12: Condition 1

Performance Indicator	PI 1.1.2: Limit and target reference points are appropriate for the stock
Score	70
Rationale	<ul> <li>SG60:</li> <li>Generic limit and target reference points are based on justifiable and reasonable practice appropriate for the species category.</li> <li>SG 80:</li> <li>Reference points are appropriate for the stock and can be estimated.</li> <li>The limit reference point is set above the level at which there is an appreciable risk of impairing reproductive capacity.</li> <li>The target reference point is such that the stock is maintained at a level consistent with B<sub>MSY</sub> or some measure or surrogate with similar intent or outcome.</li> <li>Key low trophic level species, the target reference point takes into account the ecological role of the stock.</li> <li>SG100:</li> <li>The limit reference point is such that the stock is maintained at a level consistent with B<sub>MSY</sub> or some measure or surrogate with there is an appreciable risk of impairing reproductive capacity following consideration of precautionary issues.</li> <li>The target reference point is such that the stock is maintained at a level consistent with B<sub>MSY</sub> or some measure or surrogate with similar intent or outcome, or a higher level, and takes into account relevant precautionary issues such as the ecological role of the stock with a high degree of</li> </ul>
	certainty. A variety of reference points have been considered for the North Pacific albacore stock, and analyses show that the stock is performing well. However, the existing management benchmarks are implicit only. This means that the fishery cannot meet the SG 80 level of performance, although the fishery scores 70 for this Performance Indicator.
Condition	By the end of the fourth year of certification, the SG 80 scoring requirements above must be met in full. This will be achieved if the limit reference point is set above the level at which there is an appreciable risk of impairing reproductive capacity, and if the target reference point is such that the stock is maintained at a level consistent with $B_{MSY}$ or some measure or surrogate with similar intent or outcome.
Milestones	<ul> <li>Year 1:</li> <li>In conjunction with Condition 2, evidence should be provided that AAFA is working actively through the PFMC and US RFMO Delegations to promote the adoption by the relevant RFMOS of appropriate target and limit reference points (or measures/surrogates with similar intent) for North Pacific albacore tuna.</li> </ul>





	Voor 2
	<ul> <li>Year 2:</li> <li>In conjunction with Condition 2, evidence should be provided of AAFA's continued promotion through the PFMC and US RFMO Delegations of the adoption by the relevant RFMOs of appropriate target and limit reference points (or measures/surrogates with similar intent) for North Pacific albacore tuna.</li> <li>Year 3:</li> <li>Evidence of consideration by the relevant RFMOs of appropriate target and limit reference points (or measures/surrogates with similar intent) for North Pacific albacore tuna.</li> </ul>
	<ul> <li>Pacific albacore tuna should be provided.</li> <li>Year 4:</li> <li>Evidence should be provided that appropriate target and limit reference points (or measures/surrogates with similar intent) for North Pacific albacore tuna are adopted by the relevant RFMOs.</li> </ul>
Client action plan	MSC PI 1.1.2 - Target and limit reference points
	• In the first year following grant of recertification, and thereafter as necessary, AAFA will work actively through the PFMC and the US delegations to the IATTC and WCPFC to promote the development and determination of appropriate target and limit reference points (or measures or surrogates with similar intent or outcome) for the North Pacific albacore tuna stock. These efforts will be aligned with AAFA's support for appropriate measures to increase compliance with conservation and management measures of the appropriate RFMOs.
	• In the second year following grant of recertification, and thereafter as necessary, AAFA will work actively through the PFMC and the US delegations to the IATTC and WCPFC to promote the adoption of appropriate target and limit reference points (or measures or surrogates with similar intent or outcome) for the North Pacific albacore tuna stock.
	• In the third year following grant of recertification, and thereafter as necessary, AAFA will work actively toward having the IATTC and WCPFC (or their designated bodies) expressly consider appropriate target and limit reference points (or measures or surrogates with similar intent or outcome) for the North Pacific albacore tuna stock.
	• In the fourth year following grant of recertification, and thereafter as necessary, AAFA will work actively toward having the IATTC and WCPFC adopt appropriate target and limit reference points (or measures or surrogates with similar intent or outcome) for the North Pacific albacore tuna stock.
	• In accordance with these actions, AAFA will report on efforts to explore appropriate opportunities with other tuna fisheries, associations, or organizations with complimentary objectives.
Consultation on condition	This condition requires action to be taken by a body other than AAFA, with the required outcome being that the RFMOs adopt appropriate reference points (or measures/surrogates with similar intent) for North Pacific albacore. This will come about through political and management dialogue between country representatives, rather than through a simple series of steps that can be agreed prior to certification.



As such, AAFA has been and will need to continue working with relevant US regional and national managers in order to generate support for meeting the requirements of this condition. It may be noted that the IATTC and WCPFC staffs have been kept informed of AAFA's progress through the certification process, and that AAFA has been developing links in to the RFMO process for several years.

In meeting CR requirements to show evidence that the relevant bodies have been consulted (MSC CR 27.11.3) and that funding and/or resources are in place to address Conditions (MSC CR 27.11.4), IMM is satisfied that the PFMC and US Delegations to the RFMOs are engaged in improving the management of the fishery, that the necessary research budgets are in place to address the work, and that meetings will be scheduled and held as required. Mr. Rodney R. McInnis, Regional Administrator for NMFS, has also supplied a letter of support for the AAFA Action Plan (included as Appendix 6). As such, certification can be awarded.

#### Table 13: Condition 2

Performance Indicator	1.2.2: There are well defined and effective harvest control rules in place
Score	60
Rationale	SG60:
	• Generally understood harvest rules are in place that are consistent with the harvest strategy and which act to reduce the exploitation rate as limit reference points are approached.
	• There is some evidence that tools used to implement harvest control rules are appropriate and effective in controlling exploitation.
	SG 80:
	• Well defined harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.
	• The selection of the harvest control rules takes into account the main uncertainties.
	• Available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the harvest control rules.
	SG100:
	• Well defined harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.
	• The design of the harvest control rules takes into account a wide range of uncertainties.
	• Evidence clearly shows that the tools in use are effective in achieving the exploitation levels required under the harvest control rules.



	There is a general understanding that a harvest control rule for North Pacific albacore tuna will be implemented when the stock approaches or falls below the MSY point, based around controlling fishing effort and capacity. However, the precise point when action will be taken and exactly what action will be taken is not defined. This means that the fishery cannot meet the SG 80 level of performance, although the fishery scores 60 for this Performance Indicator.
Condition	By the end of the fourth year of certification, the SG 80 scoring requirements above must be met in full. This will be achieved if well defined harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached, the selection of the harvest control rules takes into account the main uncertainties, and available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the harvest control rules.
Milestones	<ul> <li>Year 1:</li> <li>In conjunction with Condition 1, evidence should be provided that AAFA is working actively through the PFMC and US RFMO Delegations to promote the adoption by the relevant RFMOs of an appropriate harvest control rule for North Pacific albacore tuna.</li> </ul>
	<ul> <li>Year 2:</li> <li>In conjunction with Condition 1, evidence should be provided of AAFA's continued promotion through the PFMC and US RFMO Delegations of the adoption by the relevant RFMOs of an appropriate harvest control rule for North Pacific albacore tuna.</li> <li>Year 3:</li> </ul>
	<ul> <li>Evidence of consideration by the relevant RFMOs of an appropriate harvest control rule for North Pacific albacore tuna should be provided.</li> <li>Year 4:</li> <li>Evidence should be provided that an appropriate harvest control rule for</li> </ul>
Client action	North Pacific albacore tuna is adopted by the relevant RFMOs.
plan	<ul> <li>MSC PI 1.2.2 - Well-defined and effective harvest control rules</li> <li>In the first year following grant of recertification, and thereafter as necessary, AAFA will work actively through the PFMC and the US delegations to the IATTC and WCPFC to promote the development and determination of an appropriate harvest control rule that applies uniformly and equitably to all fishery mortality of North Pacific albacore tuna stock.</li> </ul>
	• In the second year following grant of recertification, and thereafter as necessary, AAFA will work actively through the PFMC and the US delegations to the IATTC and WCPFC to promote the consideration toward adoption of such an appropriate harvest control rule for North Pacific albacore tuna stock.
	• In the third year following grant of recertification, and thereafter as necessary, AAFA will work actively toward having the IATTC and WCPFC (or their designated bodies) expressly consider such an appropriate harvest control rule for North Pacific albacore tuna stock.
	• In the fourth year following grant of recertification, and thereafter as necessary, AAFA will work actively toward having the IATTC and WCPFC adopt such an





	<ul> <li>appropriate harvest control rule for North Pacific albacore tuna stock.</li> <li>In accordance with these actions, AAFA will report on efforts to explore appropriate opportunities with other tuna fisheries, associations, or organizations with complimentary objectives.</li> </ul>
Consultation on condition	This condition requires action to be taken by a body other than AAFA, with the required outcome being that the RFMOs adopt appropriate harvest control rules for North Pacific albacore. This will come about through political and management dialogue between country representatives rather than through a simple series of steps that can be agreed prior to certification. As such, AAFA has been and will need to continue working actively with relevant US regional and national managers in order to generate support for meeting the requirements of this condition. It may be noted that the IATTC and WCPFC staffs have been kept informed of AAFA's progress through the certification process, and that AAFA has been developing links in to the RFMO process for several years. In meeting CR requirements to show evidence that the relevant bodies have been consulted (MSC CR 27.11.3) and that funding and/or resources are in place to address Conditions (MSC CR 27.11.4), IMM is satisfied that the PFMC and US Delegations to the RFMOs are engaged in improving the management of the fishery, that the necessary research budgets are in place to address the work, and that meetings will be scheduled and held as required. Mr. Rodney R. McInnis, Regional Administrator for NMFS, has also supplied a letter of support for the AAFA Action Plan (included as Appendix 6). As such, certification can be awarded.



## Appendix 3: Assessment advertisement placed in the San Diego Daily Tribune

## CERTIFICATE OF PUBLICATION

Rob Blyth-Skyrme Ichthy Marine Ecological Consulting Incorporated 328 Dalene Way, #1 HONOLULU HI 96821

#### IN THE MATTER OF

#### Marine Stewardship Council



Marine Stewardship Council Certification American Albacore Fishing Association (AAFA) North Pacific Albacore Pole & Line and Troil/Jig Jishery, and South Pacific Albacore Troil Fishery.

Intertok Moody Marine Ltd are currently undertaking an assessment of the above tisheries sgainst the Marine Stewardship Council's Principles and Criteria tor Sustainable Fishing. We would welcome the viows of interested parties on the suitability of these tisheries for certification. Please forward any comments to: Dr. Rob Blyth-Skyrme, Intertek Moody Marine Ltd. Tel: +1 808 351 0050, E-mail: rob@lothlysmarine.com. Please enite that a template for stakeholder input has been provided by the Marine Stewardship Council, and is available at: http://www.msc.om/documsints/gatcertifiedistakeholders

## CASE NO.

I, Marcela Aguayo, am a citizen of the United States and a resident of the county aforesaid; I am over the age of eighteen years, and not party to or interested in the above entitled matter. I am the principal clerk of the San Diego Daily Transcript, a newspaper of general circulation, printed and published daily, except on Saturdays and Sundays, in the City of San Diego, County of San Diego and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of San Diego, State of California, under the date of January 23, 1909, Decree No. 14894; and the

#### **Public Notice**

is a true and correct copy of which the annexed is a printed copy and was published in said newspaper on the following date(s), to wit:

## September 26, 27, 28

I certify under penalty of perjury that the forgoing is true and correct.

Dated at San, Diego, California this September 28, 2011 00  $\cap$ Signature



# Appendix 4: Assessment advertisement placed on the MSC website

### American Albacore Fishing Association North Pacific Albacore Pole & Line and Troll/Jig Fishery

# MSC Certification: 4<sup>th</sup> Surveillance Audit MSC Certification: Re-Assessment

#### **Certification Body: Intertek Moody Marine**

#### Site Visit

This fishery is now entering the 'information gathering' stage of the  $4^{th}$  surveillance audit and reassessment against the MSC *Principles and Criteria for Sustainable Fishing*. A key purpose of this stage is to collect information on the fishery and speak to stakeholders with an interest in the fishery under audit and assessment. The assessment team will therefore convene in San Diego over the period  $26^{th} - 28^{th}$  October 2011, when we aim to hold face-to-face meetings with stakeholders, or to arrange conference telephone/skype calls if preferred.

Stakeholders who previously submitted comments on this fishery have been contacted directly, but MSC procedure allows stakeholders 30 days notice of a site visit and 5 days for MSC to post the notice on the MSC website. The  $26^{th} - 28^{th}$  October 2011 is within 30 days of this notification, and so alternative dates for stakeholders to speak with the assessment team could be arranged for the  $23^{rd} - 24^{th}$  November 2011. Again, and for the convenience of all parties, stakeholders can also make their submissions to the assessment team via email or telephone/skype calls.

If you have any information on this fishery that you feel should be considered in the assessment, please advise us of:

- a) your name and contact details
- b) your association with the fishery
- c) the issues you would like to discuss (in order for us to arrange appropriate representation)
- d) when you would like to meet

We will then be in touch.

Should you wish to obtain further information on the Marine Stewardship Council, this is available on their web site at <a href="http://www.msc.org">http://www.msc.org</a>. The MSC has also produced a template for stakeholder input, which is available from their web site here: <a href="http://www.msc.org/documents/scheme-documents/forms-and-templates/msc-template-for-stakeholder-input-into-fishery-assessments/view">http://www.msc.org/documents/scheme-documents/forms-and-templates/msc-template-for-stakeholder-input-into-fishery-assessments/view</a>. The assessment team will, though, consider all points, however they are raised.

As a certification body, Intertek Moody Marine has dispute resolution procedures available should these prove necessary.

Yours,

Dr. Rob Blyth-Skyrme Lead Assessor E-mail: rob@ichthysmarine.com Tel: +1 808 351 0050

> Intertek Moody Marine Merlin House Stanier Way The Wyvern Business Park Derby. DE21 6BF



# Appendix 5: Harmonisation check against relevant MSC-certified fisheries

**Table 14:** Harmonisation review for those Performance Indicators where a score of 15 points or more difference between the AAFA and WFOA or NZ scores is proposed.

PI	WFOA (certified 2010)	NZ (certified 2011)	AAFA North Pacific (proposed)	Key Differences
1.1.1	80	100	100	There is a high degree of certainty, thereby meeting the SG100 level.
1.1.2	75	75	70	N/a
1.1.3	n/a	n/a	n/s	N/a
1.2.1	95	80	85	N/A
1.2.2	80	60	60	There is only an implicit control rule in place, so meeting only the SG60 level.
1.2.3	100	80	100	A comprehensive range of information is considered to be available.
1.2.4	100	85	95	N/a
2.1.1	100 / 90	90	100	N/a
2.1.2	100	95	100	N/a
2.1.3	100	85	95	N/a
2.2.1	100	85	100	N/a
2.2.2	100	80	90	N/a
2.2.3	90	80	80	N/a
2.3.1	100	85	100	N/a
2.3.2	85	95	85	N/a
2.3.3	80	80	80	N/a
2.4.1	100	100	100	N/a
2.4.2	100	100	100	N/a
2.4.3	100	100	100	N/a
2.5.1	100	95	100	N/a
2.5.2	100	80	100	The HMS and CPS Fishery Management Plans meet the SG100 level.
2.5.3	100	80	100	The information is simply considered to meet the higher SG100 level.
3.1.1	90	95	95	N/a
3.1.2	100	95	100	N/a
3.1.3	100	80	100	Long-term objectives are explicit and required, so meeting the SG100 level.
3.1.4	80	80	100	International and US domestic reviews are considered to meet the SG100 level.
3.2.1	100	70	100	There was no FMP in place for the NZ fishery, but the US fishery has an FMP.
3.2.2	95	90	90	N/a
3.2.3	95	90	90	N/a
3.2.4	90	80	90	N/a
3.2.5	80	80	80	N/a



# **Appendix 6: NMFS letter of support for AAFA actions**



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802-4213

OCT -4 2012

Ms. Natalie Webster Director of Operations American Albacore Fishing Association 4364 Bonita Road, #311 Bonita, California 91902

Dear Ms. Webster:

This letter responds to the American Albacore Fishing Association's (AAFA) request for support of its action plans to meet conditions associated with its re-assessment for sustainable fishery certifications by the Marine Stewardship Council. NOAA's National Marine Fisheries Service (NOAA Fisheries) has reviewed AAFA's action plans proposed over the course of the certification. The agency is pleased that AAFA recognizes the importance of and supports efforts to develop biological reference points and appropriate harvest control rules that would apply to all fishery mortality for both the North Pacific and South Pacific albacore stocks. The agency welcomes AAFA's proposal to work cooperatively through the U.S. delegations to the Inter-American Tropical Tuna Commission, the Western Central Pacific Fisheries Commission, and the Pacific Fishery Management Council to promote the development and adoption of appropriate reference points and control rules. These actions are key to the development of a precautionary-based management framework for both albacore stocks.

Sincerely,

Rochey RM Jun

Rodney R. McInnis Regional Administrator





# **Appendix 7: Initial letter from the World Wildlife Fund**



**World Wildlife Fund Fisheries** 1250 24<sup>th</sup> St. NW Washington, DC 20037-1193 Main Phone: 202-293-4800 Fax: 202-223-6971

worldwildlife.org

27 October, 2011

Dr. Rob Blyth-Skyrme Intertek Moody Marine Merlin House, Stanier Way Wyvern Business Park Derby DE21 6BF UK

> Subject: American Albacore Fishing Association (AAFA) North Pacific Albacore Pole & Line and Troll/Jig Fishery, and American Albacore Fishing Association (AAFA) South Pacific Albacore Pole & Line and Troll/Jig Fishery

Dear Dr. Blyth-Skyrme:

WWF welcomes the opportunity to engage as a stakeholder in the assessment for re-certification of the AAFA North and South Pacific albacore pole & line and troll/jig fisheries. We have the following concerns regarding the re-assessments:

**1. Stock Status**. Some of the Principle 1 (P1) indicators are not met by any of the regional fishery management organizations (RFMOs) for tuna, including the Inter-American Tropical Tuna Commission (IATTC) and the Western and Central Pacific Fisheries Commission (WCPFC), which are responsible for the management of the North Pacific and South Pacific albacore stocks. For example, while there is an implicit reference point in the treaties establishing these two RFMOs, it is not precautionary, nor is it adopted formally by the RFMOs, nor is it explicitly designated as either the target or limit reference point. These are required in order for a fishery to meet the MSC Standard. WWF is aware that in the case of the WCPFC and North Pacific albacore stock that an interim working reference point has been used as a proxy for BMSY, but again this does not meet the stringent MSC requirement of having two precautionary reference points, both target and limit. In addition, there are similar shortcomings against the FAM for a harvest control rule tied explicitly to the reference points and an over-arching specific fishery management plan for the stocks. There are other less obvious P1 deficiencies that stem from the RFMOs' management that WWF looks forward to reviewing in the draft assessment reports.

**2. Previous Conditions.** The current certifications for these two stocks were based on one or more conditions. WWF believes that, based on its review of the records available to it and knowledge of the actions of the client, these conditions have not been met. WWF's information may be incomplete and it looks forward to reviewing material presented by the client as a basis for moving forward into recertification. WWF recognizes that the formal MSC guidelines with regard to conditions and, indeed,



the FAM itself have been substantially strengthened since the time of AAFA's initial certification (i.e., FAM v.2 and TAB Directive 033). However, even though the current conditions for the two units of certification (UoCs) are not articulated as explicitly as is now required by the MSC, the conditions as stated – and the spirit of the MSC standard – were not met. Looking forward, should the client again be certified with conditions, WWF points out that the conditions imposed on the New Zealand albacore fishery serve as a good example for tuna fisheries, especially because they require the firm official commitment of the government of New Zealand to represent the fishery at the WCPFC since the RFMO is comprised of sovereign governments and affords little to no direct stakeholder involvement. WWF believes that a similar commitment from the UoC's national government should be required in order to meet conditions that involve changes at the RFMO level.

**3. Bait fishes.** For the pole & line component of the fishery, bait fishes are required for the fishery to even exist much less be sustainable, and therefore are a target species that should be included in the UoCs and assessed under P1. Furthermore, WWF is opposed to assessing impacts on bait fishes under Principle 2 of the default FAM as an alternative to including them in the UoC. For the pole & line fishery to be truly sustainable, bait fishes must be managed at least as well as the albacore themselves. Since the bait fishes used are low trophic level species in the ecosystem, TAB Directive 036 (Assessment of Low Trophic Level Fisheries) applies, providing reasonable guidance on default reference points for bait fishes. WWF believes that the best course is to include bait fishes in the UoCs and assess them under P1 but, failing that, TAB Directive 036 provides excellent guidance for appropriately modifying the FAM to ensure that bait fishes will be managed at a level that meets the MSC standard.

**4. Management Levels.** For fish stocks to be sustainable and meet the MSC standard they must be adequately managed throughout their range. For the Pacific albacore stocks, the legally competent bodies to accomplish this are the IATTC and WCPFC. Also of critical importance are national, regional, and local jurisdictions, but these are of decreasing importance due to the pan-Pacific nature of the albacore stocks. This entire cascade of legal structure starting with the RFMOs needs to be assessed under Principle 3. The top body, or RFMO, that jointly covers the range of each stock is of utmost importance and needs to be weighed accordingly when assessing Principle 3.

While it is unlikely that anyone from WWF will personally attend the site visits due to schedule conflicts, this does not reflect any lack of interest in ensuring that Intertek Moody Marine completes the best, most rigorous assessments possible. WWF looks forward to explicit responses to our concerns as expressed here and to engaging in the assessments.

Best Regards,

Com Cofox

William W. Fox, Jr., Ph.D. Vice President, Fisheries WWF-US



# Appendix 8: Initial letter from the International Seafood Sustainability Foundation

International Seafood Sustainability Foundation



6 October, 2011

Dr. Rob Blyth-Skyrme Intertek Moody Marine Merlin House, Stanier Way Wyvern Business Park Derby DE21 6BF UK

> Subject: American Albacore Fishing Association (AAFA) North Pacific Albacore Pole & Line and Troll/Jig Fishery, and American Albacore Fishing Association (AAFA) South Pacific Albacore Pole & Line and Troll/Jig Fishery

Dear Dr. Blyth-Skyrme:

ISSF welcomes the opportunity to provide input as a stakeholder in the re-certification assessment of these two fisheries. We have the following concerns that we hope will be adequately assessed in the reassessments:

1) Conditions. The intent of the MSC is that conditions should normally be closed out within the period of certification. This is not the case for the AAFA albacore fisheries and, in our understanding, there is not even evidence that adequate progress has been made towards adoption of reference points, harvest strategies and control rules. The conditions in the original assessments were simply too weak and unrealistic in the expectation that the Client would be able to influence RFMOs to adopt these for the Pacific albacore stocks. Still, we recognize the fact that MSC guidance on condition setting and recertification was not very clear at the time of the original assessment. We request, however, that the new assessment takes this problem very seriously into consideration. If the new assessments recommend MSC certification again, it is imperative to follow TAB Directive 033 (Condition Setting and Reporting) with achievable milestones. In this sense, we recommend that the assessment team look at the language in the conditions placed on the certification of the New Zealand albacore troll fishery.

2) Baitfish management. For the pole and line component of the fishery, we are against following the FAM default scoring guidelines for baitfish under Principle 2. Since baitfish are required for the fishery, it is imperative that they be managed just as well as albacore. And, their role as low trophic level species in the ecosystem needs to be addressed as well. We believe that TAB Directive 036 (Assessment of Low Trophic Level Fisheries) provides good guidance on default reference points for baitfish populations and we recommend that the assessment team use these standards instead of the default FAM scoring guidelines.

International Seafood Sustainability Foundation P.O. Box 11110 McLean, VA 22102 P: 703-226-8101 F: 703-226-8100 SJackson@ISS-Foundation.org www.ISS-Foundation.org



3) The role of the RFMOs under Principle 3. ISSF is of the view that the role of the RFMOs in managing highly migratory species like albacore is if utmost importance. The re-assessment of these fisheries needs to take this into account by giving higher weight to the management framework and performance at the RFMO level than at the national level.

Yours sincerely,

Susan S. Jackson President

Cc: R. Howes V. Restrepo W. Fox B. Ack

> International Seafood Sustainability Foundation P.O. Box 11110 McLean, VA 22102 P: 703-226-8101 F: 703-226-8100 SJackson@ISS-Foundation.org www.ISS-Foundation.org



# **Appendix 9: Peer Review Report #1**

## **Overall Opinion**

Has the assessment team arrived at an appropriate conclusion based on the evidence presented in the assessment report?		Conformity Response	Assessment	Body
<u>Justification:</u> Subject to clarification of two items discussed in t comments" section below, I feel the conclusion of appropriate, based primarily on the fact that I was assigned identical or nearly identical scores for missues.	the team is would have	team has against each	thank you- the as made detailed of the PIs below.	comments

Do you think the condition(s) raised are appropriately written to achieve the SG80		Conformity Assessment Body Response		
outcome within the specified timeframe?	Yes			
Justification:		The assessment team thanks the peer		
As stated below, there appears to be considerable	e interest in	reviewer for this input- it is noted and		
WCPFC and IATTC on establishing referen	nce points.	welcomed.		
Accordingly, it is quite likely that the comm				
establish the required reference points by the 4th an				

#### If included:

Do you think the client action plan is	Yes/N	Conformity Assessment Body Response
sufficient to close the conditions	0	
raised?	Yes	
Justification:		Again, this comment is welcomed. The
The client action plan only requires the	assessment team is certainly keen to promote	
"work actively" towards establishing reference	ce points	positive collaborative working between AAFA and
and harvest control rules, but those ef	fforts in	other groups and, assuming the fishery is
conjunction with increased interest on the	e part if	recertified, any annual audit team should be
IATTC/WCPFC, and pressure from other gr	oups for	interested in reviewing AAFA's commitment to
reference points and harvest control rules a	re likely	"report on efforts to explore appropriate
to counteract any forces that may be	against	opportunities with other tuna fisheries,
establishing such points/rules.		associations, or organizations with complimentary
		objectives." (as stated in the Client Action Plan).

#### **General Comments on the Assessment Report (optional)**

The report is very well-written by specialists with a great deal of historical involvement with the fishery. Any disagreements I have with the report are fairly minor.

I believe that two items require some additional thought or at least clarification in the assessments team's report: (a) unfulfilled conditions of the 2007 assessment, and (b) how baitfish are treated in the assessment.

In the letters of both WWF and ISSF there is mention of conditions in the 2007 assessment that have not been met. It would be useful the assessment report could state the MSC policy or rule on unfulfilled conditions of a previous assessment as they relate to a follow-up assessment.



IMM Response: A condition was set against the AAFA North Pacific albacore fishery when it was certified in 2007 However, this was closed out in 2009 and the AAFA North Pacific fishery proceeded to recertification with no conditions on the existing certificate. The WWF and ISSF comments related to the AAFA South Pacific fishery which is undergoing reassessment at the same time as the North Pacific fishery, and which had one condition that was carried forward to reassessment. The situation with regard to the conditions in each fishery is explained in Section 4.1 of each report.

Baitfish are an important component of the North Pacific North Pacific Albacore Pole & Line and Troll/Jig Fishery. I recently completed a study of the baitfisheries that support the major pole-and-line fisheries of the world<sup>1,</sup> which contains a section on the baitfishery of relevance to this MSC assessment. I am not convinced of the need/value of attempting to manage small baitfisheries that are nested within much larger over-all fisheries (which is the case for the baitfishery that supports this albacore fishery). What would be useful in the assessment report is an upfront statement of how baitfish will be treated in the report - In some respects, the issue of baitfish do not fit neatly into the MSC framework, hence a need for an explicit statement in the assessment report on how they will be treated. For example, in the Maldives pole-and-line MSC fishery assessment report, baitfish are treated as "bycatch discarded species".

IMM Response: The MSC Certification Requirements V1.2 (MSC CR) provides clarity on where baitfish fisheries should be incorporated into the MSC assessment process- it is against Performance Indicators (PIs) 2.1.1 - 2.1.3 as retained species. Text was provided in Section 3.4.3 of the assessment report that referenced the MSC CR, but this now specifies Section CB 3.5.5 of the MSC CR.

Another point is that baitfishing is an important part of this albacore fishery, but this fact appears to be downplayed in at least some sections of the assessment report. For example, it is stated that "The AAFA North Pacific albacore pole and troll fishery operates entirely at the surface in deep, oceanic water", but the baitfish component of the fishery operates in shallow inshore areas.

IMM Response: Following the previous point above, baitfish are incorporated into the MSC assessment process as retained species and the northern anchovy stock status, management and information provision are considered under PI 2.1.1, 2.1.2 and 2.1.3 respectively. As such, and although the baitfish fishery takes place in the shallow inshore, the baitfish fishery is not required to be considered against other PIs (e.g. ETP, habitat or ecosystem impacts), or against the detailed and separate Principle 1 (stock status) or Principle 3 (management) PIs that the AAFA albacore fishery under assessment is assessed. As such, the intention is not to downplay the role of the baitfish fishery by referring to the AAFA fishery as operating entirely at the surface in deep, oceanic water, it is simply that the MSC guidance on baitfish fisheries has been followed. Nevertheless, clarification of the exclusion of the baitfish fishery from further assessment has been provided following the referenced '*entirely in deep, oceanic water'* text at Section 3.4.5 and in the SG 60 Sis of PI 2.4.1, 2.4.2 and 2.4.3.

<sup>&</sup>lt;sup>1</sup> Gillett, R. (2012). The Management of Tuna Baitfisheries: The Results of a Global Study. International Seafood

#### Performance Indicator Review

Please complete the table below for each Performance Indicator which are listed in the Conformity Assessment Body's Public Certification Draft Report.

Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
1.1.1	Yes	Yes	N/A	The scoring and justification are appropriate.	Noted and thank you.
1.1.2	Yes	Yes	Yes (see right)	<ul> <li>The conditions require that the client is to demonstrate by the 4<sup>th</sup> annual audit that:</li> <li>(a) The limit reference point is set above the level at which there is an appreciable risk of impairing reproductive capacity.</li> <li>(b) The target reference point is such that the stock is maintained at a level consistent with BMSY or some measure or surrogate with similar intent or outcome.</li> <li>Considering the current increased interest in WCPFC and IATTC on establishing reference points, it is quite likely that the Commissions will establish the required reference points by the 4th annual audit.</li> </ul>	Noted and thank you. The assessment team is naturally hopeful that the requisite progress to close the conditions on the AAFA fishery can be made. The peer reviewers comments on the RFMOs is therefore clearly encouraging.
1.1.3	N/A	N/A	N/A	The stock is not considered to be depleted, and so this performance indicator is not scored.	Noted and agreed, thank you.
1.2.1	No (see right)	No	N/A	The report of the 2012 WCPFC SC indicates an " increase in catches of North Pacific albacore from 2008 to 2010 and in 2011" – but this information does not	The assessment team notes that the 2012 WCPFC-SC information is now available, but a line needs to be drawn at some point on collecting and including

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Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
				appear to have been taken in consideration when scoring this indicator. It is, however, realized that the SC report was not available at the time the assessment report was completed.	additional data for the assessment. We feel we can add the very recent WCPFC information in at the first annual audit without jeopardising the validity of the assessment or the MSC standard.
				Due to the fact that target and limit reference points have not been formally adopted and that catch has been creeping upwards in the last few years, I feel that a score of 90 may be too high; suggest 80	It may also be noted that the assessment includes consideration of US Domestic management arrangements, which are considered to meet the level of performance required for the 90 score.
1.2.2	Yes, but see comment to right	Yes	Yes	The scoring and justification are appropriate. Some additional information on an important subject would be useful. The assessment states that "Letters of support will be provided as soon as they are available". It would be useful to state whether IATTC/WCPFC as a matter of normal practice provide such letters of support" – or whether this is a special/exceptional request.	Noted and thank you. It is noted that fisheries cannot proceed to the Public Comment Draft Report stage without consulting an entity/entities that will be relied upon for involvement, funding and/or resources to close conditions (CR Section 27.11.3) . However, engaging RFMOs to the extent that letters of support are provided has not been required for certification, based

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Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
					on an acceptance that such a letter would be very unlikely to come from international management bodies. Nevertheless, the IATTC and WCPFC secretariats have been notified and updated on the AAFA assessment process as it has proceeded. Instead, letters of support have been sought from US Domestic managers. Such a letter of support for the AAFA actions has now been included from the NMFS Regional Administrator, Mr. Rodney McInnis. The AAFA certification is also recommended based on the evidence that the PFMC and US Delegations to the RFMOs are engaged in improving the management of the fishery, the necessary research budgets are in place and that meetings will be scheduled and held as required.
1.2.3	Yes	Yes	N/A	The scoring and justification are appropriate	Noted and thank you.

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Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Indicator support	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
1.2.4	Yes	Yes	N/A	The scoring and justification are appropriate – it is only the lack of an external peer review that prevents a higher score.	Noted and thank you.
2.1.1	Some additional information on anchovy and its relative use in the albacore fishery may be useful in the context it provides (see right)	Yes	n/a	<ul> <li>The baitfishery is based on a resource that is primarily used for other purposes. In US waters the resource is also used for human consumption and for sportfishing bait.</li> <li>The statistical information on anchovy catches usually does not distinguish between the various bait uses: (a) dead/packaged bait, (b) live bait for recreational fishing, and (c) live bait for commercial tuna fishing.</li> <li>Baitfishing for sportfishing is much more significant than that for commercial tuna fishing: (a) Approximately 18 live bait vessels in southern California and two vessels in Oregon and Washington landed about 4,000 mt per year of coastal small pelagics (mostly northern anchovy and Pacific sardine) for sale to recreational anglers, and (b) Roundhaul vessels take a maximum of 1,000 mt to 3,000 mt per year of northern anchovy that are sold as dead bait to recreational anglers.</li> <li>In the 1950s and 1960s the annual US west coast catch of the northern anchovy reached 50,000 tonnes in several years. In the decade of the 2000s, total annual anchovy</li> </ul>	Noted and thank you. The information is incorporated into Section 3.4.3 of the assessment report. For scoring PI 2.1.1, a note has been added on the amount of bait usage by the AAFA fleet in comparison to quantities used for other purposes, as recommended.



Performance Indicator		Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
				catches in California, Oregon and Washington ranged from 1,676 to 19,277 tonnes <u>SOURCE</u> : PFMC (2011). Status of the Pacific Coast Coastal Pelagic Species Fishery. Pacific Fishery Management Council.	
2.1.2	Yes	Yes	n/a	The scoring and justification are appropriate	Noted and thank you.
2.1.3	Some additional info (see right) would add clarity	Yes	n/a	The scoring and justification are appropriate, but some additional info would add clarity: "While anchovy are thought to be abundant, there is no current information on the status of northern anchovy populations. Anchovy fisheries are managed based on annual harvest data. Scientists monitor harvest of northern anchovy, and the harvest has been low in recent years." Source: NMFS (2012). Pacific Albacore Tuna. Fishwatch. Available at: http://www.fishwatch.gov/seafood_profiles	Noted and thank you. The reference has been added to this PI for clarity.
2.2.1	Yes	Yes	n/a	The scoring and justification are appropriate	Noted and thank you.
2.2.2	Yes, but possible typo	Yes	n/a	'undersized albacore are likely (UNLIKELY??) to constitute anything approaching"	Thank you- this was a typographic error and the correction has been made.

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Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
	in text (see right)				
2.2.3	Yes	No; suggest 85	n/a	The assessment report states: "it cannot be said that accurate and verifiable information on the amount of all bycatch is available" I believe that it deserves more than an 80 score due to the fact that some available & verifiable observer data supports the contention of "effectively negligible" amounts of bycatch. I understand that in the early 1990s there were a few years of observer data (mostly in conjunction with the gillnet issue), plus several research project projects carried out opportunistically aboard the vessels. I believe that both types of information would give support to the contention of "effectively negligible" amounts of bycatch.	It is also the assessment team's understanding that there are bycatch data from opportunistic studies and from surveys undertaken aboard albacore pole and troll vessels in previous years. However, these data were not available for the assessment of the AAFA fishery and so were not taken directly into account in scoringthe fishery at 80 for this PI. In the absence of the data being available for scrutiny, it is still considered that 80 is an appropriate score.
2.3.1	Yes	Yes	n/a	The scoring and justification are appropriate	Noted and thank you.
2.3.2	Yes	Yes	n/a	The scoring and justification are appropriate	Noted and thank you.
2.3.3	A qualified	Yes	n/a	The scoring and justification are appropriate	As noted in the CAB's response to PI

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Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)		Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
	yes (see right)			I understand that in the early 1990s that there were several years of observer data, mainly dealing with gillnet issues, but which contain bycatch info	2.2.3, such data were not available to the team for this assessment. As such, they were ot taken directly into account when scoring the fishery for this PI.
2.4.1	No (see right)	Yes	N/A	This statement is repeated several times in the assessment: "The AAFA North Pacific albacore pole and troll fishery operates entirely at the surface in deep, oceanic water". While true, the baitfishery which is an integral part of the fishing operation does not "operate entirely at the surface in deep, oceanic water" and at least some mention should be made of that.	As noted against the general comments section, above, the northern anchovy is only considered against the retained species components of the assessment (i.e., Pls 2.1.1 – 2.1.3). As such, the fishery under assessment is the AAFA albacore fishery that takes place only in deep, oceanic water. A comment to this effect has been added to the text of SI 60a, noting this fact.
2.4.2	No (see right)	Yes	N/A	As above, this statement is repeated several times: "The AAFA North Pacific albacore pole and troll fishery operates entirely at the surface in deep, oceanic water". While true, the baitfishery which is an integral part of the fishing operation does not "operate entirely at the surface in deep, oceanic water" and at least some mention should be made of that.	In common with the CAB response against PI 2.4.1, a comment has been added at PI 2.4.2, SI 60a to note that, as a baitfish, the northern anchovy is assessed only against the retained species PIs.

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Performance Indicator		Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
2.4.3	No (see right)	Yes	N/A	As above, this statement is repeated several times: "The AAFA North Pacific albacore pole and troll fishery operates entirely at the surface in deep, oceanic water". While true, the baitfishery which is an integral part of the fishing operation does not "operate entirely at the surface in deep, oceanic water" and at least some mention should be made of that.	In common with the CAB response against PI 2.4.1, a comment has been added at PI 2.4.3, SI 60a to note that, as a baitfish, the northern anchovy is assessed only against the retained species PIs.
2.5.1	Yes	Yes	n/a	The scoring and justification are appropriate	Noted and thank you.
2.5.2	Yes, but see comment to right	Yes	n/a	The scoring is appropriate but the justification may have a typographical error. The text of the assessment states: "There is a plan and an operational strategy that, based on information directly from the fishery, is considered to be working to manage all the main impacts of the fishery on the ecosystem. As such, these scoring issues have NOT been met". Following from the information given, it would seem that "these scoring issues <u>HAVE</u> been met".	Thank you- this was a typographic error and the correction has been made.

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Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
2.5.3	Yes	Yes	n/a	The scoring and justification are appropriate	Noted and thank you.
3.1.1	Yes	Yes	n/a	The scoring and justification are appropriate	Noted and thank you.
3.1.2	Yes	Yes	n/a	The scoring and justification are appropriate	Noted and thank you.
3.1.3	Yes	Yes	n/a	The scoring and justification are appropriate	Noted and thank you.
3.1.4	Yes	Yes	n/a	The scoring and justification are appropriate	Noted and thank you.
3.2.1	See right	No, suggest 90	N/A	There is some question that the short and long-term objectives cited in the mission statement of the AAFA are "measurable" or verifiable. At the very least, the relevant information to allow this to be seen is not presented.	Thank you- the comment on the AAFA mission statement is accepted and the assesment team has removed the reference. Nevertheless, and consistent with the AAFA South pacific fishery, the assessment team contends that the fishery meets the SG100 level of performance for this PI.
3.2.2	Yes	Yes	n/a	The scoring and justification are appropriate	Noted and thank you.

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Performance Indicator	used to score	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
3.2.3	No, see right	Yes	n/a	In general at the international level, there is much detailed information on this subject from annual meetings of IATTC/WCPFC that demonstrates the degree to which management measures have been enforced and complied with. For example, in the report of the WCPFC's Annual TCC report. This is information than the general statements that are currently provided by the assessors.	Noted and thank you. Readers are pointed to relevant sources of information, but further detailed information has not been added as the assessment team felt it unnecessary for scoring the fishery.
3.2.4	Yes	Yes	n/a	The scoring and justification are appropriate	Noted and thank you.
3.2.5	Yes	Yes	n/a	The scoring and justification are appropriate	Noted and thank you.

# **Any Other Comments**

Comments	Conformity Assessment Body Response



# **Appendix 10: Peer Review Report #2**

### **Overall Opinion**

Has the assessment team arrived at an appropriate conclusion based on the evidence presented in the assessment report?YeJustification: The certification report findings are appropriate the conditions and recommendation are accordance with material presented in the report	in
accordance with material presented in the report         Do you think the condition(s) raised are appropriately written to achieve the SG80 outcome within the specified timeframe?         Justification:         The conditions raised are necessary and appropriate to achieve SG80 outcomes, noting that actions are required by a body other than the client and that required outcomes involve adoption of appropriate measures by the RFMO.         The suggested outcomes for the conditions are in accordance with other albacore fisheries that have been certified or are seeking certification. However, the MSC Guidance to Certification Requirements suggests that timelines should be harmonized with those of overlapping fisheries (GCI 1.4). Although the North Pacific Albacore Troll Fishery is targeting a different stock, the processes involved in ensuring the establishment of target and limit reference points and harvest control rules are shared with fisheries targeting albacore in the South Pacific (AAFA South Pacific albacore troll, New Zealand albacore troll and Fiji albacore longline fishery).	Conformity Assessment Body Response Noted and thank you on the necessity of the two conditions and on the need for the action to be taken by a body other than the client. On harmonization, the CR (V.1.2) states At Section Cl3.1 that 'CABs assessing overlapping fisheries shall ensure consistency of outcomes so as not to undermine the integrity of MSC fishery assessments', while the guidance provided in The GCR (V1.1) at Section GCl 1.6 is that 'MSC expects that the outcome of the assessment, particularly the overall result that is achieved (whether a pass or a fail) and the setting of conditions, will be consistent between overlapping fisheries in assessment and certified fisheries'. The assessment team contends that the outcomes are consistent between the Conditions placed on the New Zealand South Pacific and AAFA North Pacific albacore fisheries (i.e., reference points (for Pl 1.1.2) and harvest control rules (for Pl 1.2.2) must be adopted in order for the Conditions to be closed out). However, it is also the assessment team's contention that, on timelines, the AAFA fishery justifies an additional year to meet the Conditions because of the need to engage two RFMOS (WCPFC and IATTC) rather than the single RFMO
	(WCPFC) that the New Zealand fishery (and the Fiji albacore fishery, if certified) must engage in order to meet their Conditions. Therefore, the AAFA assessment team continues to advocate and accept a four year timeline to close the two Conditions proposed. It may also be noted that the single Condition on the WFOA and CHMSF North Pacific albacore fisheries was introduced before guidance requiring that Conditions are time-bound and outcome focused was provided. As such, the Condition on those fisheries is not considered valuable for harmonization purposes in this case.



If included:

If included:			
Do you think the client action plan is	Yes	Conformity Assessment Body Response	
sufficient to close the conditions			
raised?			
Justification:		Noted and thank you on the Client Action Plan.	
The client action plan is sufficient to close	e the		
conditions, although the issue of the timeline ra	aised	On the issue of harmonization, please see the CAB	
above will need to be addressed. In addition	n, the	response against the conditions, in the box above.	
client action plan would benefit from the additi	ion of	On the promotion of collaboration, it is noted that a	
activities to promote collaboration with	other	statement in the Client Action Plan is that 'AAFA will	
interested industry sectors and NGOs to assis	st the	report on efforts to explore appropriate	
adoption of the necessary outcomes.		opportunities with other tuna fisheries, associations,	
		or organizations with complimentary objectives.'	
		Although this is non-specific regarding activities to	
		promote collaboration, it is the assessment team's	
		contention that being specific at this time is not	
		feasible. However, we agree that, should the fishery	
		be certified, such efforts will be needed if the	
		Conditions are to be met.	

#### **General Comments on the Assessment Report (optional)**

The certification report is well presented and provides clear and concise information to support the assessment of each feature of the fishery against the three MSC Principles. In general, I agree with the majority of the scoring for the fishery and have made few suggestions for changes to the report.

IMM Response: Noted and thank you. The assessment team has provided detailed comments against each of the comments below.

Using the "MSC\_Fishery\_Assessment\_Worksheet\_v1" I estimate the overall score for P1 to be 85.6 rather than the 85.8 presented on page 7 and in Table 10 of the report. Similarly, I find a slight difference with the P2 score (94 vs 95.3) and the P3 score (97 vs 98).

IMM Response: The scores for a number of PIs have been changed as a result of the comments received from the peer reviewers and because of issues concerning partial scoring. As such, the confirmed draft scores are now 85.0 for Principle 1, 95.3 for Principle 2, and 94.4 for Principle 3.



### **Performance Indicator Review**

Please complete the table below for each Performance Indicator which are listed in the Conformity Assessment Body's Public Certification Draft Report.

Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
1.1.1	Yes	Yes	NA	Sufficient information on stock status is given to justify the scoring, however, this section should reflect commentary from Section 3.3.3 of the report indicating that under low recruitment scenarios the probability that the stock will not achieve the management objective of remaining above the SSB-ATHL threshold increases to 50%, hence the assessment recommends that there should not be increased fishing effort	The report has been modified to include reference to the information in Section 3.3.3 under SI 100b. This is that recruitment remains high and stable, so contributing to a low likelihood of recruitment overfishing, although under some risk analysis scenarios there is the potential for the stock to reach the SSB- ATHL limit threshold.
1.1.2	Yes	Yes	Yes (note comment re harmonization)	The lack of formally adopted target and limit reference points appropriately leads to a score of 70 for this PI and the generation of a condition. The actions suggested by the condition would benefit from collaboration with other interested parties to bring about adoption of	Noted and agreed on the score, thank you. The assessment team agrees with the reviewer that actions suggested by the condition would benefit from collaboration with other interested parties. However, as

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Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
				necessary measures through WCPFC. In addition, MSC Guidelines suggest there should be harmonization of the timelines of the condition with other overlapping fisheries (probably including fisheries taking South Pacific albacore, as the steps to bring about change require implementation through WCPFC for both stocks).	noted against the peer reviewer's earlier comments on the conditions, the assessment team does not believe that it is feasible to be specific on collaborations at this time. It should be noted, though, that should the fishery be certified then progress towards meeting the condition should be reviewed very carefully at annual surveillance audits. On harmonisation, the assessment team contends that the outcomes are the same, while the timelines justifiably differ. More detail is provided in the earlier box specific to setting the conditions.
1.1.3	NA	NA	NA		
1.2.1	Yes	No	NA	SG80a requires not just that elements of the harvest strategy exist (i.e. monitoring, assessment, management etc) but that they "work together". There is insufficient information given on how the elements of the harvest strategy work together to	On 'working together', it is the assessment team's contention that monitoring and assessment data show that the harvest strategy, based on effort control, has proved effective in maintaining the stock. Additional

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Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
				achieve management objectives. Also, SG100b suggests that the harvest strategy has been fully evaluated through the stock assessment process. There are other aspects to the harvest strategy that require evaluation/	information has been provided against SI 80a. On the evaluation of the harvest strategy, the assessment team has reviewed the available information and can confirm that the fishery does not meet the level of performance required for SI 100b. As such, the score for this PI has been reduced to 85.
1.2.2	Yes	Yes	Yes (note comment re harmonization)	The scoring appropriately reflects that SG80 requirements are not met and the suggested condition should improve the fishery's performance. However, the actions suggested by the condition would benefit from collaboration with other interested parties to bring about adoption of necessary measures through WCPFC. In addition, MSC Guidelines suggest there should be harmonization of the timelines of the condition with other overlapping fisheries fisheries (probably including fisheries taking South Pacific	Noted and thank you on the suggested condition. On collaboration and timelines, please see the comments shown against PI 1.1.2, which apply equally here.

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Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
				albacore, as the steps to bring about change require implementation through WCPFC for both stocks)	
1.2.3	Yes	No	NA	The SG80 scoring issues are met satisfactorily. However, the support given to there being "a comprehensive range of information" is questionable. For example, assessment outcomes are sensitive to assumptions growth and the assessment acknowledges the need for further research on this. Also, SG100b states that all information required by the harvest control rule is monitored with high frequency and a high degree of certainty. Whilst there is extensive data collected it is difficult to suggest that all required information is collected when formal harvest control rules are not in place	On the availability of information, the assessment team continues to contend that the fishery meets the standard required by SI 100a. Full details of the information available are provided in the assessment report, but it includes data on the ontogenic and seasonal patterns of migrations, seasonal variability in migrations, reliable estimates on fecundity, growth rates, and length and weight at age, fishery catches and size composition of landings. Although differential growth by sex has not been addressed in peer reviewed literature to the assessment team's knowledge, these data are not required for the stock assessment model used in the North Pacific.

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Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
					harvest control rule, a sentence has been added stating that the information collected would be adequate to support formal HCRs if they were introduced, and so the fishery meets this level of perfirmance.
1.2.4	Yes	Yes	NA	Information provided supports the scores given for this PI. As suggested by the certifier, the assessment would benefit from formal peer review.	Noted and thank you.
2.1.1	Yes	No	NA	The information and rationale given strongly support the SG80 issues. However, although catches are low, I am uncomfortable with a score of 100 for anchovy given the last full assessment of the stock was in 1995. Given the paucity of observer data for the fishery, I suggest that a recommendation is warranted that opportunities to undertake observer work for the fishery be investigated to support future P2	Although the peer reviewers comment is noted and the last full assessment of the northern anchovy stock was undertaken in 1995, catch monitoring has been undertaken for many years and management bencharks (overfishing limits as MSY proxies) have now been adopted. The PFMC (2010) considers that fishing pressure is limited and that the stocks are not overfished or experiencing overfishing, while NMFS (2012) considers anchovy to be abundant.

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9	MOODY	

Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
				assessment.	The assessment team considers that this is evidence that is sufficient to meet the SG100 scoring issues.
2.1.2	Yes	Yes	NA	Information provided supports the scores given for this PI.	Noted and thank you.
2.1.3	Yes	Yes	NA	Information provided supports the scores given for this PI.	Noted and thank you.
2.2.1	Yes	Yes	NA	Information provided supports the scores given for this PI.	Noted and thank you.
2.2.2	Yes	Yes	NA	Information provided supports the scores given for this PI.	Noted and thank you.
2.2.3	Yes	Yes	NA	Information provided supports the scores given for this PI.	Noted and thank you.

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Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
2.3.1	Yes	No	NA	Whilst I agree that the nature of the fishing gear suggests that the level of interaction with ETP species is likely to be low, I feel that justification is sufficient to meet SG80 issues. However, with the lack of an observer program and lack of data on potential interactions presented it is difficult to support a score of 100	Comprehensive, independent observer data are not available for the pole and troll fishery. Nonetheless, logbook data have been checked for albatross interactions and analyses have been undertaken to determine the likely impact of the fishery on ETP species. The assessment team considers that the results provide the necessary level of confidence to score the fishery at 100 for this PI.
2.3.2	Yes	Yes	NA	I do not have access to the NMFS (2004) reference given for SG100b. Does it provide a quantitative analysis as required here?	The Biological Opinion is avalaible at the following web address: <u>http://swr.ucsd.edu/HMS_FMP_Opinion_Fina</u> <u>l.pdf</u> . It confirms that a quantitative analysis was undertaken.
2.3.3	Yes	Yes	NA	Information provided supports the scores given for this PI.	Noted and thank you.
2.4.1	Yes	Yes	NA		Noted and thank you.
2.4.2	Yes	Yes	NA		Noted and thank you.

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Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
2.4.3	Yes	Yes	NA		Noted and thank you.
2.5.1	Yes	Yes	NA	The low level of catch in the fishery supports this outcome, however. studies of fishery removal impacts at the ecosystem level are lacking.	The peer reviewer's comment is noted and a comment on the value of information on the ecosystem impact of albacore fishery removals has been made against this PI. The score has not been adjusted.
2.5.2	Yes	Yes	NA		Noted and thank you.
2.5.3	Yes	Yes	NA		Noted and thank you.
3.1.1	Yes	Probably	NA	I note that for AAFA South Pacific albacore SG100b brings about a score of 95 rather than 100 because "the mechanism at the international level has not been tested and proven to be effective". Should this also apply here?	The assessment team agrees with the peer reviewer- the text as adopted for AAFA's South Pacific fishery asssement report is also appropriate for the North Pacific fishery, and so the score has been dropped to 95 by accepting that the fishery only meets the SG80 level of performance for SI b.
3.1.2	Yes	Yes	NA	The information provided supports the	Noted and thank you.

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Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
				conclusions and scoring.	
3.1.3	Yes	Yes	NA	The information provided supports the conclusions and scoring.	Noted and thank you.
3.1.4	Yes	Yes	NA	The information provided supports the conclusions and scoring.	Noted and thank you.
3.2.1	Yes	Yes	NA	The information provided supports the conclusions and scoring.	Noted and thank you.
3.2.2	Yes	No	NA	The score should be reduced somewhat. SG80b and SG100b require decision processes to respond in a timely manner. It is clear that the consensus approach for WCPFC can limit timely responses on some issues.	A comment was also made on this PI by the other peer reviewer, and in response the score has been adjusted to 90 (from 95) by confirming that the fishery does not meet the level of performance required by SI 100b. A note has been added on the timeliness
					of management processes to SI 80b, though, confirming that the fishery does meet the SG80 level of performance for that SI.

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Performance Indicator	used to score	and/or rationale used to score this Indicator support the given score?	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
3.2.3	Yes	Yes	NA	The information provided supports the conclusions and scoring.	Noted and thank you.
3.2.4	Yes	Yes	NA	The information provided supports the conclusions and scoring.	Noted and thank you.
3.2.5	Yes	Yes	NA	The information provided supports the conclusions and scoring.	Noted and thank you.

# **Any Other Comments**

Comments	Conformity Assessment Body Response
Minor editorial comments:	
Page v, CR should refer to MSC Certification Requirements v1.2	Thank you- this has been corrected.
Page 34, reference to PFMC 2007 should be 2007a or 2007b	Thank you- the reference should be PFMC 2007b.
Page 39, reference WCPFC 2010 and 2010b are the same reference (and referred to as WCPFC 2010a and WCPFC 2010b under P1.1.1 and P1.1.2 of the evaluation table).	Thank you- these errors have been addressed and the reference listed as WCPFC (2010) only.
Page 55, "MST proxy" instead of "MSY proxy".	Thank you- this typographical error has been corrected.

Document: Peer Reviewer Template

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# **Appendix 11: Stakeholder submissions**

The report shall include:

- a. All written submissions made by stakeholders during consultation opportunities listed in CR 27.15.3.1
- b. All written and a detailed summary of verbal submissions received during site visits regarding issues of concern material to the outcome of the assessment (*Reference CR 27.15.3.2*)
- c. Explicit responses from the team to stakeholder submissions included in line with above requirements (*Reference CR 27.15.3.3*)

#### (REQUIRED FOR FR AND PCR)

The report shall include all written submissions made by stakeholders about the public comment draft report in full, together with the explicit responses of the team to points raised in comments on the public comment draft report that identify:

- a. Specifically what (if any) changes to scoring, rationales, or conditions have been made.
- b. A substantiated justification for not making changes where stakeholders suggest changes but the team makes no change.

(*Reference: CR 27.15.4*)



# **Appendix 12: Surveillance Frequency**

(REQUIRED FOR THE PCR ONLY)

The report shall include a completed fishery surveillance plan table using the results from assessments described in CR 27.22.1

#### Table A4: Fishery Surveillance Plan

Score from CR Table C3	Surveillance Category	Year 1	Year 2	Year 3	Year 4
[e.g. 2 or more]	[e.g Normal Surveillance]	[e.g. On-site surveillance audit]	[e.g. On-site surveillance audit]	[e.g. On-site surveillance audit]	[e.g. On-site surveillance audit & recertification site visit]



# Appendix 13: Client Agreement (REQUIRED FOR PCR)

The report shall include confirmation from the CAB that the Client has accepted the PCR. This may be a statement from the CAB, or a signature or statement from the client.

(Reference: CR: 27.19.2)



**Appendix 14: Objections Process** (REQUIRED FOR THE PCR IN ASSESSMENTS WHERE AN OBJECTION WAS RAISED AND ACCEPTED BY AN INDEPENDENT ADJUDICATOR)

The report shall include all written decisions arising from an objection.

(Reference: CR 27.19.1)