MSC MONITORING, EVALUATION, AND LEARNING TECHNICAL REPORT 2024

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EXECUTIVE SUMMARY

The Marine Stewardship Council (MSC) is an international non-profit organisation that recognises, rewards, and incentivises efforts to protect oceans and ensure sustainable seafood supplies into the future. The MSC's Theory of Change describes a self-reinforcing cycle of supply and demand, where fisheries and supply chain companies seek to achieve certification against the MSC Fisheries Standard or MSC Chain of Custody Standard, and increasing consumer demand for sustainably-sourced seafood products further incentivises engagement of other fisheries and supply chain companies into the program. Rigorous processes within the program provide assurance to consumers that MSC labelled products originate from sustainable fisheries.

The MSC's Monitoring, Evaluation, and Learning system aims to describe the degree to which the MSC is delivering its Theory of Change in helping to ensure flourishing oceans and safeguarded supplies of sustainable seafood. This system consists of *monitoring* a set of indicators that reflects diverse aspects of the MSC program, *evaluating* the observed patterns to assess whether they align with intended outcomes and impacts of the program, and *learning* from the insights gained to continually improve MSC activities to increase the program's effectiveness. This 'MSC Monitoring, Evaluation and Learning Technical Report 2024' describes indicators within the following five sections.

Sustainable Fisheries

The MSC aims to increase the share of global fisheries in the program, and thereby to continue increasing the supply of, and demand for, sustainable seafood. The indicators in this section reflect the global reach of fisheries engaged with the MSC program in both numbers and landed tonnage; improvements in fisheries' scores against the MSC Fisheries Standard during both pre-certification and post-certification stages; the rate at which fisheries close their conditions of certification; and funding initiatives to incentivise fishery participation globally. These indicators show:

• The number of fishery units of certification engaged with the MSC program has continued a 15-year trend of growth, with certified fisheries operating in all major ocean areas (*indicator 1.1*).

• Landings from MSC certified fisheries have steadily increased throughout the MSC's 25-year history, with landings from MSC engaged fisheries in 2024 representing nearly 20% of global marine landings from wild-capture fisheries (*indicator 1.2*).

• Scores against the Fisheries Standard were greater for fisheries in the first re-assessment than in the initial assessment, particularly for Principles 1 and 3, suggesting that fisheries continued to make improvements after initial certification (*indicator 1.3*).

• Though numerous nuances exist with the setting and closing of conditions, 81% of conditions set during fisheries' first assessment against the Standard were resolved within the five-year duration of a certificate. However, fisheries that have been through two re-certifications typically resolved fewer conditions within the certificate duration. Further analyses are being conducted on those that remain open at the end of an assessment cycle (*indicator 1.4*).

• Fishery scores at the pre-assessment stage improved on average by the time corresponding fisheries undertook a full MSC assessment. The greatest challenges to meeting MSC Fisheries Standard requirements were most commonly observed for Performance Indicators in Principle 1 or related to Endangered, Threatened and Protected species in Principle 2 (*indicator 1.5*).

• The MSC's Ocean Stewardship Fund has incentivised fishery improvements in both the pre-certification and post-certification phases of fishery engagement, with a strong focus on supporting fisheries operating in developing economies and student research (*indicator 1.6*).

Seafood supply chains and markets

The MSC aims to increase the share of global seafood supply chains participating in the program, and thereby to continue increasing the supply of, and demand for, sustainable seafood. The indicators in this section reflect the global reach of supply chain companies engaged with the MSC program; market trends in MSC ecolabelled seafood; and auditing processes within the MSC Chain of Custody. These indicators show:

• The number of MSC Chain of Custody certificate holders has increased steadily over the past 20 years (with average 8% annual growth since 2013), most of which are certified under the Default Standard; numbers of certificate holders have fluctuated in recent years for those certified under the Group Standard or Consumer-Facing Organisation Standard (*indicator 2.1*).

• Growth in the volume of MSC labelled seafood products sold over the last six years reflects the diversification of label use in mature markets and growth in canned tuna products, while decreases for some product types reflect changing consumer preferences and suspensions of some small pelagic fisheries (*indicator 2.2*).

• Non-conformities raised during audits of supply chain companies were found to be primarily related to training and to communication between certificate holders and Conformity Assessment Bodies (*indicator 2.3*).

Assurance

The MSC aims to meet international best practice in sustainable seafood certification, in both the fishery assessment and supply chain auditing processes. The indicators in this section reflect systematic review processes of third-party assessments against the MSC Fisheries Standard; the frequency of requested variations from MSC requirements by fisheries and supply chain companies; the frequency of objections to fishery certification; stakeholder responses during the Fisheries Standard Review and Chain of Custody Review; and potentially important persistent disagreements raised in peer reviews of fisheries assessments. These indicators show:

• Over the last five years, there has been a slight increase in the number of major findings identified during technical oversight of fishery assessment documents, primarily related to requirements associated with scoring the fishery (*indicator 3.1*).

• The number of requests to vary from MSC fisheries certification requirements, relative to the number of fisheries in the MSC Program, has seen an increasing trend in the last five years. Since 2012, the

proportion of Chain of Custody certificate holders submitting variation requests has fluctuated, but without any clear trend observed (*indicator 3.2*).

• The number of Notices of Objection submitted against fisheries' Final Draft Reports has remained steady at an average of 5.3 per year since 2011, with most objections resulting in revisions to rationales, conditions and report text. As a result of objections, 14 fishery assessments were revised to include new conditions, and three fishery assessments had units of assessment suspended or withdrawn from the program (*indicator 3.3*).

• Public consultations were solicited from diverse stakeholders during the most recent Fisheries Standard Review (2018-2022), with over 660 submissions from approximately 350 individual respondents across 46 countries. As part of the ongoing Chain of Custody Review, an informal feedback process to gather input on the Chain of Custody requirements prior to the formal review phase resulted in the collection of 467 valid submissions from respondents across 62 countries (*indicator 3.5*).

• Potentially important persistent disagreements between peer reviewers and Conformity Assessment Bodies have been identified in 16 fishery assessments over the past two years since the peer review procedure was implemented, leading to changed outcomes in two assessments (*indicator 3.6*).

Data for describing *indicator 3.4*, 'Availability of competent auditors, assessors, and Technical Consultants' are not currently available in the necessary structure, but reporting on this indicator is planned for the next Technical Report.

Public perception

The MSC aims to increase awareness of and trust in the MSC ecolabel among consumers. As consumers preferentially purchase MSC labelled seafood products, the market demand for MSC certified seafood is predicted to increase. The indicators in this section reflect how consumers perceive the MSC program; and the number and sentiment of MSC mentions in the media. These indicators show:

• The proportion of surveyed consumers that report having seen the MSC logo increased steadily from 37% to 50% over the last eight years, and in 2024, 74% of MSC-aware consumers had a high level of trust in the MSC's claims (*indicator 4.1*).

• The total number of mentions of the MSC in the media has doubled over the last three years to nearly 40,000 (*indicator 4.2*).

• Mentions of the MSC in the media are more commonly positive (43 to 54%) than negative (4 to 7%), with the remaining 42 to 51% of mentions being neutral in sentiment (*indicator 4.3*).

Unintended consequences

The MSC monitors unintended effects—either negative or positive—emerging from stakeholders' engagement in the certification processes, so as to facilitate benefits and mitigate any drawbacks that are within its area of influence. The sole indicator reported in this section reflects the number of issues logged by the MSC that require attention. This indicator shows:

• Over the past 15 years, issues raised in the MSC Issue Log have transitioned away from being primarily internal to being primarily raised by diverse external stakeholders. The issues raised feed into the MSC's policy development process and help shape improvements to the MSC program (*indicator 5.2*).

Data for describing *indicator 5.1*, 'Relative number of interpretations' are not currently available in the necessary structure, but reporting on this indicator is planned for the next Technical Report.

The patterns observed in these indicators help the MSC to learn from its monitoring and evaluation activities. These learnings inform the MSC about the extent to which its stated or implicit objectives are being achieved, and about specific areas or groups that may be promising to target in focused outreach and communication efforts. They also highlight potential changes that may be required to ensure the MSC program remains effective.

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Report authors:

Amanda Lejbowicz	Head of Fisheries Standard Accessibility
Angela Breslin	Grant Administrator and Compliance Manager
Billy Hynes	Senior Assurance Manager
Dan Hoggarth	Peer Review College Manager
Jennifer Rasal	Senior Data Science Officer
Jessica Chalmers	Development Director
Kobus Kellermann	Supply Chain Standards Manager
Michael Melnychuk	Principal Scientist (Data Science)
Polly Burns	Head of Standard Implementation
Rachel Leahy	Senior Science Communications Manager
Samantha Lees	Impacts Research Analyst
Shaun McLennan	Head of Fisheries Standard – Policy
Simon Brown	Assurance Manager
Tessa van Walsum	Senior Supply Chain Standards Officer
Tim Davies	Head of Fisheries Standard Operations
Toby Middleton	Head of Market Operations

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This report has been developed following the ISEAL Impacts Code of Good Practice version 2.0. Please contact research@msc.org to provide feedback or send requests related to this report.

GLOSSARY

Where applicable, definitions of some terms below were drawn from the *ISEAL Code of Good Practice*, as noted.

Condition of certification is a requirement to for fisheries to make specific improvements, usually by the next assessment cycle, in order to achieve best-practice requirements against the MSC Fisheries Standard.

Conformity Assessment Body is an independent, third-party organisation that is accredited to carry out conformity assessment services against the MSC Fisheries Standard and Chain of Custody Standard.

Evaluation is the systematic and objective assessment of activities. It provides information that is credible and useful, enabling the incorporation of lessons learned into decision making processes. Evaluation determines the worth or significance of the MSC program in the context of direct impacts to assessed attributes of participating organisations, to the environments in which they operate and to broader societal benefits.

Impacts (*ISEAL Code of Good Practice*) are the positive and negative long-term, higher-level effects resulting from the implementation of a standards system, either directly or indirectly, intended or unintended.

Indicator (*ISEAL Code of Good Practice*) is a quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement of outcomes, to reflect the changes connected to a standards system, or to help assess the performance of an organisation.

Monitoring is a continuous function that utilises the systematic collection of data on specified indicators to provide management and stakeholders with information on the extent of program progress and the achievement of objectives.

Monitoring, Evaluation and Learning Framework specifies a set of indicators (which may be changed or updated periodically) that describe how aspects of the MSC program are changing over time or compared to stated targets that relate to the sustainability of fisheries and seafood supply chains, providing answers to specific learning questions and lessons to support continual improvement.

Monitoring, Evaluation and Learning System (*ISEAL Code of Good Practice*) is an ongoing set of interconnected functions, processes and activities that involve the systematic collection or collation and analysis of data and information to provide management and other stakeholders with an indication of the extent of progress and improvement, achievement of intended results, the occurrence of unintended effects or implementation problems, answers to specific learning questions, and lessons to support continual improvement.

MSC Chain of Custody Standard is the Standard applied for all MSC Chain of Custody audits. It provides assurance that all seafood sold with the blue MSC label comes from a fishery that has been certified as sustainable. Chain of Custody certification ensures there is an unbroken chain where certified seafood is easily identifiable, separated from non-certified products, and can be traced back to another certified business.

MSC engaged describes all Units of Assessment that are currently in assessment against the MSC Fisheries Standard, certified against the Standard, suspended from the program, or participating in the MSC Improvement Program.

MSC Fisheries Standard is the Standard applied for all MSC Fishery assessments and audits to assess whether a fishery is well-managed and sustainable. Fisheries are assessed against 25 Performance Indicators, which sit under three core Principles (sustainability of the stock; environmental impacts of fishing; and effective management).

MSC certified fishery consists of one or more Units of Certification. As a default rule, different stock units under a single fishery name are counted as different fisheries; different gear types used to catch such species are however included by default in the fishery for each stock and therefore not counted as individual fisheries.

MSC fishery assessment refers to a single report that assesses usually, but not always, all Units of Certification under a single fishery name. Occasionally, Units of Certification under a single fishery name are assessed in separate reports.

MSC program documents include standards, certification requirements, vocabulary, and guidance to the standards or certification requirements.

Outcomes (*ISEAL Code of Good Practice*) are the likely or achieved short-term and medium-term results from the implementation of a standards system's strategies.

Performance Indicator is the lowest level of sub-criterion of a MSC Criterion in the decision tree of the Fisheries Standard; the level at which the performance of the fishery is scored by the assessment team.

Principle there are three core Principles of the MSC Fisheries Standard, which are used as the basis for defining a well-managed and sustainable fishery: sustainable target fish stocks; environmental impacts of fishing; and effective management.

Stakeholder is any person or group with an interest or claim which has the potential of being impacted by or having an impact on a given project and its objectives. Stakeholders include governmental and non-governmental institutions, local, indigenous or tribal communities, universities, research institutions, development agencies and banks, donors, etc. Stakeholder groups that have a direct or indirect "stake" can be at the household, community, local, regional, national, or international level.

Supporting documents includes checklists, templates, forms, manuals for CABs or clients to meet requirements.

Unintended effect (*ISEAL Impacts Code of Good Practice*) is an unintended change, either a drawback or a benefit, due directly or indirectly to an intervention which may include the implementation of a standards system.

Unit of Assessment defines the unique combinations of target stock(s), fishing gear, and the fleets, vessels, or individual fishing operators that are assessed against the MSC Fisheries Standard. Units of Assessment include all units that have ever been assessed against the Standard, regardless of the outcome of the assessment or whether the unit is still engaged with the program.

Unit of Certification defines the unique combinations of target stock(s), fishing gear, and the fleets, vessels, or individual fishing operators that are listed on a MSC fishery certificate. Units of Certification have achieved MSC certification at least once, but may have since exited the program.

Unit of Certification transfer is an administrative change that occurs when individual certificate holders decide to partner with other certificate holders and merge under a joint certificate, usually for cost-sharing reasons. In these situations, the original certificate becomes inactive and some or all of the fishery's UoCs are transferred to another certificate.

ACRONYMS

ASI	Assurance Services International
ACDR	Announcement Comment Draft Report
BMT	Benchmarking and Tracking tool
CAB	Conformity Assessment Body
CFO	Customer-Facing Organisation
CH	Certificate Holder
ETP	Endangered, Threatened or Protected
FDR	Final Draft Report
FAO	United Nations Food and Agriculture Organization
ISEAL	International Social and Environmental Accreditation and Labelling
ISO	International Organization for Standardization
ITM	In-Transition to MSC
MEL	Monitoring, Evaluation and Learning
MSC	Marine Stewardship Council
NC	Non-Conformity
NGO	Non-Governmental Organisation
OSF	Ocean Stewardship Fund
PCDR	Public Comment Draft Report
PI	Performance Indicator
UoA	Unit of Assessment
UoC	Unit of Certification
UoPA	Unit of Pre-Assessment

INTRODUCTION: MSC MONITORING, EVALUATION, AND LEARNING

The MSC program and Theory of Change

The Marine Stewardship Council (MSC) is an international non-profit organisation that recognises, rewards, and incentivises efforts to protect oceans and ensure sustainable seafood supplies. The ***MSC vision*** is of the world's oceans teeming with life, and seafood supplies safeguarded for this and future generations. The ***MSC mission*** is to use our ecolabel and fishery certification program to contribute to the health of the world's oceans by recognising and rewarding sustainable fishing practices, influencing the choices people make when buying seafood, and working with our partners to transform the seafood market to a sustainable basis.

Engaging in international consultation with stakeholders, the MSC has developed standards for environmentally sustainable fishing and for assuring the chain of custody in seafood supply chains, both using an independent third-party assessment process.

The MSC Fisheries Standard sets out requirements that a wild-capture fishery must meet to enable it to claim that its fish and seafood products are caught from well-managed and sustainable fish stocks. It comprises Performance Indicators related to the sustainability of target fish stocks, the environmental impact of fishing, and effective management.

The MSC Chain of Custody Standard provides assurance that products sold with the MSC ecolabel or trademarks originated from a certified fishery. It ensures that certified products are purchased from certified suppliers, identifiable, segregated, and traceable, with volumes recorded.

Both MSC Standards have been revised regularly throughout the MSC's 25-year history, periodically being updated to reflect changes in global best practice and improvements in the overall certification system. These revisions help ensure our Standards remain relevant and to incentivise fisheries and seafood companies to continually improve their practices.

This continual improvement is part of the MSC's Theory of Change, which describes how the program creates market incentives to reward sustainable fishing practices. This results in a "pull" towards certification that will improve the stewardship of the world's oceans and enable many fisheries to better compete in a global marketplace that increasingly demands proof of sustainability (Arton et al., 2020). A more detailed description of the MSC's Theory of Change can be found in the 2022 Monitoring & Evaluation Technical Report (MSC, 2022a).

The MSC Monitoring, Evaluation, and Learning system

The MSC's Monitoring, Evaluation, and Learning (MEL) system aims to describe the degree to which the MSC is delivering its Theory of Change as a means of realising its vision. At its core is the MEL framework, which describes key attributes of the MSC program that are monitored. It specifies a set of indicators (which may be changed or updated periodically) that aim to describe how aspects of the MSC program relating to the sustainability of fisheries, seafood supply chains, assurance systems, and

public perception are changing over time. The indicators currently evaluated, covered in this report, relate to several steps of the Theory of Change and apply to diverse types of stakeholders.

Monitoring a set of indicators that reflect diverse aspects of the MSC program allows for identifying whether the aspects represented by indicators have changed over time or differ among groups being compared.

Evaluating these indicators in the context of the Theory of Change allows for assessing whether observed changes align with intended outcomes and impacts of the certification system.

Learning from the outputs of monitoring and evaluation supports continual improvement of MSC programs and activities to increase the effectiveness of their implementation and reduce the likelihood of negative unintended consequences occurring.

Communicating the results of the MEL system provides accountability to the diverse stakeholder groups involved with the Theory of Change and demonstrates transparency of the MSC program.

The MEL system is intended to reflect the MSC's commitment to technically rigorous and transparent methods of tracking and evaluating outcomes and impacts of the MSC program. Accordingly, this MEL system has been designed in conformity with the International Social and Environmental Accreditation and Labelling (ISEAL) Code of Good Practice for Assessing the Impacts of Social and Environmental Standards (the ISEAL Impacts Code).

Contents and structure of this report

This 2024 MEL Technical Report draws from the wide range of datasets held by the MSC to present a series of indicators that relate to sustainability of fisheries and seafood supply chains, assurance of the MSC program, public perception of the MSC, and unintended consequences of MSC program activities. Some of these indicators have been presented in previous reports (e.g., MSC, 2022a), while others are presented for the first time here.

The indicators presented in this report were developed through consultation with internal and external stakeholders as part of MSC's recent Monitoring & Evaluation Review. These indicators focus on key areas that have been identified as informative and requiring continuous monitoring using data sources that can be updated and tracked through time. They are used to show how measurable attributes of the MSC program have changed over time or among compared groups, with the intention of demonstrating potential 'outcomes' (short to medium-term results) and 'impacts' (long-term effects) of the program.

For each indicator, a general description, observed patterns and possible implications are described in the main text, while further details of its definition, data sources, and methods for calculation are provided in Annex A2—Indicator protocol. Years reported below are calendar years unless otherwise stated to be financial years (April 1 to March 31) or other distinctions (e.g. Peer Review College years). Reference to other data or research done to understand the impacts and outcomes of the MSC program is included where available and appropriate, though this report is not intended to be an in-depth, exhaustive account of all the MSC's potential impacts and outcomes.

SUSTAINABLE FISHERIES

The MSC aims to increase the share of global fisheries participating in the program, and thereby to continue increasing the supply of, and demand for, sustainable seafood.

Indicator 1.1 – Number of Units of Assessment engaged with MSC

This indicator reveals trends in the number of Units of Assessment (UoAs) under the fisheries that have interacted with the MSC program. UoAs are the unique combinations of target stock, fishing method/gear, and fishing practices (including vessels) that make up an MSC certified fishery. This provides clearer insights into the extent of the MSC program than using the number of fisheries alone, because it considers the number of different fishery operations covered under a MSC certificate.

A steady increase in the number of certified UoAs has been observed since 2009 (Figure 1.1a). Since 2021, this growth has predominantly been fuelled by an increase in the number of certified tuna, bonito and billfish UoCs (+ 119). The next largest growth came from certification of cod, hake and haddock UoCs (+ 14). Regionally, this growth came predominantly from FAO areas 77 Eastern Central Pacific (+ 51 UoCs), 71 Western Central Pacific (+ 25 UoCs), and 61 Northwest Pacific (+ 24 UoCs).

The number of UoAs withdrawn from certification has also risen over the last three years, likely tied to an increased number of suspensions of certification between 2019 and 2021. Suspensions of certification may occur for a variety of reasons, most often related to a fishery no longer meeting the requirements of the Fisheries Standard, in particular requirements related to Principle 1 (Melnychuk et al., 2024).

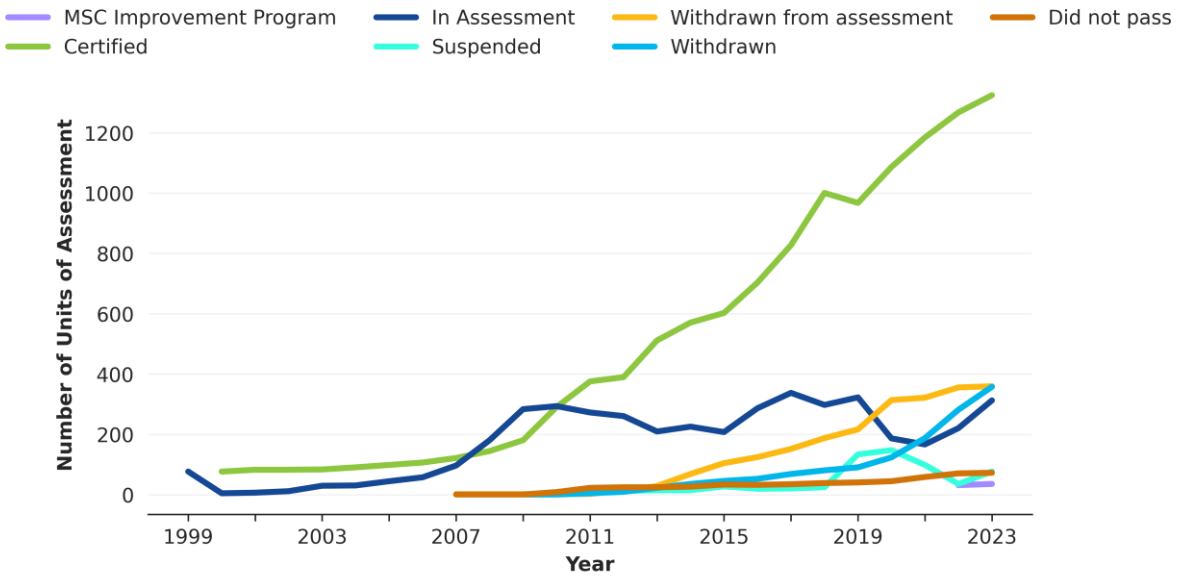


Figure 1.1a. *Number of Units of Assessment (UoAs) in the MSC program by status and year. Seven categories of UoAs (distinguished by colour) are mutually exclusive in any given year, but UoAs may change categories from one year to the next.*

The number of UoAs in assessment increased in 2022 and 2023, towards the higher levels observed between 2016 and 2019. Because the typical time in assessment is between 12 and 18 months, we expect the recent increase of in-assessment UoAs to result in a similar increase in the number of certified UoAs and/or in the number of UoAs withdrawn from assessment over the following 18 months. The number of UoAs that complete but do not pass their first assessment is smaller by comparison. A relatively small number of UoAs (36 in 2023) are also working towards certification through the MSC Improvement Program (formerly the In-Transition to MSC program). This program has been designed to support fisheries worldwide to make the improvements necessary to meet the MSC Fisheries Standard (Figure 1.1a).

Units of assessment operate in coastal and high seas locations around the world (Figure 1.1b). Operational areas are especially common in Europe, Atlantic coasts of the United States and Canada, western Australia, Alaska, the Russian Pacific coast, as well as on the high seas, particularly pelagic fisheries for tunas. While countries or regions with developing economies are less well represented, fishery UoAs do still operate throughout tropical coastal regions (Figure 1.1b).

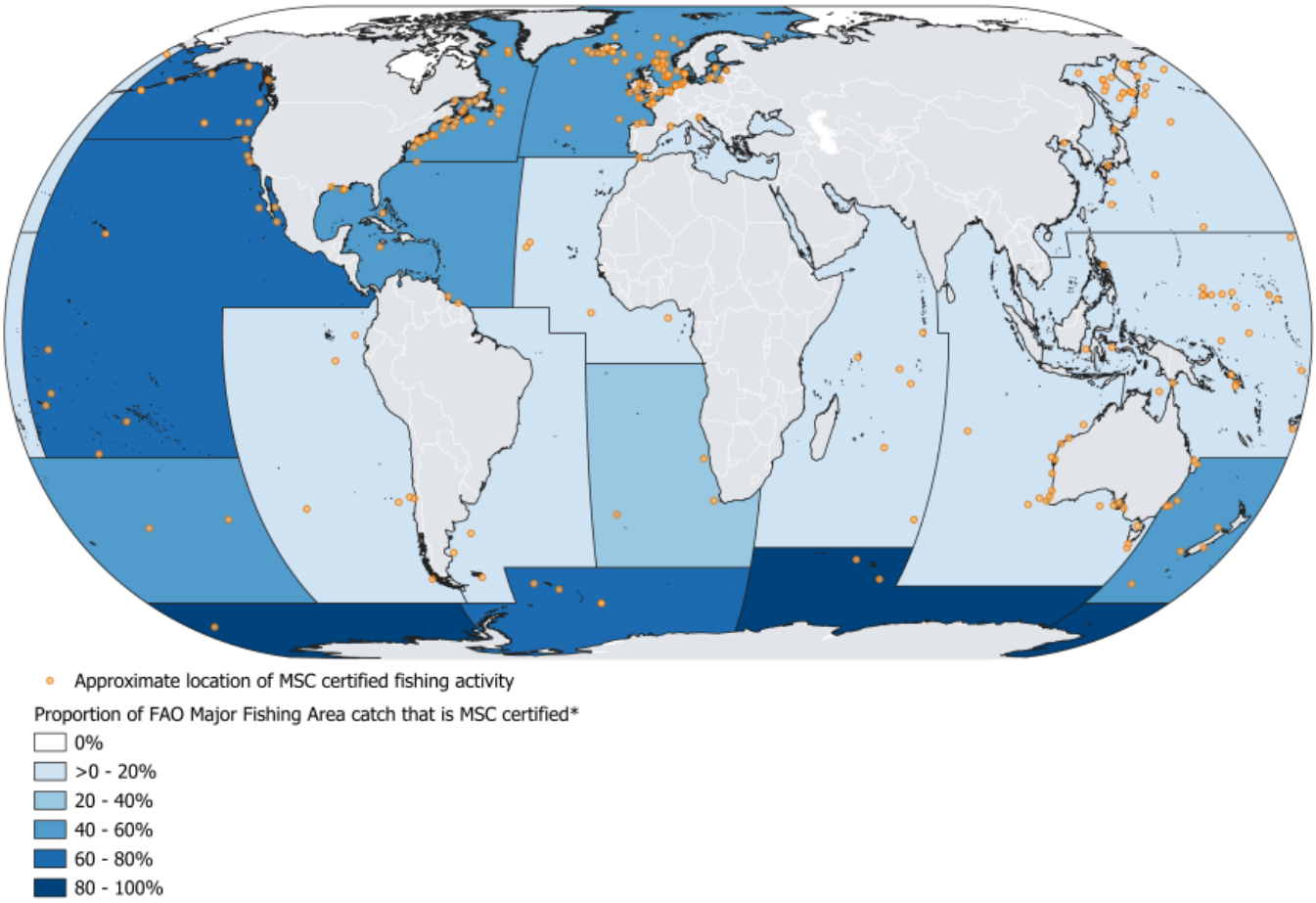


Figure 1.1b. *Approximate locations of operation of certified and suspended fishery units of certification, as of 31st March 2024. Shading of FAO Major Fishing Areas reflects the fraction of total commercial landings taken from the area that is caught by MSC certified fisheries.*

Learnings

The MSC identifies key fisheries to engage with by mapping sustainable seafood supply to markets that demand certification. This method of prioritisation also considers a fishery's current environmental performance and whether it is ready to enter assessment against the MSC Fisheries Standard.

To retain existing fisheries, a portion of the MSC's Ocean Stewardship Fund provides assistance to fisheries seeking re-certification. Several studies since the 2022 Technical Report (MSC, 2022a) have also focused on evaluating the frequency of and cause for withdrawal of UoCs from the program (Jones et al., 2023; Lees et al., 2023; Melnychuk et al., 2024; Pierucci et al., 2022). The MSC's strategy for retaining currently-certified fisheries is outlined in its Integrated Strategic Plan, which also outlines workstreams and tools for increased accessibility of the program to fisheries in developing economies. Growth, particularly in tuna fisheries in the Pacific Ocean, has demonstrated the success of this strategy.

Indicator 1.2 – Proportion of FAO landings engaged with MSC

Annual landed tonnage of marine fish and invertebrates caught by MSC certified Units of Certification (UoCs) has increased at an annual rate of 21% year on year since 2000, to nearly 14 million tonnes as of November 2024 (Figure 1.2A). In addition, combined landings from fisheries in their initial assessment against the MSC Fisheries Standard have typically ranged between one to two million tonnes during most of this period. The total volume landed from suspended UoCs reached a peak of 2.8 million tonnes in 2020, though have since decreased, with annual landings ranging from 0.9 to 1.4 million tonnes in the years since. For comparison, between 2012 and 2018, landings from suspended UoCs did not exceed 0.3 million tonnes. The total annual catch from fisheries engaged in the MSC Improvement Program (previously the In-Transition-to MSC Program) increased to 0.1 million tonnes between 2021 and 2024. Combined landings of MSC engaged fisheries (including UoCs that were certified, suspended, in assessment or in the MSC Improvement Program) were 16.1 million tonnes in 2023. By comparison, annual global total marine landings reported by member countries to the Food and Agriculture Organization of the United Nations (FAO) have ranged between 76 to 84.5 million tonnes since 1999 (79 million tonnes in 2022; Figure 1.2A).

This indicator tracks the fraction of total global marine landings that are caught by fisheries engaged with the MSC Program. Engagement includes fisheries that are certified, in their initial assessment, suspended from certification, and those that are in the MSC Improvement Program in any given year. The total capture of MSC engaged fisheries as a fraction of total global marine landings reported to FAO increased steadily over the first 20 years of the MSC program, and since 2019 have ranged from 18.6% to 20.8% (Figure 1.2B).

MSC certified catch accounts for the majority of the total MSC engaged catch. The proportion of MSC certified catch increased rapidly between 2004 and 2017, and while the rate of certifications has slowed, the proportion of certified catch reached a peak of 17.5% in 2024. The fraction of total global marine landings caught by UoCs under suspension peaked at 3.5% in 2021 and has since declined. The fraction of total global marine landings caught by UoCs in their initial assessment peaked in 2008 and gradually decreased thereafter, with a notable drop in 2024 (noting data for this last year are incomplete). The fraction caught by fisheries in the MSC Improvement Program increased between 2022 and 2024, though remains a small proportion at 0.1% (Figure 1.2B).

The fraction of total global marine landings caught by MSC engaged fisheries varies by taxonomic group. Disaggregating landings by group, proportions of global marine landings caught by MSC engaged fisheries are all more than 50% for several species groups: ‘salmons, trouts and smelts’; ‘scallops and pectens’; ‘krill and planktonic crustaceans’; ‘cods, hakes and haddocks’; ‘king crabs and squat lobsters’; and mussels. Other species groups that are generally well represented (around 30 to 40%) in the total global marine catches are ‘lobsters and spiny rock lobsters’, ‘flounders, halibuts and soles’; ‘tunas, bonitos and billfishes’, and ‘clams, cockles and arkshells’. By considering catch totals rather than by proportions, the species groups with the greatest catch by MSC engaged fisheries include 'cods, hakes and haddocks’ (40% of total MSC engaged catch), ‘tunas, bonitos and billfishes’ (17%), and ‘herrings, sardines and anchovies’ (15%).

The fraction of total global marine landings caught by MSC engaged fisheries also varies geographically. Summarising by FAO marine ‘Major Fishing Area’, areas around the Southern Ocean have the greatest MSC certified fractions (combined MSC certified landings as a proportion of total marine landings

reported to FAO), followed by the northern and central East Pacific Ocean (Figure 1.1b). Major Fishing Areas at tropical latitudes as well as the western North Pacific Ocean tend to have a lower fraction of total landings caught by MSC certified fisheries (Figure 1.1b).

Learnings

Comparing quantities of MSC engaged catch with total quantities as reported to FAO helps the MSC to understand which species groups and which geographic areas are currently under-represented. Species groups and areas with the potential for increased MSC coverage can be the targets of MSC outreach efforts to broaden its base of certified fisheries and reach more markets. These evaluations are conducted with the aim of achieving over a third of global marine landings caught by MSC engaged fisheries by the year 2030, as outlined in the MSC Strategic Plan.

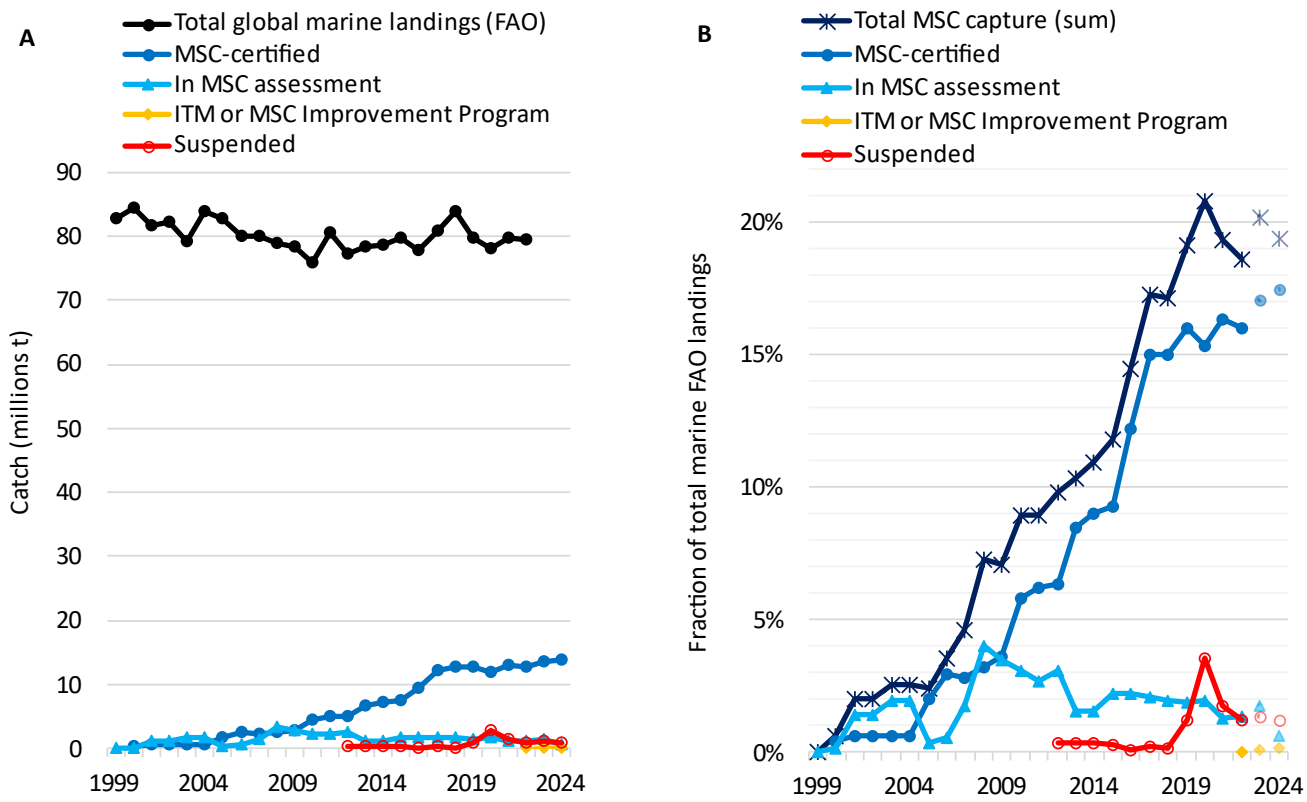


Figure 1.2. *(A) Annual total global marine landings as reported to FAO, and annual total catches of MSC units of assessment that were certified, in initial assessment, in the MSC Improvement Program (previously the In-Transition-to-MSC Program, ITM), and suspended from certification. (B) Annual total catches of MSC categories as a proportion of total global marine landings as reported to FAO. Catch data for 2024 are incomplete, summing through 2024-11-25. In (B), fractions for years 2023 and 2024 are relative to 2022 FAO landings (the last available year of FAO landings data). FAO landings data exclude landings from inland waters and from species groups freshwater crustaceans, freshwater molluscs, miscellaneous aquatic invertebrates, miscellaneous freshwater fishes, river eels, and turtles.*

Indicator 1.3 – Distribution of Units of Assessment Principle scores at initial assessment and first re-assessment

This indicator tracks how the Principle 1, 2 and 3 scores of MSC Units of Assessment (UoAs) change throughout the five-year certificate cycle. To achieve certification, fisheries must meet best practice level (average score of 80 or above) across each Principle of the MSC Fisheries Standard, and cannot score less than 60 (the minimum acceptable level) for any Performance Indicator. Principle scores can increase during an assessment cycle as fisheries make improvements to close their conditions. Most improvements are expected to be complete at the start of the second certification cycle, except in exceptional circumstances in which additional time is allowed. Therefore, this indicator compares scores at the beginning of the first and second assessment cycles to evaluate whether the scores resulting from conditions being closed increase as expected.

To ensure consistency in the fisheries represented at both the initial and first re-assessment periods, only UoAs that passed initial certification are considered, and all possible outcomes for those UoAs at first re-assessment are accounted for, including those that failed re-assessment. To avoid duplication resulting from multiple UoAs within the same fishery sharing the same score, only distinct Principle scores within each fishery are counted. Some fisheries have been re-certified more than once, but only initial and first re-assessment scores are included here due to small sample sizes in later assessment cycles.

Between 2000 and 2023, a total of 1,448 UoAs were scored during an initial assessment against the Fisheries Standard. Of these, 1,390 passed their assessment and became certified, while 58 achieved at least one Principle score of less than 80 and therefore failed the assessment overall (Table 1.3). Between initial assessment and first re-assessment, UoAs may split, merge, be transferred between certificates, or be added through scope extensions. As such, while 1,390 UoAs passed initial assessment, 848 UoAs were active at the beginning of the following cycle and chose to undergo a second assessment against the Fisheries Standard. Of these UoCs, 828 passed and 20 failed this first re-assessment (Table 1.3). The number of distinct scores received by the included UoAs by Principle and assessment cycle ranged from 223 to 493.

Table 1.3. *Number of Units of Assessment (UoAs) scored and included in the comparison for this indicator. Counts include all UoAs that underwent initial assessment and re-assessment between years 2000–2023. UoAs not included in the comparison either failed their initial assessment, have not been in the program long enough to reach their second assessment cycle, or withdrew from the program during the initial 5-year assessment cycle.*

Outcome	Total number	Number included in comparison between assessment periods
Passed initial assessment	1,390	742
Failed initial assessment	58	0
Passed first re-assessment	828	650
Failed first re-assessment	20	6

For all three Principles, and especially for Principles 1 and 3, scores were greater at first re-assessment than they were at initial assessment (Figure 1.3). The MSC reviews each version of the Fisheries Standard within five years of its release to ensure it reflects the evolution and uptake of best practice in fisheries management, potentially increasing fisheries' performance levels expected by the Standard. Between formal reviews, the Standard may also undergo minor revisions as approved by the MSC's Technical Advisory Board and Board of Trustees. This means that many fisheries (approximately 30%) may undertake their first reassessment against an updated version of the Standard, often requiring them to improve or amend their practices to meet the revised requirements. The observation that fishery scores are improving while being assessed against a current understanding of scientific best practice at re-assessment implies that score improvements likely reflect real improvements in fishery practices.

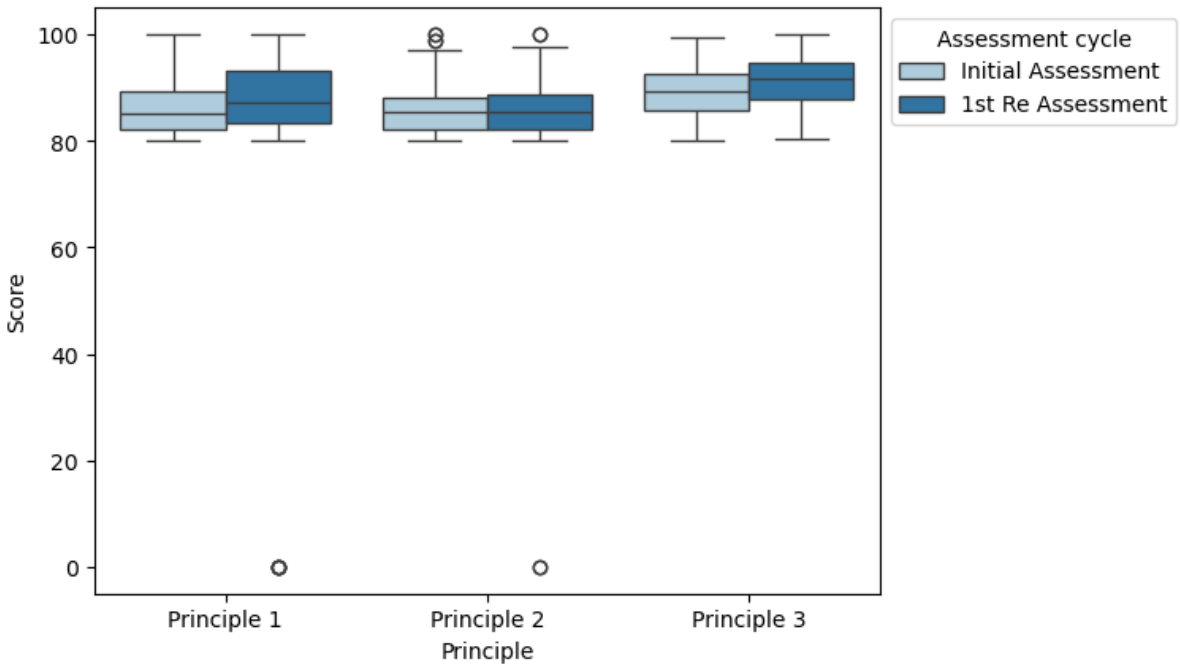


Figure 1.3. *Boxplots of Principle 1, 2 and 3 scores during initial assessment and first re-assessment periods. Scores are calculated for distinct Principle scores within each fishery (multiple units of assessment may share the same distinct Principle score). Sample sizes are: at initial assessment, n = 405, 493 and 323 for P1, P2, P3, respectively, and at re-assessment, n = 344, 422 and 223 for P1, P2, P3, respectively.*

Higher scores of fisheries at first re-assessment compared to scores at initial assessment suggest that those fisheries that remain in the program continue to show improvements, or to maintain high scores allowing for re-certification, across all three Principles in the five years following certification. A caveat is that UoAs which withdraw from the program before reassessment do not have scores available for this comparison (the same is true for UoAs which do not pass their initial assessment). In some cases withdrawals may be associated with fisheries anticipating a failure at reassessment, thus the possibility of survivorship bias exists for this comparison (after initial certification, 27% of UoAs are predicted to eventually withdraw from certification, and an additional 4% of UoAs are predicted to either fail a re-assessment or withdraw from a re-assessment period; Melnychuk et al. 2024).

Learnings

Monitoring the performance of UoAs against the Fisheries Standard over time can help confirm whether the MSC program is working as intended to drive continual improvement. If UoA performance declines over time, further investigation can determine which factors are driving this decline, allowing appropriate solutions to be developed and implemented.

Indicator 1.4 – Conditions assigned to Units of Certification

A condition of certification is opened when a Unit of Certification (UoC) assessed against the Fisheries Standard is determined to meet the minimum requirements for a Performance Indicator but not yet best practice. Fisheries then develop actions plans to address each condition and improve performance where relevant. Whilst most conditions are opened during an assessment against the Fisheries Standard, occasionally, conditions may be raised during annual surveillance audits or as a result of harmonisation of scores and conditions with overlapping fisheries certified at a later stage.

Conditions should be closed by an agreed date, typically within the five-year lifetime of the certificate, with the closure of conditions used as a measure of fishery improvements against the Standard. However, certain nuances exist that may result in conditions remaining open for longer than five years or not being closed at all. Under exceptional circumstances, such as when the required outcomes of a condition cannot be achieved within five years due to natural ecological functions and response times, a fishery may be allowed to extend a condition deadline beyond the length of the certificate (MSC, 2022b). If a fishery is re-assessed against a newer version of the Fisheries Standard, existing conditions may no longer be appropriate and may be rewritten. Conditions are also occasionally rewritten mid-assessment cycle if new UoCs are added to the assessment or due to harmonisation with newly certified fisheries. Finally, if fisheries withdraw from certification, they are not required to continue making improvements against the condition.

Across all MSC certified fisheries, 2,496 conditions were opened in the year of initial assessment (Figure 1.4 top panel). Within each consecutive assessment cycle, fewer conditions were opened as fewer fisheries were active within the MSC program for these durations (Figure 1.4 top panel). Regardless of when conditions were opened, most were closed over the remaining years of the assessment cycle before the next cycle began (81% of conditions in the initial assessment, 74% in the first re-assessment, and 53% in the second re-assessment; Figure 1.4 bottom panel). Some of the conditions that remained open were further categorised as 'behind target' (Figure 1.4). Some conditions were re-written, particularly during the 2nd re-assessment cycle, when 13% of conditions opened at the beginning of the assessment cycle were re-written by the end of the assessment cycle (Figure 1.4). Conditions involving exceptional circumstances, self-suspensions, withdrawals, or those not addressed were relatively uncommon (Figure 1.4).

Learnings

The MSC is currently conducting an in-depth review of condition closure to determine how many conditions are closed within the five-year assessment cycle and how many conditions have been carried over to subsequent assessment cycles. The review will also consider how many conditions that are opened in re-assessments are closely related to conditions opened in earlier assessment cycles. This review will analyse the reasons why these conditions were extended or re-opened, and whether these cases complied with scenarios allowed under the Fisheries Certification Requirements and Processes, aiming to gain a more insightful understanding of whether the MSC program is functioning as intended.

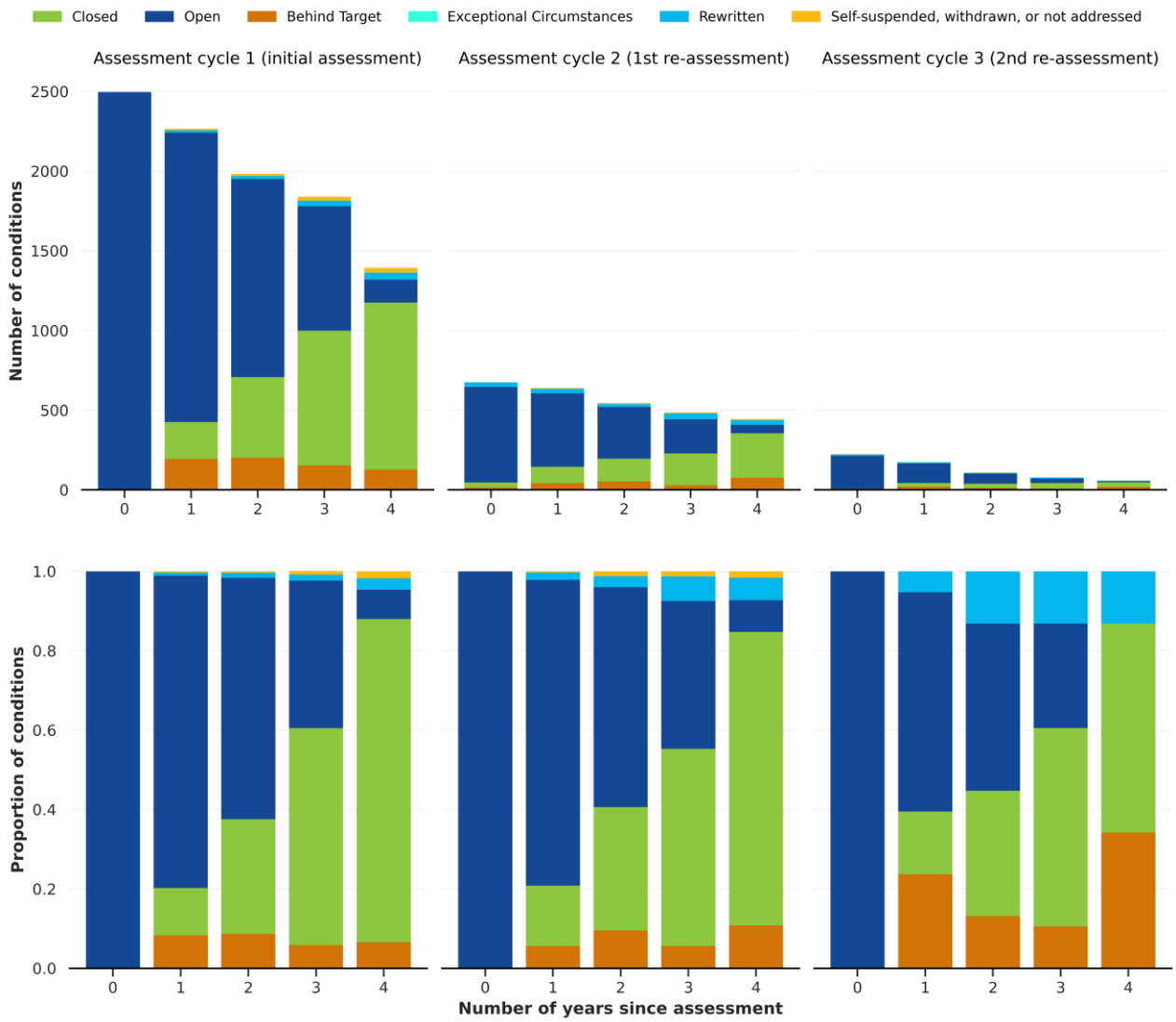


Figure 1.4. *Status of opened conditions by assessment cycle and number of years since assessment for assessment cycles 1 - 3. Status categories are assigned in each year and may change from one year to the next, and some conditions are opened after year 0 in each cycle. (top) Number of conditions. (bottom) Within each assessment cycle, proportion of the conditions opened at the beginning of the assessment cycle, including only the subset of conditions with available data through the entire 5-year cycle. Sample sizes for the subsets in bottom panel range from 1311, 329, and 38 for assessment cycles 1, 2 and 3 respectively.*

Indicator 1.5 – Performance Indicator score changes between pre-assessment and MSC assessment

Pre-assessments provide an initial overview of a fishery's performance against the MSC Fisheries Standard, acting as a gap analysis. They offer a standardized measure of a fishery's sustainability without requiring the fishery to undergo a full MSC assessment. Each Performance Indicator is evaluated, with a draft score range provided rather than a single value. Draft score ranges include: fail (‹60); pass with condition (60-79); and pass (≥80). If pre-assessments identify barriers to certification, fisheries can address these before entering full assessment. Consequently, many improvements made by fisheries to achieve MSC certification occur prior to the full assessment process. Details of the MSC pre-assessment dataset are described in Rasal et al. (2024).

There is no requirement for pre-assessment reports to be publicly available, although many are published on fisheryprogress.org; others are privately shared with the MSC. The MSC has compiled a dataset from all publicly available pre-assessment reports and those shared privately; the full dataset currently includes 571 reports containing 3,025 units of pre-assessment (UoPA) which are cross-referenced with MSC records to align with corresponding units of assessment (UoAs).

Indicator 1.5 describes changes in scoring between the pre-assessment stage and the initial scoring report during full assessment against the MSC Fisheries Standard (Announcement Comment Draft Report; ACDR). Paired comparisons may reveal key areas of the Standard where fisheries made improvements between stages. On average, UoPAs that were eventually certified (or still in full assessment at the time of analysis) made improvements in all areas of the Standard between the pre-assessment stage and ACDR, with the exception of the 'habitats' component (Figure 1.5A; Performance Indicators are pooled into these components shown).

Similar patterns were observed for UoPAs that went through a pre-assessment, entered full assessment and completed their ACDR, but then either withdrew from or failed the full assessment (Figure 1.5B). Most components showed either improvement or no significant difference in scores. The exception to this is the 'Endangered, Threatened, and Protected species' (ETP) component, where scores decreased on average between the pre-assessment and full assessment stage (Figure 1.5B).

Comparing Figure 1.5A and B, it is evident that fisheries that withdrew from or failed the full assessment consistently received lower scores for Principle 1 components at both the pre-assessment and full assessment stages. In contrast, Principle 3 and most Principle 2 components (except for ETP), showed fewer scoring changes between these two subsets of fisheries. This suggests that, at least for the UoCs that failed or withdrew from a full assessment after completing an ACDR, Principle 1 and ETP components may have had more challenging requirements for fisheries to meet during full assessment.

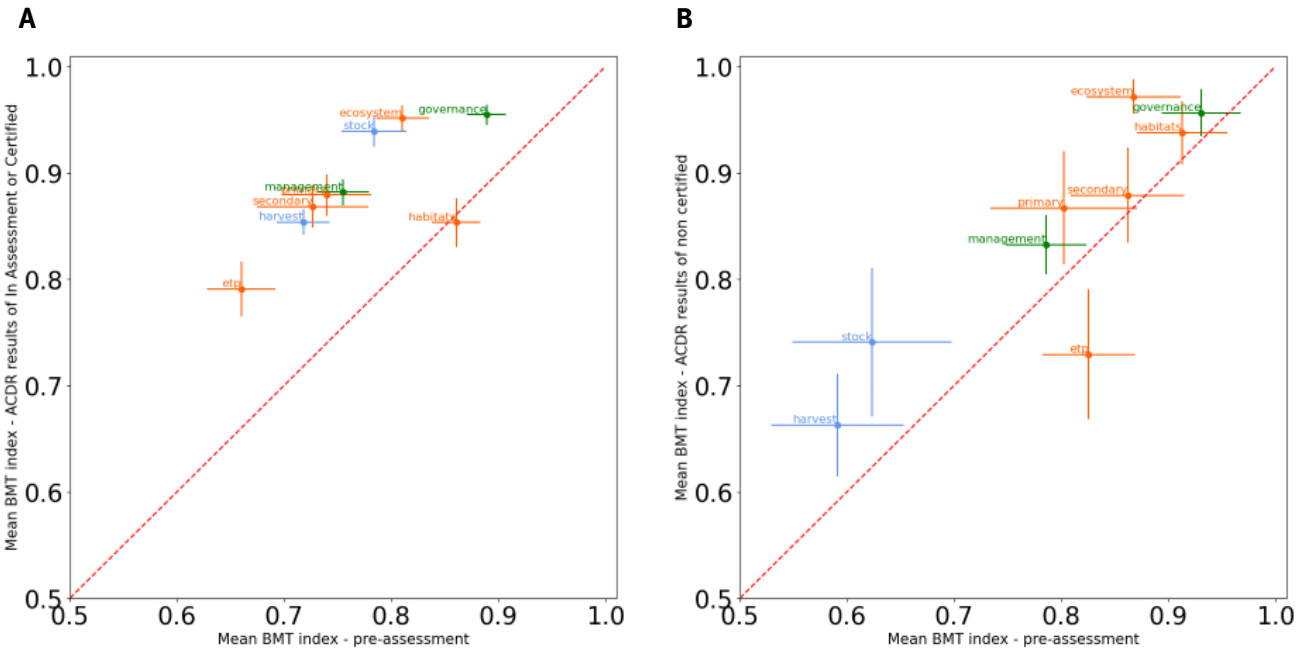


Figure 1.5. *Scatterplot showing the mean Benchmarking and Tracking index of individual components (see A1.5* ***Performance Indicator score changes between pre-assessment and MSC assessment****for definitions), comparing pre-assessment index to MSC certification index from ACDR reports. Includes all units of pre-assessment (UoPAs) that by June 2024 were (A) in assessment or certified against the MSC Fisheries Standard, or (B) had withdrawn from or had failed MSC full assessment. Horizontal and vertical error bars reflect 95% confidence intervals for the component at pre-assessment and MSC full assessment stages. Dashed line shows the 1:1 relationship. Blue = Principle 1 components, orange = Principle 2 components, green = Principle 3 components. Sample sizes are (A) 358 UoPAs, and (B) 81 UoPAs.*

Not all fisheries that undergo a pre-assessment aim to achieve MSC certification. Instead, fishery clients or managers may use the Fisheries Standard as a benchmark to assess a fishery's sustainability. This provides an opportunity to compare fisheries that progressed to full assessment and achieved MSC certification following a pre-assessment with fisheries which did not enter full assessment or entered full assessment but were not certified. Of the 2,455 UoPAs completing a pre-assessment, 72% did not (or have not yet) gone on to full assessment, 7% entered full assessment but were not yet certified (and may not achieve certification), and 21% were certified. While only 26% of all UoPAs have successfully achieved certification, 61% of those with favourable outcomes at the pre-assessment stage were certified (Table 1.5). Furthermore, 17% of UoPAs initially identified as unlikely to pass an MSC full assessment managed to achieve certification (Table 1.5), suggesting improvements were made to meet the MSC Fisheries Standard.

Learnings

The MSC continues to expand the pre-assessment dataset to monitor the pre-assessment stage and track the improvements made before fisheries enter full assessment against the Standard. This helps identify individual fisheries or groups that may qualify for MSC certification but have not yet joined the program. It also provides an opportunity for the MSC to engage with these fisheries, encourage

participation, or better understand their decisions not to enter full assessment. Additionally, this indicator highlights specific areas where fisheries need the most significant improvements, enabling targeted support and assistance. This information can guide the MSC's Ocean Stewardship Fund in prioritising projects and creating tailored support streams to effectively assist fisheries on their sustainability journey.

Table 1.5. *Counts of units of pre-assessments by pre-assessment result and eventual outcome. 'Entered assessment but not certified' contains all units of pre-assessment that are currently in full assessment, have withdrawn from full assessment or failed full assessment.*

Pre-assessment result	**Outcomes**			
	MSC certified	Entered assessment but not certified	Not entered assessment	Total
Risk of failing Performance Indicator	212	109	1,411	1,732
Risk of failing Principle	165	60	281	506
Likely pass	132	5	80	217
Total	509	174	1,772	**2,455**

Indicator 1.6 – Number of grants and amount of funding awarded through the Ocean Stewardship Fund

MSC's Ocean Stewardship Fund (OSF) aims to accelerate progress in sustainable fishing worldwide. Through the Fund, the MSC awards grants for research and innovation to help fisheries adopt and implement sustainable practices. The MSC commits 5% of annual royalties from MSC certified product sales to the Fund and combines this with third-party donations. Since 2020, the Ocean Stewardship Fund has allocated over £5.2 million to fisheries and research projects across 33 countries (Table 1.6).

Of the 144 grants awarded since 2020:

- 50% are supporting improvements and research in MSC certified fisheries,
- 50% are supporting fisheries that are earlier in their sustainability journey and are not yet certified, including in those in the MSC Improvement Program,
- 40% are supporting fisheries operating in developing economies, of which almost a third (28% of the 40%) are supporting student research projects.

Table 1.6. *Ocean Stewardship Fund support towards sustainable fisheries since 2020.*

Funding category	Total # grants	Total funding awarded (£ 000s)	Further information
Transition Assistance Fund	28	£1,322	The Transition Assistance Fund supports fisheries in the MSC Improvement Program (previously the In-Transition to MSC Program) to make the improvements needed to meet the MSC Fisheries Standard. See case study below.
Science and Research Fund	23	£1,050	Supports science and research activities within certified fisheries that are related to conditions of certification. Outputs can be used by more than the one fishery client receiving the award and managing the research / activity. See case study below.
Student Research Grants	18	£83	Supports postgraduate research projects in MSC certified fisheries or non-certified fisheries working towards the Standard to make improvements. 88% of grants are supporting students in developing economies.
Recertification Assistance Fund	45	£1,194	This fund rewards fisheries that have been in the MSC program for at least 10 years and provides support towards the costs of recertification.
Pathway Projects	3	£151	The OSF has recently been extended to support Pathway Projects, multi-fishery, multistakeholder

			initiatives which create the enabling conditions to support fisheries on their sustainability journey and make improvements. OSF grants are supporting improvement activities in fisheries in Canada, Portugal, and Italy.
Innovations Fund	13	£696	The Innovation Fund supports research of strategic priority for the MSC. Examples include projects that have identified and improved best practice approaches for at-sea monitoring, which will ensure that fishery observers around the world can carry out their work safely.
Others including Donor Funded Projects	14	£754	Other grants awarded include donor-funded projects that have focused on specific regions including Western Africa and Mediterranean.
Total	**144**	**£5,250**	

Two case studies illustrate the diversity of research projects funded through the OSF:

1) *WWF South Africa and the South African albacore tuna pole and line fishery*. (Transition Assistance Fund grant; £50,000; awarded March 2020)

The South African albacore tuna pole and line fishery mainly operates off the south and west coasts around Cape Town and up to the Namibian border. Fishers use bamboo poles with a wire leader attached and unbarbed hooks to catch and haul albacore tuna. Together with World Wildlife Fund South Africa, the fishery set up a fishery improvement project to enhance the sustainability and traceability of albacore tuna catch.

With funding from the OSF, the fishery developed a comprehensive system for collecting detailed at-sea catch information for all species, including any interactions with endangered, threatened or protected (ETP) species. The fishery also implemented robust management practices to ensure efficient monitoring is taking place as well as compliance with permit conditions and fishery management policies. In addressing these critical areas, the funding ensured that the fishery would be much better positioned for achieving MSC certification.

In August 2024, the fishery became the first to achieve MSC certification following participation in the MSC Improvement Program – and the first certified tuna fishery in South Africa. This marks a significant milestone for the MSC and for the South African fishing industry. Certification means the fishery now supplies the market with 2,500 tonnes of MSC certified, sustainably caught tuna. Most of this will be sold canned to consumers in North America and Europe. The fishery also serves as a model for others to improve the sustainability of their practices.

2) *University of Windsor and the Greenland halibut bottom trawl and gillnet fishery: Protecting the Greenland shark - the world's longest living vertebrate*. (Science and Research Fund grant; £50,000; awarded March 2020)

The Greenland halibut trawl and gillnet fisheries off the east coast of Canada were certified in 2019. A condition of certification was to gather more accurate data on bycatch and help assess the status of the Greenland shark population in the region. The Greenland shark is an apex predator that lives for hundreds of years and is slow to reproduce, so can be especially vulnerable to accidental capture.

With funding from the OSF, researchers from the University of Windsor's Hussey Lab worked with fishing crews to assess the health of Greenland sharks incidentally caught and to quantify their mortality after release. At the time, post-release survival rates of the species were largely unknown. This made it difficult to identify ways to reduce the accidental capture of this species.

A post-capture assessment was performed on 47 sharks caught unintentionally across two fishing seasons (2020 and 2021). Data was gathered on the sharks' health condition, reflex responses, and deck observations of sharks – which would be used to determine if post-capture condition relates to post-release survival outcomes. Prior to release, a pop-off satellite archival transmitting tag was attached to each shark to monitor their behaviour and assess post-release mortality. Mortality estimates from these tags were then scaled up in order to generate an estimated total mortality for the Greenland shark across the entire fishery.

A safe handling and release guide for shark and skate bycatch in offshore trawl, longline, and gillnet fishing gears was also developed with input from researchers, industry, and observers before distribution to fishing crew.

As a result of this funding, the fishery (Canada 0AB 2+3KLMNO Greenland halibut bottom trawl and gillnet) is on target to meet the conditions of its certification as well as provide much needed information on Greenland shark populations in the fishing area.

Learnings

Access to the OSF has been linked to strong and consistent engagement with fisheries. This is vital to extending the MSC's reach and engaging over a third of fisheries in the program by 2030.

The next phase of growth in the OSF to deliver greater impact will require a scale-up of funding and new funding mechanisms. Its evolution is a key focus for 2025 and beyond, and will be informed by the significant experience and expertise within the MSC and its monitoring program, as well as its funders and stakeholder communities.

SEAFOOD SUPPLY CHAINS AND MARKETS

The MSC aims to increase the share of global seafood supply chains participating in the program, and thereby to continue increasing the supply of, and demand for, sustainable seafood.

Indicator 2.1 – Number of MSC Chain of Custody certificate holders

For products to be sold with the MSC ecolabel, every company in the supply chain must be certified against the MSC Chain of Custody Standard. The Standard provides assurance that all seafood sold with the MSC ecolabel comes from a fishery that has been certified as sustainable. At each stage of the supply chain, MSC certified seafood must be easily identifiable and kept separate from uncertified products. Companies handling MSC certified seafood are also required to have a management system capable of proving the product is certified at the point of purchase, and eligible for sale as certified.

This indicator tracks the number of valid Chain of Custody certificate holders each year, representing the number of companies providing assurance that products with the MSC ecolabel come from a certified sustainable source. The total number of Chain of Custody certificate holders has grown year-on-year at an average annual rate of 8% since 2013, increasing from 2,549 in 2013 to 5,964 in 2024 (Figure 2.1). While numbers of certificate holders have expanded over time, the annual growth rate of certificate holders has steadily diminished in recent years, from around 13% (range 11-16%) between 2016 and 2018, to 2.5% (range 1 – 4%) between 2022 and 2024. This decline in average annual rate is present for all certificate types.

In 2015, the Chain of Custody Standard was updated to include a Group model and a Customer-Facing Organisation (CFO) model alongside the Default model to cater to diverse supply chain business needs. The Default Standard is designed to be applicable to single or multisite companies; the Group Standard model is applicable to any company with multiple sites coordinated through a central office; the CFO Standard model is applicable to single or multisite retailers, restaurants, caterers and fresh fish counters selling directly to final consumers. Prior to this, the Group Standard was an annex to the Default Standard. Certificate holders previously under the Group annex were able to transition to either the Group or CFO model, as appropriate, before the official launch of the standalone Group and CFO standard models in 2015.

From 2015 to 2024, the number of multisite certificates within the Default Standard increased by 640 certificates to 932, at an average annual rate of 13.8% (range, 4% to 28%) (Figure 2.1). Since 2016 the number of Group certificates has steadily increased and is now back to previous 2014 levels (141) with an average annual growth rate of 4% (range, 1% to 14%). Issuance of CFO certificates declined in the two years after the CFO Standard was released (2015–2016), with only 121 certificates issued. Between 2017 and 2022, only 64 additional certificates were issued in total, with a loss of 14 certificates occurring between 2023 and 2024, bringing the current number of certificates to 171. However, the number of sites may differ from the number of certificate holders; the CFO Standard has the largest number of certified sites (41,018 in 2024) as all restaurant and wet fish counter sites are now certified

under this Standard. By comparison, the number of sites in 2024 for Group certificates was 25,207, and 7,014 for Default Standard certificates.

Learnings

The number of MSC CFO Chain of Custody certificate holders has steadily decreased, despite it being one of the newest standards. The CFO market is a highly complex and continually evolving environment due to factors such as high transaction volumes, operational diversity, and frequent staff turnover.

One of the aims of the current Supply Chain Standard Review is to increase engagement by improving the accessibility of the Chain of Custody Standard. This will involve removing unnecessary complexity in language and clarifying requirements for different supply chain actors.

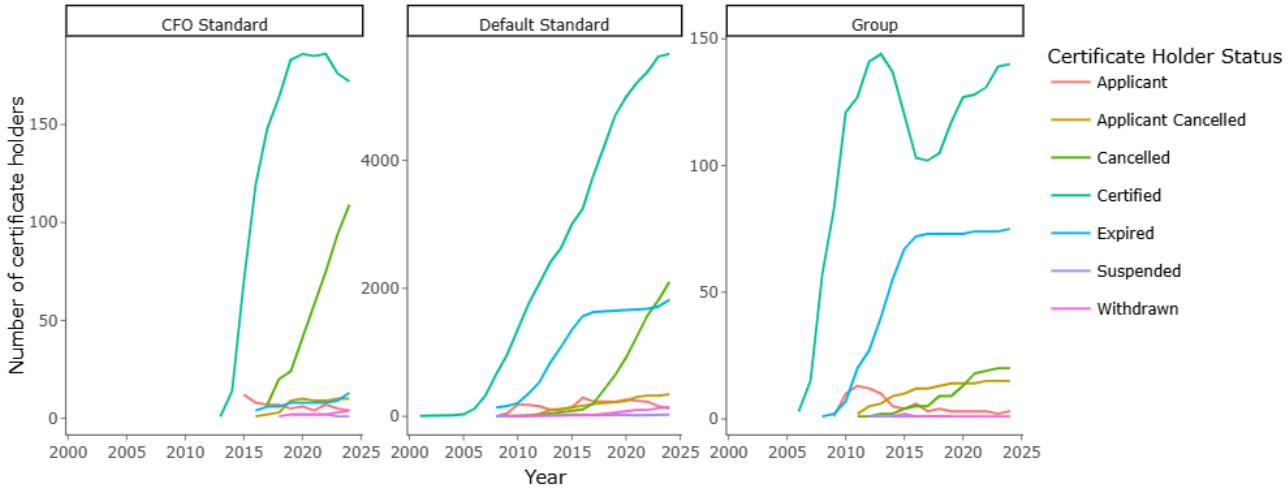


Figure 2.1. *Number of MSC Chain of Custody certificate holders by year, certificate type, and certificate holder status. CFO = Customer-Facing Organisation. Note different axis values in panels.*

Indicator 2.2 – Total volume of seafood sold with the MSC ecolabel

The MSC ecolabel is the most widely used seafood ecolabel globally, used by consumers to identify certified MSC products. This indicator tracks the volume of MSC labelled products sold in global markets. We note that not all MSC certified seafood ends up being sold with the MSC ecolabel.

In most product categories, the volume of MSC labelled seafood products has grown between 2018 and 2024 (Figure 2.2). The greatest proportional increases were observed for product categories 'food to go', 'pet food', 'surimi', and 'canned'. This relates to the diversification of label use into new product categories by retailers and seafood brands in mature markets, as well as the growth in MSC labelled tuna specific to canned products.

There has been a stabilisation in the volume of frozen products following the surge in consumption during the Covid-19 lockdowns, as consumers shifted towards products that required less frequent grocery visits, and with longer storage life. Subsequently, higher rates of inflation over the past 18 months have suppressed general seafood consumption as consumers purchase seafood less frequently at higher prices.

The decrease over the last two years observed in product category 'fish counter' (Figure 2.2) is also related to closure during Covid-19 lockdowns that in many cases were not reopened, reflecting a change in seafood purchasing habits. In the case of 'chilled prep', and 'chilled plain' the decreases largely correlate to the suspension of herring and mackerel fisheries that had provided significant volumes of MSC labelled products in these categories. This also caused loss of labelled canned products, although this was largely offset by the growth of MSC labelled canned tuna as mentioned above.

Volumes of labelled seafood in 'foodservice' (out of home consumption) remain stable (Figure 2.2). This reflects continued engagement by a small number of global businesses, as well as the lack of absolute engagement by this sector relative to retail across all markets. While there are local exceptions to this global trend the sector does not face the same consumer, media or stakeholder pressure on seafood sourcing as exists in retail. Moreover, for those businesses that do engage, the volume of seafood sold per company is considerably less than recorded in retail.

Regionally, the volume of MSC labelled products has stabilised in North and Western European markets as the most consumed species progress toward label use saturation. Coupled with this, loss of labelled products containing seafood from fisheries that lost certification was offset by growth in tuna labelling. In North America, Asia, Southern Europe, and Central Europe, there has been notable growth in the volume of labelled seafood as those markets mature and more brands integrate certification into their sustainable seafood sourcing policies. Countries in these regions are following the same trends and label use patterns as those observed in more established markets for the MSC label, focussing on labelling frozen, chilled, and canned products containing whitefish, tuna, and pelagic species.

Learnings

While global sales data are shown in Figure 2.2, the MSC also evaluates regionally-disaggregated data to track MSC labelled seafood sales by country as well as by product type. These more detailed trends help the MSC to better understand how patterns of consumer demand are changing in specific markets, which in turn informs MSC outreach activities with retailers in those markets.

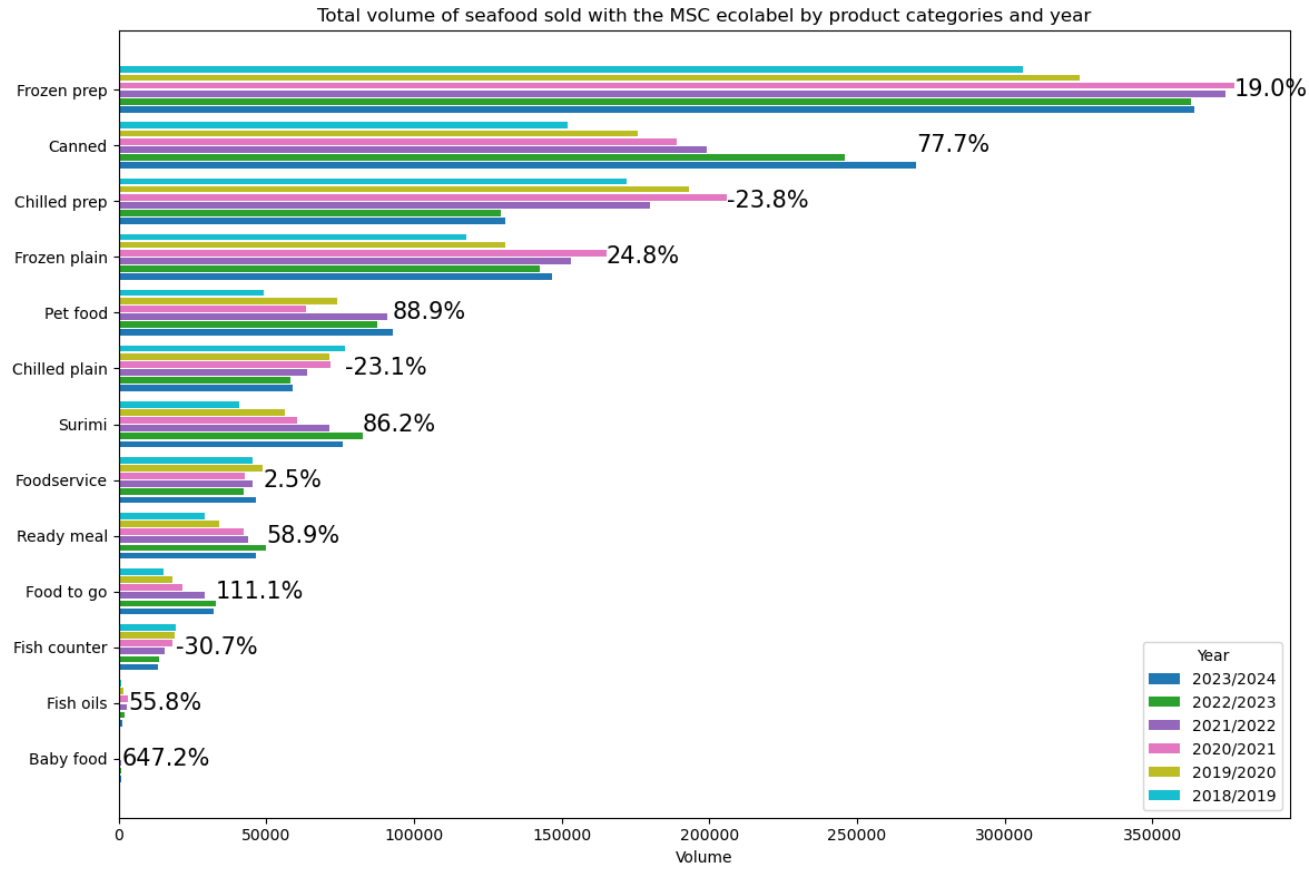


Figure 2.2. *Volume (tonnes) of MSC labelled products sold by product category and financial year. The reported percentage for each product category is the difference between volume sold in 2023/2024 and volume sold in 2018/2019 relative to the volume sold in 2018/2019.*

Indicator 2.3 – Relative number of Chain of Custody non-conformities

Companies with MSC Chain of Custody certification are required to be audited against the MSC Standard by their conformity assessment body (CAB) every 12 to 18 months to maintain their certificate. If a certificate holder does not comply with a requirement, it will receive a non-conformity for that specific clause. Non-conformities can differ in severity and therefore are given timespans to resolve (30 days for major non-conformities and 60 days for minor). Since May 2023, certificate holders are required to close all non-conformities before a certificate decision can be reached, in compliance with ISO-17065. If the non-conformity is not closed within the proposed time frame, the certificate holder will be suspended, pending an additional onsite audit to assess the corrective action.

Since September 2023, all CABs and auditors have moved to the MSC's new Supply Chain Audit Platform which allows auditors to complete their audits online. The digitisation of the audit process has provided the MSC Supply Chain Standards team with greater insight into the number of non-conformities, traceability, and other auditing events of all certificate holders. However, as a result of this change to the audit process, data for 2023 are not directly comparable with indicator data for 2024.

Each version of the Chain of Custody Standard has a different classification system for non-conformities (Table 2.3). For Customer-Facing Organisation (CFO) clients, all non-conformities, even those found at individual sites, are assigned to the certificate holder, while Group certificate holders can have site specific and/or central office non-conformities. Furthermore, the CAB shall raise any non-conformities found at a non-certified subcontractor with the certified entity. Further details can be found in the MSC Chain of Custody Certification Requirements v3.2.

Initial findings of non-conformity data reveal that commonly raised clauses covered key processes of the MSC Standard, primarily recordkeeping and management processes. The most notable clauses raised and associated requirements were:

- Default model v5.1 2.1: Certified products shall be identified as certified at all stages of purchasing, receiving, storage, processing, packing, labelling, selling and delivering, except for sales invoices to final consumers. Recorded for 5.1% of all recorded non-conformities.
- Default model v5.1 5.4.1: The organisation shall have a process for managing non-conforming product. Recorded for 4.8% of all recorded non-conformities.
- Default model v5.1 1.1: The organisation shall have a process in place to ensure that all certified products are purchased from certified suppliers, fisheries, or farms. Recorded for 4.7% of all recorded non-conformities.

Commonalities were also identified between the non-conformities raised in the three models of the Standard. These often related to training and communication between certificate holders and CABs. In 2024, 10% of all non-conformities raised for CFO certificate holders were related to training material not being provided to responsible personnel (CFO model v2.1 5.2.2). A further 9% of non-conformities were raised for a lack of records demonstrating that training has been carried out (CFO model v2.1 5.2.3).

For Group certificate holders, most (9%) non-conformities raised were because certificate holders didn't inform their CAB within 10 days of changing their MSC contact person (Group model v2.1 5.2.1.1). A

further 7% of non-conformities were raised due to missing information or lack of training for responsible personnel (Group model v2.1 5.1.2).

Default certificate holder non-conformities were similar, with 20% raised because the certificate holder did not inform their CAB within 10 days of changing details (Default model v5.1 5.2.1 and 5.2.1.1). A further 10% of non-conformities were raised for missing training records (Default model v5.1 5.1.2).

Learnings

As access to data on non-conformities is now more readily available, the MSC is better able to monitor and evaluate the Chain of Custody program and incorporate findings into Standard review processes and targeted investigations. For example, as 40% of non-conformities raised across all certificate types consistently relate to recordkeeping and communication of changes to CABs, the Supply Chain Standards team will raise this with CABs during the Tripartite meeting in February 2025. This concern is also currently being considered for the ongoing Chain of Custody Standard Review.

The MSC Supply Chain Standards team will also be able to offer more tailored training resources to CABs and certificate holders as a result of improved monitoring and evaluation. One example will be developing specific 'Get Certified' guidelines which emphasise the importance of recordkeeping and improved communication between the certificate holder and their CAB.

Table 2.3. *Number of non-conformities (NC) raised per certificate holder (CH) with number of NCs and CHs in brackets for 2023 and 2024. Extraction of non-conformity data has been made possible since auditors moved from eCert to Supply Chain Audit Platform in September 2023. As such, more non-conformities are found in 2024 compared to 2023. In total, from September 2023 until November 2024, 2729 CH were recorded with 6323 NCs. Data collected on 21st November 2024.*

Standard type	NC Classification	Definition	Ratio (# NC /# CH) 2023	Ratio (# NC /# CH) 2024
Default	Observation	Where the client demonstrates partial compliance or minor inconsistencies with the Chain of Custody Standard that do not constitute a breach but highlight areas for improvement to maintain compliance and prevent future non-conformities.	1.8 (293/162)	1.8 (1029/583)
	Minor	Where the client does not comply with the Chain of Custody Standard, but those issues do not jeopardise the integrity of the Chain of Custody.	1.9 (782/409)	1.8 (2716/1523)
	Major	Where the integrity of the Standard is potentially jeopardised, or in cases where the organisation has not complied with specific eligibility requirements	1.7 (126/76)	1.6 (498/302)
CFO	Observation	Where the client demonstrates partial compliance or minor inconsistencies with the Standard that do not constitute a breach but highlight areas for	2.0 (26/13)	1.9 (76/41)

		improvement to maintain compliance and prevent future non-conformities.		
	Minor	Where the client does not comply with the Standard, but those issues do not jeopardise the integrity of the Chain of Custody.	3.1 (91/29)	3.9 (290/75)
	Major	Where the integrity of the Standard is potentially jeopardised, or in cases where the organisation has not complied with specific eligibility requirements.	2.0 (12/6)	1.9 (35/18)
Group	Observation	Where the client demonstrates partial compliance or minor inconsistencies with the Standard that do not constitute a breach but highlight areas for improvement to maintain compliance and prevent future non-conformities.	2.5 (33/13)	2.2 (81/37)
	Site Minor	Where there is a system breakdown that is unlikely to result in non-certified product being sold as certified.	1.6 (13/8)	2.5 (72/29)
	Group Minor	Where there is a partial lapse or partial breakdown of activities related to one element of the organisation's management or auditing system.	2.2 (46/21)	1.8 (89/50)
	Site Major	Where there is a system breakdown that could result in non-certified products being sold as certified.	1.0 (1/1)	1.5 (3/2)
	Group Major	Where there is a breakdown of activities related to one element of the organisation's internal management or auditing system.	1.7 (5/3)	1.3 (5/4)
	Site Critical	Where a product is found that is labelled or has been sold as certified but is shown not to be certified.	0.0 (0/0)	1.0 (1/1)
	Group Critical	There is a complete breakdown of the management system such that the organisation's assurances of site conformity with the Chain of Custody Group Standard cannot reasonably be relied upon, or Site Critical non-conformities have also been raised against the central office as per 9.4.5 or 9.4.6.1.b	0.0 (0/0)	0.0 (0/0)

ASSURANCE

The MSC aims to meet international best practice in sustainable seafood certification, in both the fishery and supply chain assessment and auditing processes.

Indicator 3.1 – Relative number of technical oversight major findings

Technical oversight is the review of fishery assessment documents against MSC scheme documents. The aim of the process is to identify and document any misapplication of requirements. The MSC Fisheries Standard team carries out technical oversight on a range of fishery assessment reports, including Fishery Announcements and Announcement Comment Draft Reports, Public Comment Draft Reports (PCDRs), Final Draft Reports and Surveillance Reports. Technical oversight is only recorded systematically for PCDR review, so only data relating to these reports are presented here.

In the case of PCDRs, documents are sampled for review primarily using a risk-based approach designed to manage MSC credibility risk associated with individual fishery assessments and application of MSC scheme requirements (Fisheries Certification Requirements and Fisheries Certification Process). This risk-based sample is taken alongside a random stratified sample to ensure a baseline number of reports across Conformity Assessment Bodies (CABs) are reviewed. Additionally, as part of the review of PCDRs, the MSC Supply Chain Standards team is engaged to review traceability systems.

Any potential non-conformities are known as technical oversight findings, which are graded as one of three types:

- **Guidance**: An area of concern that does not represent a misapplication of requirements but that could be addressed to better demonstrate conformity to scheme requirements.
- **Minor**: A misapplication of requirements that is not in itself likely to cause a material change to an outcome but requires further attention by the CAB.
- **Major**: A misapplication of requirements that, if corrected, could result in a material change to an outcome.

Only major findings are considered here, as the classifications of guidance and minor finding grades are inconsistent and thus not considered to be useful indicators.

A total of 85 PCDRs were submitted in 2023, which continues a trend of increasing PCDRs between 2019 and 2023 (Figure 3.1A). In this same period, the number of PCDRs reviewed remained steady, implying a decrease in the proportion of PCDRs receiving oversight. In 2019, 89% of received reports were subject to technical oversight, compared to 53% of reports in 2023. Of the reports that were reviewed under technical oversight, 38 to 54% raised major findings between 2019 and 2021 and 63 to 67% raised major findings in 2022 and 2023 (Figure 3.1A). The number of major findings per reviewed report ranged from 1.2 to 2.8 from 2019 to 2023 (Figure 3.1B).

Of the major findings raised, most were related to requirements associated with scoring, for example 96% of major findings in 2022 and 68% in 2023. Other topics receiving major findings included scoring harmonisation, use of the salmon scoring tree, condition setting, and the risk-based framework. Within the scoring-related findings, 52% in 2022 and 85% in 2023 were related to inadequate scoring

justifications. This represents a major focus of the technical oversight process, and a variety of reasons may lead to scoring justifications being considered inadequate.

Learnings

The information generated through technical oversight is used for a number of applications:

1. To trigger follow up actions that aim to correct the misapplication of requirements, including engagement with the CAB and escalation to Assurance Services International. This happens on a case by case basis, and is a core part of routine Fisheries Standard team operations.

2. To generate feedback on the application of the requirements to inform future policy development. For instance, patterns in oversight findings may show where requirements are routinely misapplied or misunderstood. Analysis of technical oversight for this purpose is done *ad hoc* as part of a policy development project.

3. To identify training needs for CABs, fishery assessors, Peer Reviewers and MSC staff. As with policy development, technical oversight data analyses are part of the development of new training material.

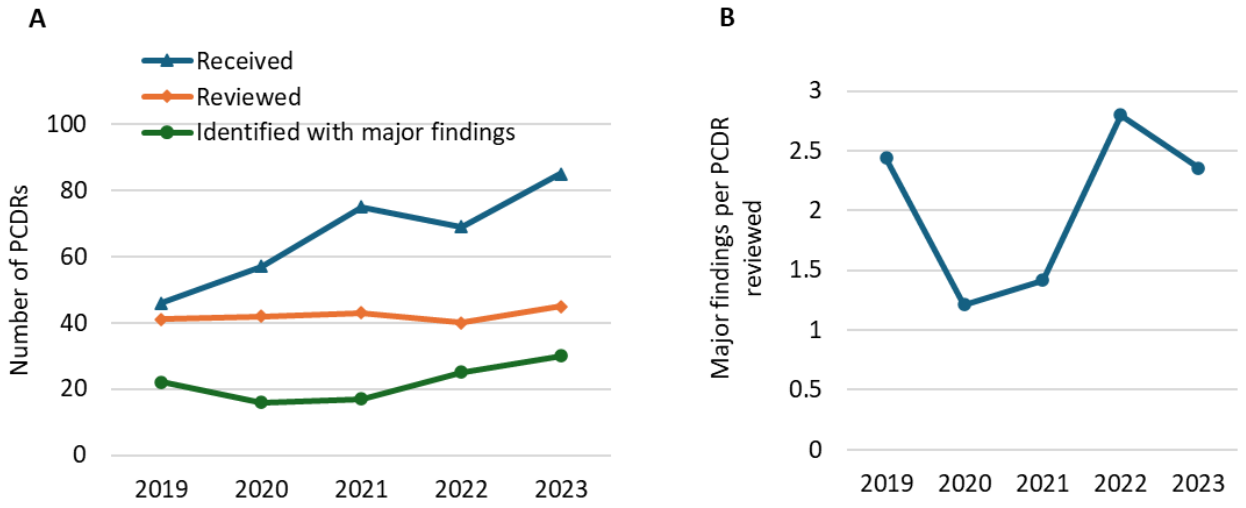


Figure 3.1. *(A) Numbers of fishery Public Comment Draft Reports (PCDR) received, reviewed, and recorded as having major findings under the technical oversight process. (B) Number of major findings recorded per PCDR reviewed. Years before 2019 are considered less consistent in terms of methodology and classifications so are not shown.*

Indicator 3.2 – Relative number of variation requests

Variation from the MSC's scheme requirements is permitted in certain cases to facilitate the effective running of the MSC Program. Variation requests are submitted to the MSC by Conformity Assessment Bodies (CABs) when they wish to vary from a requirement specified in the Fisheries Standard, Fisheries Certification Process, Chain of Custody Standard, Chain of Custody certification requirements or General Certification Requirements. If a variation request is to be approved, the CAB must justify why a variation from requirements is needed, identify any impacts of the variation to the assessment process, and explain how these impacts will be managed. Requests are not always approved. The MSC considers the justification given by the CAB on a case-by-case basis and, if approved, may include conditions to mitigate any impacts of the variation. The MSC's response to a variation request is normative, meaning that CABs must confirm with the scope and terms of the variation.

For fisheries certification, variation requests are expected to vary with the number of fisheries within the program, so we examine the relative ratio of fisheries variation requests to the number of unique fisheries. Note that the relationship between number of fisheries and number of variation requests is not one-for-one; in a given year, most fisheries will not be associated with a variation request, and of those that are, a relatively small group will typically be associated with multiple requests. The number of Chain of Custody variation requests is expected to vary with the number of certificate holders, so we present the indicator as a relative ratio.

For fisheries, the relative number of variation requests received each year (relative to the number of unique fisheries) has fluctuated between 0.33 to 0.68 with a slight increasing trend over the period from 2019 to 2023 (Figure 3.2A). Most variation requests represent one-off requests, seeking to adjust a small part of the certification process. Furthermore, the vast majority of variation requests focus on just a few parts of the certification process, particularly those components with surveillance audits and site visits. Surveillance audits are the most frequently applied component of the fisheries certification process, so a higher number of variation requests is logical. There are also varied logistics involved in scheduling and completing surveillance audits (which is also true for site visits).

The MSC Supply Chain Standards team receive Chain of Custody variation requests through the helpdesk and communicate directly with CABs prior to registering the request. In some cases, variation requests are retracted before they are officially considered by the Supply Chain Standards team, therefore total number of variation requests submitted will be greater than registered. For Chain of Custody, the relative number of requests registered each year (as a proportion of certificate holders) has consistently remained around 1 to 3% since 2012, with no consistent directional change (Figure 3.2B). The number of variation requests registered reached a peak in 2021 (Figure 3.2B) which can be attributed to an increased volume of requests for remote auditing during the latter stages of the Covid-19 pandemic (117 out of 174 requests related to remote auditing), in accordance with the Chain of Custody Certification Requirements v3.2, clause 7.6.1. This trend was linked to the Covid-19 Derogation, which allowed remote auditing under exceptional circumstances until March 2021. Consequently, all CABs were required to submit a variation request for reconsideration of their remote auditing requests. The low rejection rate of variation requests in 2021 (Table 3.2) further demonstrates that most requests, including those related to remote auditing, were approved. During the periods either side of the Covid-19 pandemic peak, (2016–2020 and 2022–2024), most Chain of Custody variation requests registered were associated with requests to either delay or advance a surveillance audit by up to 90 days, as

stipulated in Chain of Custody Certification Requirements v3.2, clause 11.3.1(e). Over the entire period from 2016 to 2024, an average of approximately 5.3% of all submitted and registered variation requests were rejected (Table 3.2).

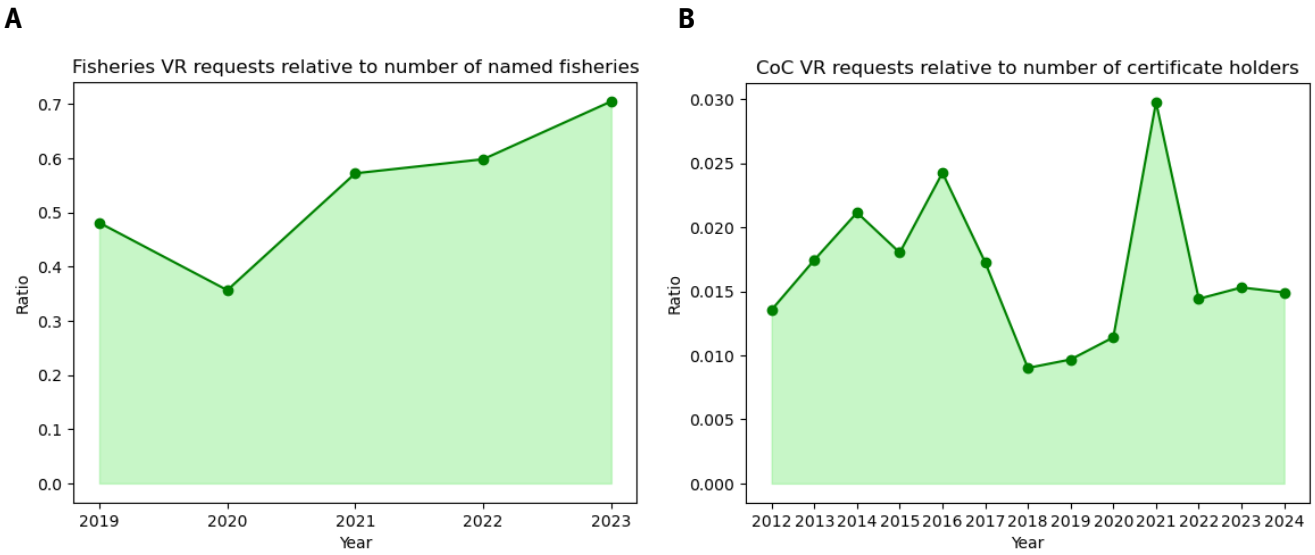


Figure 3.2. *Relative numbers by year of (A) Fisheries variation requests relative to the number of unique fisheries, and (B) Chain of Custody variation requests submitted to MSC, relative to the number of certificate holders. Only fisheries that were either certified or in assessment are included, excluding those that were suspended or withdrawn. For certificate holders, only those that were either certified or applicants were included, excluding those that were expired or cancelled. Data are current through 2024-12-13.*

Learnings

For fisheries, a large number of variation requests are received each year. In 2023, this was roughly four per week. This reflects a continuing year-on-year increase on the number of variation requests received, both in absolute terms and relative to the number of fisheries in the MSC program. This may reflect the growing sophistication of the program, an increase in certification process (or fishery) complexity, a greater willingness within CABs to request variations, or other reasons. Variation requests are used for highlighting areas of the Standard that may need development. For instance, they may show where requirements are routinely varied against because they are impractical or no longer relevant. Analysis of variation requests for this purpose is usually done *ad hoc* as part of a policy development project.

For the Chain of Custody, the number of Chain of Custody variation requests has remained relatively stable from 2016 onwards (with 2021 as an outlier), despite the number of Chain of Custody certificate holders steadily increasing. The true number of requests submitted that have not been registered and rejected 'off platform' has not been considered but this may reveal greater number of variation request applications than seen in Table 3.2. A standard cannot be written to entirely eliminate variation request applications, however, the Chain of Custody Standard Review aims to address common requests, such as introducing new clauses detailing remote auditing options.

***Table 3.2**. Number of Chain of Custody certificate holders, total number of variation requests registered, percentage of registered requests that were rejected, and total number of requests divided by number of certificate holders, by year. Data for 2024 current through 27 November.*

Year	Number of certificate holders	Number of variation requests registered	Percentage of variation requests rejected (%)	Variation requests/ certificate holders (%)
2016	3465	92	5.4	2.7
2017	4017	74	8.1	1.8
2018	4492	43	9.3	1.0
2019	5000	51	15.7	1.0
2020	5300	64	4.7	1.2
2021	5523	174	1.2	3.2
2022	5692	87	4.6	1.5
2023	5927	94	5.3	1.6
2024	5950	91	4.4	1.5

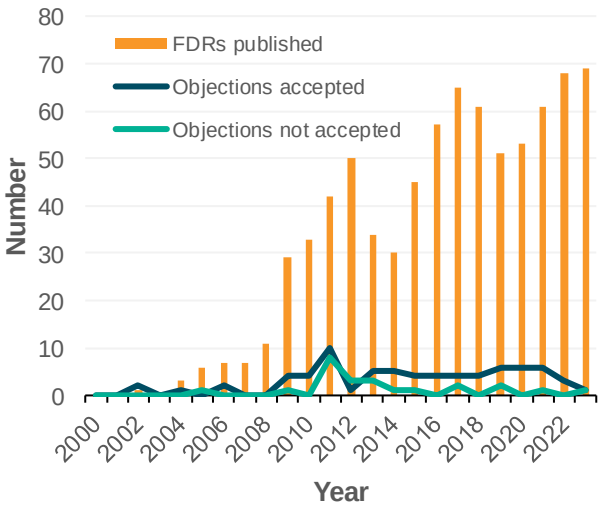
Indicator 3.3 – Relative number of objections to fishery certification

The MSC Fisheries Certification Process allows stakeholders who have participated in a fishery assessment to file a Notice of Objection to the Final Draft Report (FDR) produced by the Conformity Assessment Body (CAB). The FDR is the last opportunity for stakeholder input on a fishery assessment before the Public Certification Report is published announcing which Units of Assessment (UoAs) will become certified. The aim of the MSC's objections procedure is to provide a structured framework by which specific concerns about certification decisions can be formally reviewed and resolved.

Once received, a Notice of Objection is reviewed by an independent adjudicator —a legal expert in dispute resolution and regulation. The independent adjudicator will decide whether to accept the objection based on numerous criteria outlined in the MSC Disputes Process (MSC, 2022c). Criteria include whether the objection is determined by an independent adjudicator to be spurious or vexatious, and whether evidence is presented that would allow the independent adjudicator to determine if the CAB made an error that is material to the determination or the fairness of the assessment. These may include errors of procedure, scoring, or when reviewing the Client Action Plan.

Though the number of FDRs published each year has generally increased since the first fishery achieved MSC certification in 2000 (Figure 3.3A), the annual number of objections to fishery assessments has ranged from four to eight (5.25 on average) since a peak of 18 objections in 2011. Each FDR may receive more than one Notice of Objection from different stakeholders, and up to five objections have been accepted for a single assessment. On average, there have been 0.04 objections accepted and 0.01 objections not accepted per FDR published since 2000 (Figure 3.3B). There has been no obvious trend in the number of objections over time, except the number of accepted objections has been consistently higher than the number that were not accepted since 2012.

A



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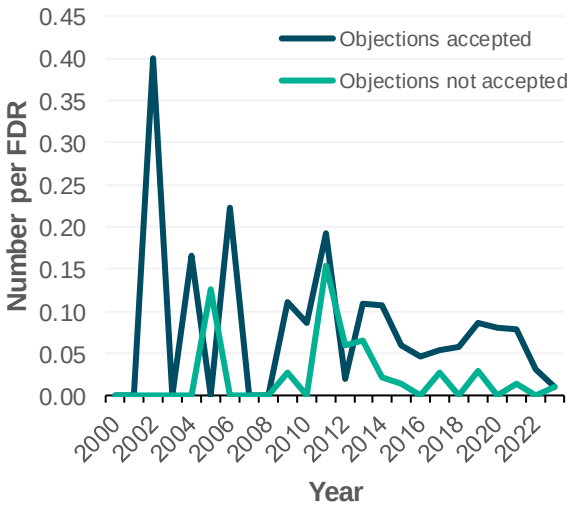

Figure 3.3. *A) Number of Notices of Objection received, which were each either accepted or not accepted, and the number of Final Draft Reports (FDRs) published per year. B) Number of Notices of Objection accepted and not accepted per FDR published annually.*

The components of the Fisheries Standard that are most frequently objected against include:

- Harvest strategies (Performance Indicators (PIs) 1.2.1 – 1.2.4 of the Standard; 28 objections)
- Endangered, Threatened and Protected species (PIs 2.3.1 – 2.3.3; 28 objections)
- Fishery-specific management systems (PIs 3.2.1 – 3.2.4; 25 objections).

The assessed species groups that are most frequently the subject of objections are:

- Tunas, bonitos and billfishes (33 objections)
- Cods, hakes and haddocks (19 objections)
- Miscellaneous demersal fishes, predominantly orange roughy and toothfish (12 objections).

Non-governmental organisations are the most frequent objectors to fishery assessments (Table 3.3), and the percentage of objections accepted for each stakeholder group has remained stable since the previous Technical Report (MSC, 2022a) was published.

The following outcomes occurred as a result of the objections that were accepted and are now fully resolved:

- 28 fishery assessments had non-material PI score reductions, or revisions to rationales, conditions, and report text.
- 14 fishery assessments had material PI score reductions to less than 80 and new conditions added.
- Three fishery assessments had UoCs suspended or withdrawn.
- One fishery assessment had a new recommendation added.
- One fishery assessment had a procedural change
- 12 were either dismissed by the adjudicator or withdrawn by the objector and therefore resulted in no change to the fishery assessment.

Table 3.3. *Number of objections submitted and rate of their acceptance, by stakeholder type. * Indicates correction from previously published Technical Report (MSC, 2022a).*

Stakeholder type	Total number of objections	% of objections accepted
Fishing industry	14	64
Government	1	100
Multiple	4	50
NGO	69	84
Research/Academia	2	50
Unknown	6	17*

Learnings

A review of the MSC's Disputes Process, which includes the Fisheries Objection Procedure, was conducted as part of the 2018 – 2020 Assurance Review. The review identified issues with the Objection

Procedure including the costs and time associated with the process; having a single adjudicator overruling the expert judgement of multiple experts involved in producing fishery assessment reports; and the potential for conflicted use by commercial interests.

The MSC has developed a proposal for a revised process that intends to remove increasing costs due to escalation of legal resources and remove the imbalance created if all parties do not have legal support. This proposed process has undergone initial testing and will be presented to the Board of Trustees for approval followed by piloting in 2025.

Indicator 3.5 – Number and diversity of stakeholder responses to Standard review processes

The MSC Fisheries Standard is reviewed approximately every five years to ensure that it reflects the most up-to-date understanding of internationally accepted fisheries science and management. Similarly, the MSC Chain of Custody Standard is reviewed periodically to ensure that it remains relevant and effective in maintaining an unbroken chain of custody throughout seafood supply chains. These reviews engage stakeholders from academia, fellow non-governmental organisations, governments, and industry.

The indicator considered here reflects the diversity of stakeholder responses, both geographically and by stakeholder affiliation or background. The most recent Fisheries Standard Review began in 2018 and resulted in the Fisheries Standard v3.0 issued on 26th October 2022, with an amended version (v3.1) published in July 2024. More than 660 submissions from public consultation surveys were received from approximately 350 individual respondents across 46 countries and 275 unique organisations. In these public consultations, the best-represented stakeholder group was NGOs, followed by seafood supply chain companies and commercial wild harvest fishery representatives (Table 3.5a). Other well-represented groups included representatives from Conformity Assessment Bodies or accreditation organisations, academics or scientists, and people from government or other management agencies. In terms of geographic representation, public consultation submissions from Europe and North America accounted for 71% of all submissions (in particular from the UK and USA), with the remainder coming from all major continents and country groups including several countries with developing economies (Figure 3.5). In addition to public consultation surveys, other approaches to soliciting stakeholder feedback were also conducted, including virtual conferences, workshops, and desk-based reviews.

Table 3.5a. *Number of submissions from Fisheries Standard Review public consultation surveys by stakeholder type. Counts include submissions between 2020-2022 in the most recent Review.*

Stakeholder type	Number of consultation submissions
Non-governmental organisation	169
Seafood supply chain	129
Commercial wild harvest fisheries	91
Conformity assessment/accreditation	55
Academic/scientific	49
Governance/management	40
Consumer	16
Communications/media	3
Standard setting	3
Cultural/recreational/artisanal	3
Aquaculture	1
Other/unknown	119
Total	**678**

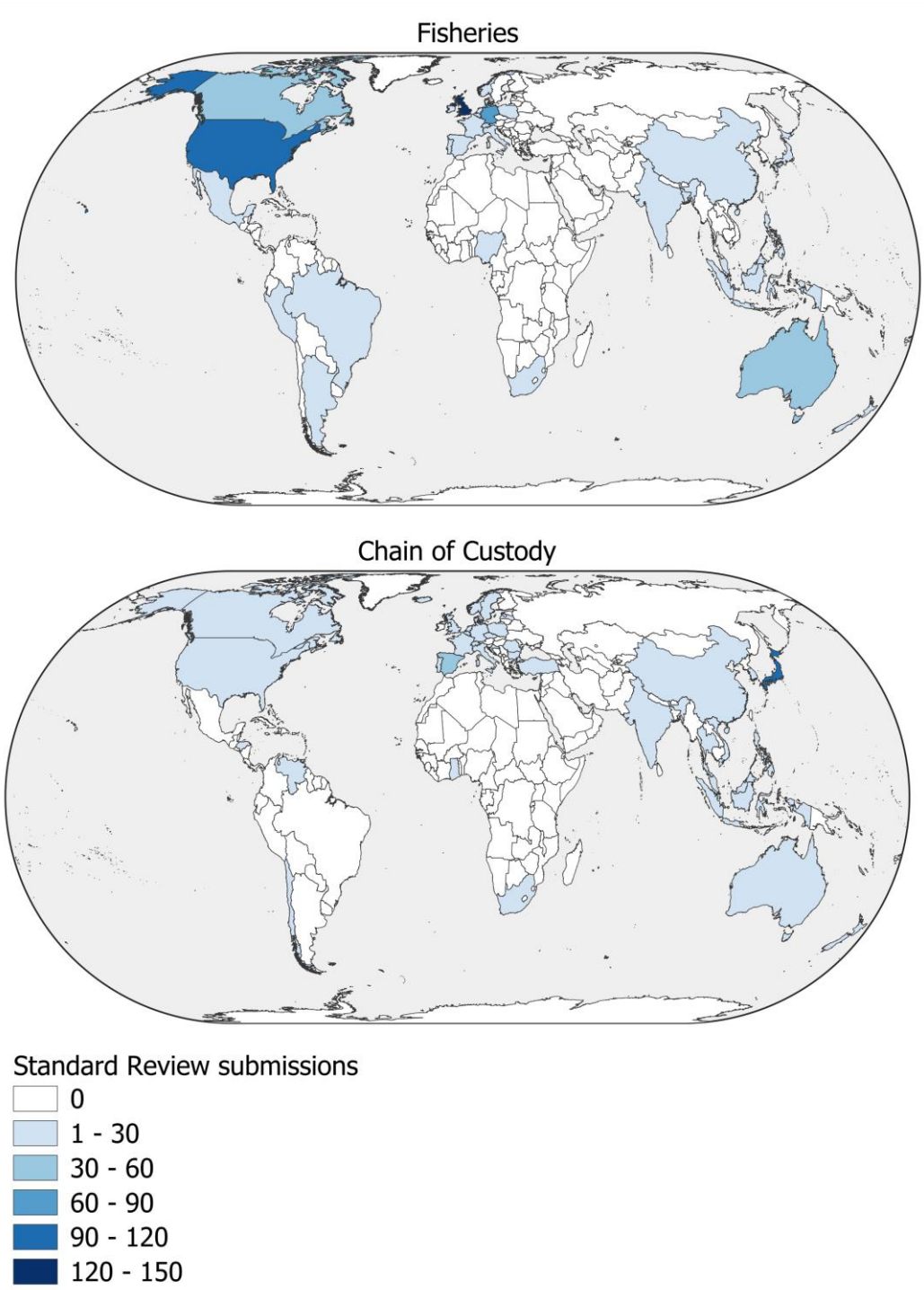

Figure 3.5. *Number of submissions from public consultation surveys by country. Counts include submissions between 2020-2022 in the most recent Fisheries Standard Review and between 13 September 2023 and 16 October 2023 in the current Chain of Custody Standard Review.*

The most recent Chain of Custody Review began in September 2023 and is currently ongoing. An initial survey was made public in January 2024 with 467 stakeholder submissions being received across 62 countries reflecting a broad geographic and professional diversity. This expanded on earlier stakeholder surveys, including the 2014-2015 Chain of Custody Program Review which involved 127 submissions through online consultations, and the 2016-2019 Review which involved public consultation submissions from 91 respondents. In the current review, stakeholders were asked to classify their scheme use activity, which provides insight into how different groups engage with the Standard. The majority of submissions (72%) were from individuals who implement the Standard, followed by consultants (15%) and assurance providers, such as certifiers and auditors (6%) (Table 3.5b). This distribution indicates that the feedback is heavily influenced by those directly involved in implementing or assisting with the standard, offering valuable perspectives on its practical application. In terms of geographic representation, 25% of submissions received were from respondents from Japan, followed by respondents from Spain (11%), Germany (6%), USA (5%), UK (4%), and France (4%) (Figure 3.5). The remaining 46% of submissions were received from 56 other countries with representation across all continents, including several countries with developing economies. This current review achieved greater geographic coverage than previous reviews, which included online consultation submissions or public consultation submissions from respondents in 16 and 17 countries, in 2014/15 and 2016/19 respectively. In both cases, respondents from Germany represented 30% and 25% of responses respectively, nearly twice as many as any other country. The wide geographic reach of the current review underscores the global relevance of the Chain of Custody Standard and its applicability across various contexts.

Table 3.5b. *Number of submissions from the current Chain of Custody Standard Review public consultation surveys by scheme use activity. Counts include submissions between 13 September 2023 and 16 October 2023.*

Scheme use activity	Number of Chain of Custody Standard Review submissions
I implement the standard	337
I help companies apply the standard (consultancy)	72
I am a certifier / auditor (assurance provider)	30
I am looking to implement the standard	12
Other	16
Total	**467**

Learnings

Despite the high number of submissions and engagement with the last Fisheries Standard Review, there are key learnings that can be taken from stakeholder engagement (Burns et al., 2024). Stakeholders from the UK and USA made up 21% and 15% respectively of all those involved in the Review. The remaining 63% was made up of participants from 44 other countries, suggesting attempts to diversify geographically were ineffective.

The distribution of those involved is also not reflective of fisheries engaged in the MSC program, with the UK representing only 1.2% of certified catch (by volume). The USA is more closely aligned, with

27.3% of the certified catch, but it is evident that UK stakeholders are dominant. Russia and Norway have the second and third largest certified catches at 17.1% and 11.0% respectively, yet there was no engagement from Russian stakeholders and Norway represented less than 1% of stakeholders. The geographical diversity could be in part due to the higher number of seafood supply chain representatives (129) versus certified fisheries (91), reflecting where there are large numbers of MSC products available and thus more representatives likely to engage. NGOs were the most well represented sector (169) and again these may be more likely to be found in the UK or North America.

Currently, only 0.09% of the total certified catch is from fisheries in Indonesia, however this country is a focus area for Fishery Improvement Projects. There are currently 19 Fishery Improvement Projects underway in Indonesia using the MSC Standard as a benchmark, representing 19,000 tonnes. Despite the importance of engaging stakeholders form this region, only one stakeholder from Indonesia participated in the last Fisheries Standard Review.

The MSC wanted to reach underrepresented stakeholders in the recent Review and ensure that language was not a barrier to participation. Throughout the consultation process, the MSC offered support to enable stakeholders without English as a first language to effectively participate in consultations. However, this support relied on regional MSC offices to offer bespoke opportunities in response to requests for translations. In retrospect, these efforts appeared to be largely ineffective in increasing diversity. For example, in 2020 there were 60 expressions of interest for consultation, of which 14 were from individuals where English was not their first language. However, only one interview in a language other than English was conducted, as others did not take up the offer. Final consultation materials were made available to MSC staff to translate in 2022. In Japan, this resulted in 19 survey respondents (11% of total respondents), in comparison to only one respondent across all previous consultations in the Review. This highlights the importance of local engagement and translation as a necessary means to improving consultation and engagement.

Indicator 3.6 – Number of peer review persistent disagreements

The Peer Review College was introduced by the MSC in 2017 following a pilot phase. It operates independently of the MSC Executive, with oversight from a committee sourced from the MSC's Stakeholder Advisory Council and Technical Advisory Board.

All fishery assessments and re-assessments against the MSC Fisheries Standard are reviewed, usually by two separate reviewers. The peer reviewers are experts on subjects like fish stock assessment and fisheries management, with equivalent competences to the assessment team members used by Conformity Assessment Bodies (CABs). Reviewers are carefully selected to avoid any conflicts of interest relating to the specific fishery assessments they review.

All peer review comments and CAB responses are published in the public assessment reports released by CABs. Between 2018 and 2020, the peer reviewers raised over 2,500 comments, leading to many improved scoring rationales and minor score changes (e.g. reductions from 100 to 80). They also led to some more significant score changes (e.g. reductions from 80 to 60), resulting in the required opening of conditions. In some cases, peer reviews have prompted CABs to either withdraw a fishery from assessment altogether, or to reduce the scope by removing some Units of Assessment.

Although the peer review system is widely recognised as a valuable part of the MSC's assurance system, stakeholders have raised concerns that CABs sometimes argue against peer review comments and resist changing the scoring of the fishery. Such resistance can be appropriate in some cases, where it is justified by changes being made to the information provided by the CAB or to the rationales given for the scores. In other cases, the resistance to change may not be consistent with the MSC Standard. In recognition of these concerns, in July 2022, the Peer Review College piloted a new 'Persistent Disagreements' Procedure, which was then fully implemented in July 2023. Disagreements between peer reviewers and CABs are seen as 'persistent' when they exist in both the 'initial' and 'follow-up' review stages. Under the new procedure, any persistent disagreements that could change the fishery's final score from an overall pass to a fail are checked by one of the College's third-party experts. If the expert decides the CAB responses are not adequate, details are sent to Assurance Services International (ASI) to investigate using its Incidents Procedure. Feedback is also provided to any peer reviewers whose comments are seen as inconsistent with the Standard. If ASI agrees with the concerns raised, they can require the CAB to take corrective action, such as changing the scoring in the fishery.

Since the start of the pilot in July 2022, the Peer Review College third-party experts have examined persistent disagreements in 16 reviews from a total of approximately 280 reviews done on about 155 fishery assessments (Table 3.6). These have led to six ASI incidents being raised across five different fisheries, involving four different CABs. Assessment outcomes have since been changed by the CABs in two of these cases, with the results still pending in two other cases (Table 3.6).

Learnings

These results show that the procedure can result in important changes in MSC certified fisheries. The approach complements the assurance provided by the Objections Procedure in regard to stakeholder inputs (as covered in indicator 3.3) by providing additional assurance relating to the peer review process. In each of the two fisheries affected to date, one of the Units of Assessment has been withdrawn or suspended from certification. The fact that only six of the 16 cases were raised as ASI incidents reflects that some of the disagreements were deemed to be due to incorrect peer reviewer

comments, while others were accepted as having been appropriately resolved by the CAB's responses. Two of the ASI incident cases to date did not result in a change to the CAB outcome. In one of these, a more minor 'opportunity for improvement' was raised by ASI on the CAB. The other case was dismissed, due to the evidence not being clear enough that the MSC requirements had not been met. The Peer Review College is learning from such experiences to ensure that only the most well-supported cases are passed on to ASI to investigate in future.

Table 3.6. Numbers of potentially important persistent disagreement reviews by Peer Review College year and the resulting numbers of ASI incidents raised, and numbers of changes made by CABs to their assessments.

Year (1 Sep – 31 Aug)	Number of potentially important persistent disagreement reviews	Number of ASI incidents raised for inadequate CAB responses	Number of changes made to (outcomes in) CAB assessments
2022-23	11	4	1 (+1 TBC)
2023-24	5	2	1 (+1 TBC)
Total	**16**	**6**	**2**

PUBLIC PERCEPTION

The MSC aims to increase awareness of and trust in the MSC ecolabel among consumers. As consumers preferentially purchase MSC labelled seafood products, the market demand for MSC certified seafood is predicted to increase.

Indicator 4.1 – Consumer perception of the MSC

The MSC regularly commissions a third party to survey trends in consumers' relationships with sustainable seafood across multiple countries. Every two years since 2016, the MSC Global Seafood Consumer Survey monitors consumers' awareness and perception of the MSC. It also considers consumers' values, behaviours, intended behaviours, attitudes and knowledge regarding sustainable seafood, including the proportion of respondents who are aware of and/or purchase products with the MSC ecolabel. Surveys typically involve more than 25,000 consumers across 23 countries, with a minimum of 600 consumers surveyed in each country. Survey results are reported publicly on the MSC website.

Consumer survey data were used to construct a two-part indicator to reflect consumer perceptions of the MSC, the first reflecting awareness and second reflecting trust in the MSC ecolabel. One survey question asked whether consumers had ever seen the MSC logo, and presented consumers with four categories for their answer:

- 'Yes, seen often'
- 'Yes, seen occasionally'
- 'No, never seen'
- 'Not sure'.

Among the survey respondents who had selected one of the two 'yes' categories in the first question, i.e. MSC-aware consumers, another survey question (beginning in 2018) asked consumers how much trust they have in the claims of the MSC. Respondents selected an integer on a seven-point scale ranging from one (no trust) to seven (a lot of trust). The top three categories (five, six, seven) were pooled as a measure of high trust. The survey also included many other questions related to the state of the worlds' oceans, the role of seafood in health, dietary preferences, motivations in purchasing seafood, and understanding of the MSC program – other summaries are presented on the MSC website.

The proportion of surveyed consumers that had seen the MSC logo increased steadily from 37% in 2016 to 50% in 2024 (Figure 4.1A). Of these MSC-aware consumers, around one third of them had seen the MSC label often, while approximately two thirds had seen the label occasionally. Over this same period, the proportion of surveyed consumers that answered they had never seen the MSC label decreased from 54% in 2016 to 38% in 2024, while the proportion of consumers who were not sure remained steady at 10 to 11% (Figure 4.1A). Among the MSC-aware consumers surveyed, between 69 to 78% of respondents indicated they had a high level trust in the claims of the MSC (Figure 4.1B). This proportion increased over the first two survey intervals before decreasing slightly in 2024.

Learnings

Indicator results presented here summarise survey responses across 23 countries, but disaggregated data are also analysed at the country level as well as by demographic of respondents. These disaggregated data help the MSC Global Communications and Outreach teams to plan more strategically in how to target MSC messaging and increase understanding of the MSC ecolabel among consumers.

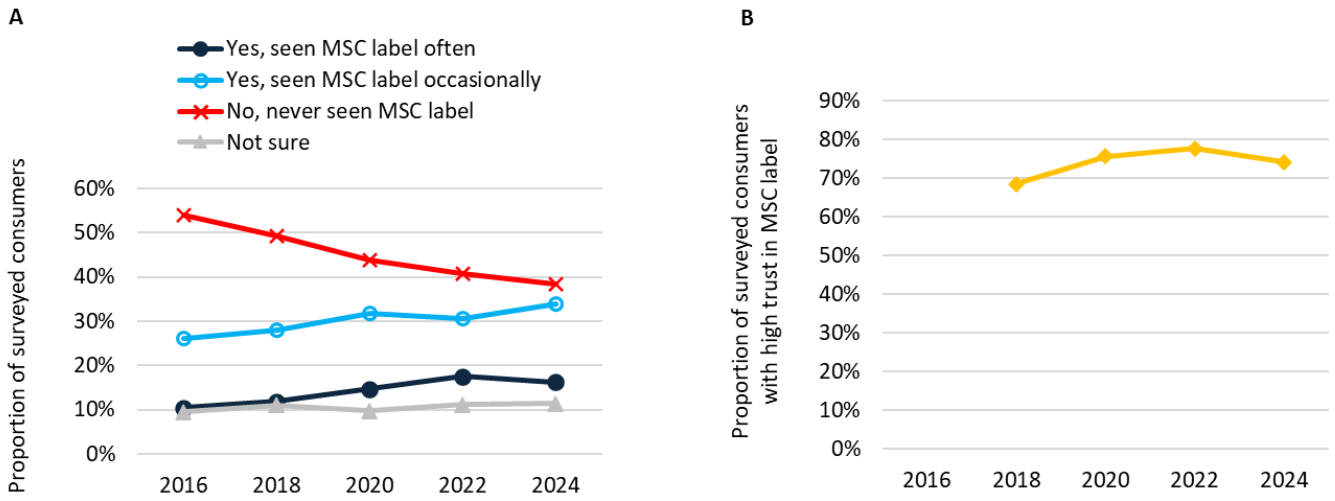

Figure 4.1. *Consumer awareness of MSC and trust in MSC ecolabel. (A) Proportion of surveyed consumers who have seen the MSC ecolabel often, occasionally, never, or were unsure. (B) Of surveyed consumers who have seen the MSC ecolabel, proportion who have a high level of trust in the label (level 5, 6 or 7 on a 1 to 7 scale of 'no trust' to 'a lot of trust').*

Indicator 4.2 – Number of articles in print, broadcast, and online media coverage

The MSC tracks the coverage that it receives in the media. This coverage is thought to reflect the reach of the MSC program to consumers and stakeholders.

The indicator considered here is the total number of mentions of the MSC in online, broadcast, and printed media coverage. Mentions are counted by a third-party coverage monitoring service and are disaggregated by financial year. Counts of mentions have used a consistent approach over the last three years, so only these years are included in the indicator.

The total recorded number of mentions of MSC has doubled over a three-year period, from 19,768 in 2021-2022 to 39,928 in 2023-2034 (Figure 4.2). This suggests that consumers and stakeholders are encountering more exposure to the MSC program.

Learnings

Coverage is monitored by country, and trends in regionally-disaggregated data are used by MSC Global Communications and Public Relations teams in their strategic messaging to increase the MSC program's reach to consumers.

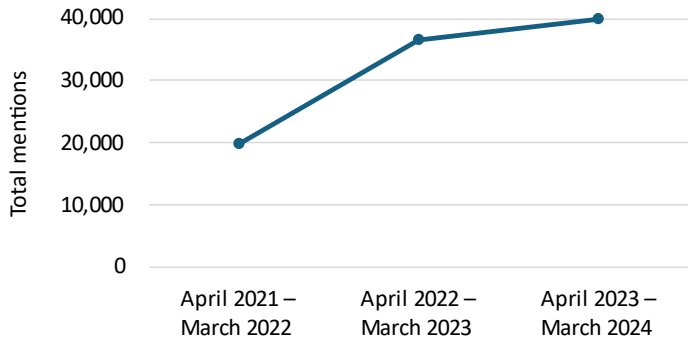

Figure 4.2. *Total mentions of MSC in online and printed media coverage in the last three financial years.*

Indicator 4.3 – Sentiment of media coverage

Using the same third-party coverage monitoring service as described for indicator 4.2, the MSC also tracks the sentiment of the coverage it receives in external print, broadcast, and online media. The sentiment of this coverage is thought to provide information on the credibility of the MSC program with consumers, and is likely to influence consumer perceptions of the MSC program.

Mentions of the MSC in the media are classified by the third-party coverage monitoring service as positive, neutral or negative towards the MSC. Sentiment is also monitored by country, but for the purposes of this indicator, pooled data across countries are presented.

Over the last three financial years, the proportion of MSC mentions classified as having a positive sentiment ranged from 43 to 54%, with the greatest proportion occurring in the most recent year (Figure 4.3). Over this period, the proportion of MSC mentions classified as having a negative sentiment has been much lower and decreased slightly, from 7% in 2021-22 to 4% in 2023-24. The proportion of MSC mentions classified as being neutral in sentiment ranged from 42 to 51% over this period (Figure 4.3).

Learnings

Regionally-disaggregated sentiment data are analysed and used by MSC Global Communications and Public Relations teams in deciding where to target their communication efforts to help consumers better understand the MSC program.

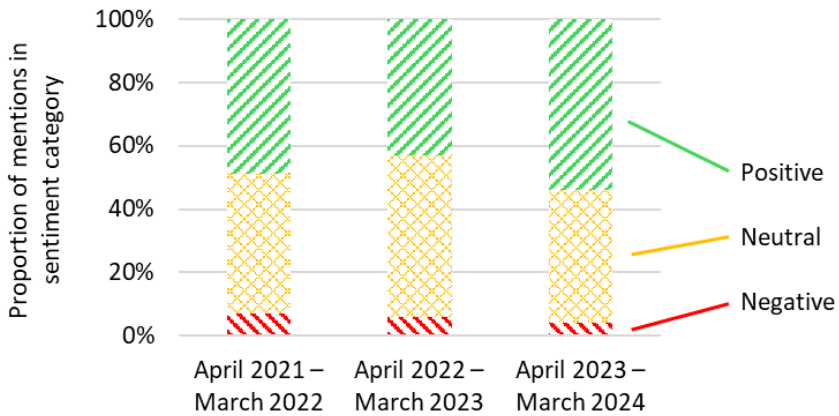

Figure 4.3. *Sentiment classification of MSC in online and printed media coverage.*

UNINTENDED CONSEQUENCES

The MSC monitors unintended effects—either negative or positive—emerging from stakeholders' engagement in the certification processes, so as to facilitate benefits and mitigate any drawbacks that are within its area of influence.

Indicator 5.2 – Number of logged issues

The MSC Issue Log is a tool used to record and track issues raised by internal and external stakeholders as they move through the MSC policy development process. An issue is a problem or opportunity identified in relation to MSC program documents or supporting documents, or any other element of the certification program, which is within the remit of the Science and Standards Department to address.

External stakeholders can submit an issue by following the process on the MSC website, which is then reviewed by the MSC and added to the Issue Log. The MSC Standard Setting Procedure outlines how issues from the log are considered in the development of a new Standard or revision of an existing one. The process is complementary to that of interpretations, which will be represented by indicator 5.1 in future reports. Issues are categorised as Major, Medium, Minor or Internal in the Issue Log to determine the development decision-making process for each specific issue raised (Table 5.2).

Table 5.2. *Criteria for each issue type in the MSC Issue Log.*

Issue type	Criteria	Examples
Major	New standard, or a change to the sustainability or Chain of Custody intent or scope of a standard, or a change to the assurance system which constitutes a major change to intent or scope of a standard.	• New standard • Introducing labour requirements • Change to conditions which effectively changes the bar
Medium	A change to a standard or the assurance system, which changes a practice but does not constitute a change to the sustainability or Chain of Custody intent or scope of a standard.	• Removing a General Certification Requirement that does not affect credibility of assurance • Creation of a new template for CAB use
Minor	A change to guidance, other clarification, or editorial change (e.g. errata, correcting a typo, etc) in a standard or the assurance system, which does not constitute a change of practice or a change to the sustainability or Chain of Custody intent or scope of a standard.	• Rewriting a requirement to improve its readability • Moving a section to another place in a document • Updating a hyperlink
Internal	Not raised in relation to a program document. Relates to an operational area of Science and Standards.	• New quality management system needed to support Chain of Custody Technical Oversight

Issues are assigned to individuals and the issue status is updated as the issue moves through the policy development process. If an issue becomes a project, it can only be considered resolved once the project output is published (e.g. program document) or operational (e.g. quality management system).

This indicator tracks the number of issues raised each year. Before 2015, fewer issues were raised, with the majority of logged issues classed as internal (Figure 5.2). The greatest number of issues were reported in 2015, likely due to the active collation of issues arising from the Fisheries Standard Review process and other policy development work. This resulted in the release of several program documents in 2014 and 2015, including the MSC Fisheries Standard v2.0 (October 2014), MSC Fisheries Certification Requirements v2.0 (October 2014), MSC Chain of Custody Standard (Default model v4.0, Group model v1.0 and Consumer Facing Organisation (CFO) model v1.0; February 2015), along with the MSC Chain of Custody Certification Requirements v2.0 (February 2015).

Since 2015, internal issues have been logged less frequently, and medium or major issues became the majority of logged issues (Figure 5.2). Issues became more frequent in 2019 and 2020 in preparation for the onset of the MSC Fisheries Standard Review. Ahead of each Standard Review, the Issue Log is reviewed by the relevant team to ensure all known issues are included and some may be reclassified where necessary. Annual counts of raised issues have since declined in the last few years, however a slight rise again in 2023 followed the release of MSC Fisheries Standard v3.0 in October 2022.

Learnings

The MSC Issue Log is a useful resource for MSC Standard Reviews and other policy development projects, allowing for all issues to be contained in one place, grouped, categorised and reviewed. It helps the MSC to better identify issues from a user perspective (e.g. issues raised by CABs) as well as understand what is important to stakeholders (e.g. environmental NGOs) and may reveal unintended consequences of the MSC program through the issues raised from these diverse stakeholders. However, the benefits of the Issue Log rely on its continued and consistent use by MSC teams.

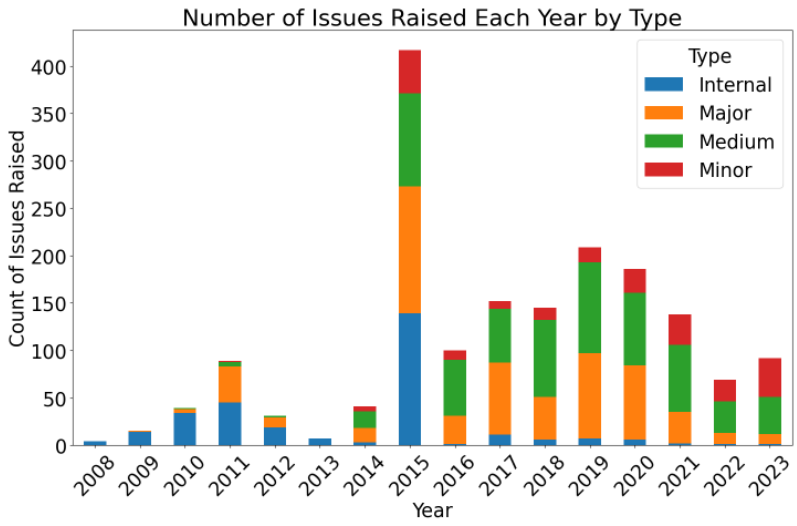

Figure 5.2. *Number of issues raised in the MSC Issue Log by type and year.*

REFERENCES

Arton, A., Leiman, A., Petrokofsky, G., Toonen, H., Neat, F., Longo, C.S., 2020. What do we know about the impacts of the Marine Stewardship Council seafood ecolabelling program? A systematic map. Environ Evid 9, 1–20. https://doi.org/10.1186/s13750-018-0143-1

Burns, P., Polidoro, B., Jardim, E., McElroy, D., McGregor, E., Wood, N., 2024. Defining Best Practice in Global Stakeholder Consultations: Lessons learned from the Marine Stewardship Council's Fishery Standard Review. Mar Policy 167, 106238. https://doi.org/https://doi.org/10.1016/j.marpol.2024.106238

FAO, 2024. Global Capture Production, 1950-2022.

Jones, S.T., Allison, E.H., Kroetz, K., Ota, Y., Jardine, S.L., 2023. Enrollment, retention, and inclusivity of Marine Stewardship Council (MSC) eco-labelling certifications. Mar Policy 155, 105734. https://doi.org/10.1016/j.marpol.2023.105734

Lees, S., Longo, C., Melnychuk, M.C., Burns, P., Polidoro, B., 2023. Corrected numbers and assumptions for understanding MSC certified fishery withdrawals: Commentary on Pierucci et al. Mar Policy 155, 105683. https://doi.org/10.1016/j.marpol.2023.105683

Melnychuk, M.C., Lees, S., Atcheson, M., Burns, P., Longo, C., Polidoro, B., 2024. Rates and drivers of fishery certification and withdrawal from the MSC program. Mar Policy 170, 106343. https://doi.org/https://doi.org/10.1016/j.marpol.2024.106343

MSC, 2022a. MSC Monitoring and Evaluation Technical Report.

MSC, 2022b. MSC Fisheries Certification Process v3.0.

MSC, 2022c. MSC Disputes Process, version 1.01. London.

MSC, 2014. Guidance for using the MSC Benchmarking and Tracking Tool (BMT).

Pierucci, A., Columbu, S., Kell, L.T., 2022. A global review of MSC certification: Why fisheries withdraw? Mar Policy 143. https://doi.org/10.1016/j.marpol.2022.105124

Rasal, J., Melnychuk, M.C., Lejbowicz, A., Montero-Castaño, C., Ferber, S., Longo, C., 2024. Drivers of success, speed and performance in fisheries moving towards Marine Stewardship Council certification. Fish and Fisheries 25, 235–250. https://doi.org/10.1111/faf.12805

ANNEX A: MATERIALS AND METHODS

This annex contains a description of all data collection and analysis methods used to reach every result and conclusion presented in this report.

1 Data sources

Data sources used for indicators and other supporting data summaries are listed in Table A1. Note that Ecert is the MSC's certificate management software.

Table A1. *Data sources used for summaries presented in this report.*

Dataset	Contents	Source
Catch database	Certified and suspended catch volume by species, gear, vessel country, and ocean region	Maintained by MSC. Entered into Ecert by CABs and verified by MSC using fishery assessment reports that are publicly available on Track-a-Fishery.
Chain of Custody certificate holder database	Client; CAB; Chain of Custody; audits; non-conformities; current certification status; monthly historical certification status	Maintained by MSC. Certification information into the Supply Chain Audit Platform by CABs and MSC.
Fishery certificate holder database	Client; CAB; fishery; Unit of Assessment; species; gear; ocean region; current certification status; monthly historical certification status	Maintained by MSC. Certification information entered into Ecert by CABs and MSC.
Cision media coverage dashboard	Amount of coverage; readership; sentiment	Provided by Cision, a third-party public relations monitoring service tracking mentions of the MSC in print, broadcast, and online media.
FAO Global Capture Production database	FAO global wild-capture production for marine and inland fisheries	Maintained by United Nations FAO (FAO, 2024)

GlobeScan Consumer Insights Surveys	Attitudes to ocean sustainability; seafood consumption; diet changes; motivators of seafood purchase; perceptions of ecolabels and sustainable fishing; MSC awareness, trust, and understanding	Provided by GlobeScan, a third-party insights and advisory firm tracking consumer attitudes to sustainable seafood and the MSC ecolabelling program.
Issue Log	Issue; relevant document and clause; issue status; issue type; resolution time frame; proposed change	Maintained by MSC. An internal tool for recording and tracking issues raised by internal and external stakeholders.
MSC-International database	Number and volume of MSC-labelled products by category, species, brand; turnover	Maintained by MSC. Entered into Ecert by Logo License holders.
Objections database	Objections, objectors; independent adjudicators; final decision on objections; outcome of objections	Maintained by MSC
Ocean Stewardship Fund grant records	Total number of grants awarded; total value of grants awarded; grant type; grant recipient details (developing economies, certified fisheries, Improvement Program fisheries, non-certified fisheries)	Maintained by MSC
Peer Review College database	Peer reviewers; Quality Assurance reports; peer review comments; persistent disagreements	List of reviewers maintained by MSC. Quality Assurance reports produced by third-party experts.
Pre-assessment database	Client; CAB; fishery; Unit of Pre-Assessment; species; gear; ocean region; draft scoring ranges	Maintained by MSC. Data manually extracted from publicly available and privately shared pre-assessment reports.
Scoring database	CAB; assessment team; assessment report metadata; scores; conditions	Maintained by MSC. Data manually extracted from publicly available fishery assessment report PDFs available on Track-a-Fishery.

Fisheries Standard Review public consultation surveys	Survey respondent; organisation and country affiliation	Maintained by MSC. Periodically collected during standard review processes.
Chain of Custody Review stakeholder submissions	Submission respondent; scheme use group and country affiliation	Maintained by MSC. Periodically collected during standard review processes.
Technical Oversight and Variation Requests (TOVAR) database	Technical oversight; variation requests	Maintained by MSC. Technical oversight conducted and recorded by MSC staff; variation requests and responses submitted by CABs and MSC staff via Ecert and publicly available on Track-a-Fishery.
Unit of Certification (UoC) transfer table	Unit of Certification identity splits, merges, and certificate transfers	Maintained by MSC. Relies on Unit of Certification information entered in Ecert by CABs.

2 Indicator protocol

This section contains detailed descriptions that explain how indicators presented in this report were constructed. This section may include additional metrics needed for each indicator, units of measure, definitions for key terms, data sources, data collection frequency and approach, scope, or other technical references. Indicator numbering below corresponds to indicator numbering of the main text.

A1.1 Number of Units of Assessment engaged with MSC

Definition: Number of Units of Assessment (UoA) engaged with MSC refers to the number in any given year that were certified, in assessment, suspended, or in the MSC Improvement Program (previously the In-Transition to MSC Program), by year (1999 – 2023). UoAs that withdrew or failed a MSC assessment are also displayed. Because UoAs can change status categories from one year to the next, the number of UoAs in any given status category can decrease from one year to the next.

Source: (1) Fishery certificate holder database; (2) UoC transfer table.

Method: Certificate status for all UoAs in December of each year is extracted from the certificate holder database and joined with the UoC transfer table. For transferred UoAs, the original UoA identity and status history is included in counts until the date the UoA is transferred. All months after the transfer start date are flagged and excluded from the dataset, as these UoAs are now counted under a new UoA identity. Counts of UoAs by status and year are then calculated.

A1.2 Proportion of FAO landings engaged with MSC

Definition: Landed tonnage of Units of Assessment (UoAs) that are engaged with MSC, by year (1999 – 2024, with 2024 data current through to 25 November). Expressed as a fraction of total global marine landings as reported to the Food and Agriculture Organization of the United Nations (FAO).

Source: (1) Catch database; (2) FAO Global Capture Production database (FAO, 2024).

Method: MSC fishery catch data in any given year include UoAs that were certified, in MSC assessment, suspended, or the MSC Improvement Program (previously the In-Transition to MSC program). Catches of fisheries in pre-assessment are not included. Catch data include all marine areas but not inland areas. FAO landings data similarly include all marine areas but not inland areas, and exclude catches from the following species groups: Freshwater crustaceans, Freshwater molluscs, Miscellaneous aquatic invertebrates, Miscellaneous freshwater fishes, River eels, and Turtles. FAO landings data extend through year 2022. To calculate MSC fractions of FAO landings for years 2023 and 2024, the value for FAO landings in 2022 was paired with MSC fishery catch values for 2023 and 2024, and distinguished by different symbols for plotting (Figure 1.2B).

Disaggregated MSC fractions of FAO landings were presented in Figure 1.1b by FAO Major Fishing Area. Calculated fractions follow the same methodology, with MSC catch data and FAO landings data each disaggregated by Major Fishing Area, and their ratio calculated separately for each Major Fishing Area.

A1.3 Distribution of Units of Assessment Principle scores at initial assessment and first re-assessment

Definition: Principle 1, 2 and 3 scores for Units of Assessment that have undergone two full assessments against the MSC Fisheries Standard; distributions of scores at initial assessment and first re-assessment (1999 – 2023).

Source: (1) Scoring database; (2) UoC transfer table.

Method: Distinct Principle 1, 2 and 3 scores for all UoAs that have undergone two full assessments against the Fisheries Standard between 2000 and 2023 are displayed. Distinct scores reflect how fisheries are typically scored in assessments, with one P1 score awarded for each stock, one P2 score awarded for each gear type, and one P3 score awarded for each governance system. Multiple UoAs within a fishery may share those stocks, gears, or governance systems, and therefore the total number of Principle scores in a fishery assessment depends on the number of UoAs being assessed, whereas the number of distinct Principle scores depends on the number of elements being assessed. Thus, distinct Principle scores are used to avoid larger fisheries biasing the observed trends in fishery performance over the duration of their engagement with the MSC.

Bias in comparing assessment periods is also reduced by including only UoAs that were scored in both the initial assessment cycle and the first re-assessment cycle. The assessment history for transferred UoCs can be complex, with new identities of UoCs occasionally undergoing an 'initial assessment' in a new fishery, despite having previously undergone one or more assessments under its original fishery certificate. Therefore, the assessment history for the original identities of UoCs is linked (via the UoC transfer table) with the assessment history for the new identities of UoCs to allow the first and second time a transferred UoC was assessed to be calculated. UoAs that failed initial assessment or that

withdrew from certification before the first re-assessment are removed as they do not have a subsequent re-assessment to compare scores with, but UoAs that failed re-assessment are included as they have scores available in both assessment cycles.

A1.4 Conditions assigned to Units of Certification

Definition: Number of conditions of certification open at the beginning of each assessment cycle and proportion of conditions that are closed by the end of each assessment cycle (1999 – 2023).

Source: Scoring database

Method: All fishery assessment reports and condition details are extracted from the scoring database. Years since certification is calculated by using the publish date of the Public Certification Report as year zero and adding one year for each consecutive annual Surveillance Audit report published, up to four years since certification (thus the 'year 4' category may be longer than 4.0 calendar years). Years since certification is calculated separately for Expedited Assessment and Expedited Audit reports using the difference between the report publish date and the Public Certification Report publish date, as these assessments and audits do not occur sequentially but instead can occur at any point in an assessment cycle.

Successive counts in the years following year zero show the number of distinct conditions that were closed, the number that remained open (with two sub-classifications), the number that were re-written, as well as a pooled count of conditions for UoCs that were suspended or withdrawn, or conditions that were not addressed. If a condition was reported on twice in the same year since certification, for example in an annual Surveillance Audit report and in an Expedited Audit report, only the last condition status for the year was counted. Counts do not include conditions from fishery assessment reports that failed because those are not recorded. The total number of conditions typically declines over the course of an assessment cycle as not all fisheries have been certified long enough to reach year four of an assessment cycle.

To compare across assessment cycles, the counts of conditions over the five years of an assessment cycle are also shown as a proportion of the conditions that had been opened in year zero of that cycle. These proportions are shown only for the fisheries that reached year four of each assessment cycle, i.e. the fisheries that have been certified long enough to close the majority of their conditions. This was restricted to conditions with a full five years of data availability for a given assessment cycle so that the outcome of each opened condition in year zero could be assessed across the remaining four years. Within an assessment cycle, the proportions of year zero conditions therefore sum to 100% across the five-year period, allowing for a clearer understanding of the proportion of opened conditions that are closed over time.

A1.5 Performance Indicator score changes between pre-assessment and MSC assessment

Definition: Comparison of component scores at the fishery pre-assessment stage and component scores assigned at ACDR stage of a fishery's initial full MSC assessment (1997 – 2024, with 2024 data current through to 9 February). Comparisons are separated by the UoC status following the initial full

assessment: those that were certified or are still in assessment are separated from those that failed or withdrew from the initial full assessment.

Source: (1) Pre-assessment database; (2) scoring database.

Method: For all UoPAs that can be linked to a UoA that entered MSC full assessment, the UoPA ID code, converted pre-assessment scores (scores assigned to categories ‹60, 60-79, ≥80), corresponding MSC UoA ID code(s), the assessment tree used in the initial MSC assessment, and the status of the corresponding MSC UoA(s) at the end of the initial MSC assessment were extracted from the pre-assessment database. Where a UoPA has been assessed in multiple pre-assessments, the converted scores from the earliest pre-assessment were extracted to provide the longest record of performance history. Where a UoPA – UoA pair have a one-to-many or many-to-one relationship, the converted pre-assessment scores were duplicated to achieve a set of scores for each combination of a unique UoPA and a unique UoA.

The categorical ACDR scores assigned to each MSC UoA in its initial assessment were extracted from the scoring database and merged with the pre-assessment score data by matched UoA ID codes. All categorical scores were converted to numeric Benchmark and Tracking (BMT) values: ‹60 = 0, 60-79 = 0.5, ≥80 = 1 (MSC, 2014). This resulted in a set of paired PI scores for each UoPA - UoA combination. PI-level scores were aggregated into component-level scores by calculating the mean and 95% confidence interval of PI scores within each component. Component-level BMT scores at the pre-assessment stage were plotted against corresponding component-level BMT scores at the ACDR stage for: 1 – UoCs that were certified or are still in initial assessment, 2 – UoCs that withdrew from initial assessment or failed the initial assessment ('Exiting').

A1.6 Number of grants and amount of funding awarded through the Ocean Stewardship Fund

Definition: Total number of grants and amount of funding awarded to fisheries through MSC's Ocean Stewardship Fund (2020 – 2024).

Source: Ocean Stewardship Fund grant records

Method: All grants provided under the Ocean Stewardship Fund are recorded along with the amount of funding provided. The 144 grants provided since 2020 were classified into seven categories, with number of grants and total funding summed for the category.

A2.1 Number of MSC Chain of Custody certificate holders

Definition: Number of certified, applicant, cancelled, expired, withdrawn and suspended Chain of Custody certificate holders, by year and certificate model (2001 – 2024).

Source: Chain of Custody certificate holder database

Method: Certificate status for all certificate holders in December of each year is extracted from the certificate holder database. Certificate holders are grouped into three categories depending on the model of the Standard they are certified to. Counts of certificate holder by certificate holder model, status, and year are then calculated.

A2.2 Total volume of seafood sold with the MSC ecolabel

Definition: Total volume (tonnes) of seafood sold annually bearing the ecolabel, by product type (April 2018 – March 2024).

Source: MSC-International database

Method: The turnover declaration dataset from the MSC-International database provided the breakdown of volume sold each year for each product type, with volumes pooled across countries. Product type categories 'unknown' and 'unallocated' were filtered out. This breakdown by product type and financial year is shown in Figure 2.2. For each product type, the difference between volume sold in 2023/2024 and volume sold in 2018/2019 relative to the volume sold in 2018/2019 was calculated and added as labels to Figure 2.2.

A2.3 Relative number of Chain of Custody non-conformities

Definition: Number of non-conformities against the MSC Chain of Custody Standard issued, relative to the number of audited certificate holders, by year (September 2023 – November 2024).

Source: Chain of Custody certificate holder database

Method: Data for all audits conducted each year are extracted including details of the certificate holder audited and any non-conformities raised. Certificate holders are grouped into three categories depending on the model of the Standard they are certified to. Non-conformities are grouped by type. The number of non-conformities raised is compared to the number of certificate holders audited each year.

A3.1 Relative number of technical oversight major findings

Definition: (1) Number of fisheries Public Comment Draft Reports (PCDR) reviewed under Technical Oversight standard operations procedures, and the subset of those identified as having major findings. (2) Ratio of the total number of major findings identified in reviewed PCDR reports to the number of PCDR reports reviewed (2019 – 2023).

Source: Technical Oversight and Variation Requests database

Method: The MSC Fisheries Standards team undertakes technical oversight on a semi-random sample of submitted PCDR reports from fisheries assessments. Identified 'findings' are classified as major, minor, or guidance, and only major findings are considered for the indicator. Consistent procedures for technical oversight have been applied since 2019, so indicator data presented begin in 2019. A reviewed PCDR report may have more than 1 major finding identified, and the number of major findings identified per PCDR report reviewed ranged from 1.4 to 2.8 on average (Figure 3.1B). An alternative but related indicator could instead be calculated as the proportion of reviewed PCDR reports that had major findings identified, which varied from 0.38 to 0.67 and is correlated ($r = 0.91$) with the main indicator. The counts from which this alternative indicator are calculated are shown in Figure 3.1A.

A3.2 Relative number of variation requests

Definition: The annual number of variation requests received from CABs for fisheries (1999 – 2023) and for supply chain companies (2000 – 2024, with 2024 data current through to 27 November), standardised either to the number of named fisheries or to the number of supply chain certificate holders.

Source: (1) Technical Oversight and Variation Requests database; (2) Fishery certificate holder database; (3) Chain of Custody certificate holder database

Method: The annual count of fisheries was calculated using unique fishery ID numbers, with a fishery ID included only if it had at least one UoC classified as certified or in assessment in December of the relevant year. UoCs that were suspended or had previously withdrawn were not included. The number of fishery variation requests and the annual count of fisheries were then used to calculate the ratio of variation requests relative to the number of fisheries.

Similarly, the number of supply chain variation requests submitted each year was filtered to include only variation requests associated with supply chain certificate holders. Annual counts were determined based on the year each variation request was raised. The number of certificate holders was calculated using unique certificate holder IDs, filtered to include only those classified as applicants or certified in December of the relevant year. The number of variation requests and the annual count of certificate holders were then used to calculate the ratio of variation requests relative to the number of certificate holders.

A3.3 Relative number of objections to fishery certification

Definition: Numbers of objections accepted and not accepted in relation to the number of Final Draft Reports published; annual counts (2000 – 2023).

Source: (1) Objections database; (2) Fishery certificate holder database.

Method: The count of objections accepted and not accepted each year is calculated using the number of Notice of Objections submitted by objector, so if multiple objectors submit a Notice of Objection against the same fishery each will be included in the count. The count of Notices received each year is compared to the total number of Final Draft Reports published each year and the average number of accepted and not accepted objections per FDR published each year is calculated. As supporting material for this indicator, the total counts (across years) of objections accepted and objections not accepted are separated by six stakeholder types. For each stakeholder type, the proportion of objections accepted is given, calculated as the ratio of accepted objections to all filed objections (including those not accepted).

Outcomes of objections are counted by the number of fishery assessments receiving one or more objections rather than by the number of objections leading to those outcomes. This avoids artificially inflating the number of changes made to fishery assessments.

A3.4 Availability of competent auditors, assessors, and Technical Consultants

Not included here, but planned for inclusion in future technical reports.

A3.5 Number and diversity of stakeholder responses to Standard review processes

Definition: Stakeholder responses from public consultation surveys within recent standard review processes, disaggregated by country and by stakeholder affiliation or scheme use activity (2020 – 2023).

Source: (1) Fisheries Standard Review public consultation surveys in 2020 – 2022 from the 2018 – 2022 Fisheries Standard Review; (2) Chain of Custody Review stakeholder submissions in 2023 from the 2023 – 2025 Chain of Custody Standard Review.

Method: Submissions to public consultation surveys from the most recent Fisheries Standard Review were recorded for a series of surveys with stakeholders during the review process. Review submissions were categorized into one of 11 types of stakeholder affiliation (in addition to an other/unknown category), with counts reported by type. Submissions to public consultation surveys from the ongoing Chain of Custody Standard Review were recorded for surveys with stakeholders. Chain of Custody Standard Review submissions were categorized into one of four types of scheme use activity (in addition to an other category), with counts reported by category. For both Fisheries Standard Review and Chain of Custody Standard Review surveys, submissions were also categorized by the country of stakeholder respondents.

A3.6 Number of peer review persistent disagreements

Definition: Annual number of 'potentially important persistent disagreement' reviews conducted by the Peer Review College third-party experts, and the numbers passed on to ASI to investigate as incidents that subsequently resulted in changes to the outcome of fishery assessments (September 2022 – August 2024).

Source: Peer Review College database

Method: The number of Quality Assurance reviews conducted by the Peer Review College third-party experts, relating to cases of 'potentially important persistent disagreements', in each of the Peer Review College years (1 September to 31 August), were recorded. The numbers of cases which were passed on to ASI to investigate as incidents each year, and the numbers of those cases which resulted in material changes to the CAB assessments (from a pass to a fail), are also presented.

Every fishery assessment in the MSC program is peer reviewed, usually by two Peer Review College reviewers (with only one for scope extensions and 'reduced reassessments'). There are normally about 75 assessments reviewed each year. Persistent disagreements between the peer reviewer and the CAB are checked where they could be sufficient to change the outcome of an assessment, and those that could be sufficient are considered to be 'potentially important persistent disagreements'. This may occur, for example, if a Performance Indicator is shown not to meet the minimum 60 level, or if the aggregate Principle score could fall below the minimum 80 level. This procedure was adopted in July 2022 as a pilot, and fully implemented in July 2023. The time series for the indicator is currently short but will continue to be monitored, and the results updated for pending cases. Neither the Peer Review College Quality Assurance reviews nor the ASI Incident assessments are publicly available, but changes to fishery certificates are reported on MSC's Track a Fishery webpages.

A4.1 Consumer perception of the MSC

Definition: Proportion of surveyed consumers that are MSC-aware (stating they had seen the MSC label either often or occasionally), and the proportion of those MSC-aware consumers that stated they had a high level of trust in the MSC label (2016 – 2024).

Source: GlobeScan Consumer Insights Surveys conducted in 2016, 2018, 2020, 2022 and 2024

Method: (1) MSC awareness, as summarised in Figure 4.1A. Consumer surveys were conducted with the general public to evaluate the frequency of seeing the MSC label. Survey data were collected by country, age group, gender, type of seafood purchased, and retailer. In 2024, 27,134 surveys were conducted across all groups, and consistent procedures were used in earlier surveys. Survey respondents were asked "Have you ever seen the following logos?", and the MSC logo was shown. Respondents selected among categories of "yes, seen often", "yes, seen occasionally", "no, never seen", or "not sure". Fractions of consumer responses in these four categories are shown over time for the five surveys conducted. Responses in the two "yes" categories (including both "seen often" and "seen occasionally") are considered to be MSC-aware consumers.

(2) MSC trust, as summarised in Figure 4.1B. Consumers considered to be MSC-aware were asked a follow-up question to evaluate trust in the MSC label. MSC-aware survey respondents were asked "How much trust do you have in the claims of the following organisations?", and were prompted about the MSC. Respondents selected among seven categories ranging from one ("no trust") to seven ("a lot of trust"). Responses of five, six or seven were considered to represent high trust in the MSC label. In 2024, 10,557 responses were received across all groups, and consistent procedures were used in earlier surveys.

A4.2 Number of articles in print, broadcast, and online media coverage

Definition: The number of mentions of the MSC identified in the media over the last three financial years (April 2021 – March 2024).

Source: Cision media coverage dashboard

Method: MSC mentions identified in print, broadcast and online media are recorded by month and country. MSC mentions were pooled by financial year (April 2021-March 2022, April 2022-March 2023, and April 2023-March 2024), and pooled across countries to show the total (global) number of MSC mentions by year (Figure 4.2).

A4.3 Sentiment of media coverage

Definition: The proportion of MSC mentions in sentiment categories 'positive', 'negative', or 'neutral'. MSC mentions were identified in the media over the last three years (April 2021 – March 2024).

Source: Cision media coverage dashboard

Method: MSC mentions identified in print, broadcast and online media are classified as having a positive sentiment (favourable of the MSC), negative sentiment (unfavourable of the MSC), or neutral

sentiment (neither favourable nor unfavourable). Sentiments of MSC mentions are recorded by month and country. MSC mentions were pooled by financial year (April 2021-March 2022, April 2022-March 2023, and April 2023-March 2024), and pooled across countries to show the overall fractions of MSC mentions in these three sentiment categories, by year (Figure 4.3).

A5.1 Relative number of interpretations

Not included here, but planned for inclusion in future technical reports.

A5.2 Number of logged issues

Definition: The annual count of issues raised at the MSC (both internally and externally), categorised by their potential impact (2008 – 2023).

Source: Issue Log

Method: The Issue Log is an internal tool for recording and tracking issues raised by internal and external stakeholders. An issue is a problem or opportunity identified in relation to the MSC program documents or supporting documents, or any other element of the MSC certification program which is within the remit of Science and Standards department to address. Issues are categorised dependent on the level of response that would be required to resolve the issue:

- Major: New standard, or a change to the sustainability or Chain of Custody intent or scope of a standard, or a change to the assurance system which constitutes a major change to intent or scope of a standard.
- Medium: A change to a standard or the assurance system, which changes a practice but does not constitute a change to the sustainability or Chain of Custody intent or scope of a standard.
- Minor: A change to guidance, other clarification, or editorial change (e.g. errata, correcting a typo, etc) in a standard or the assurance system, which does not constitute a change of practice or a change to the sustainability or Chain of Custody intent or scope of a standard.
- Internal: Not raised in relation to a program document. Relates to an operational area of Science and Standards.

Historically, the "Major" category was split into "Low Impact" and "High Impact," but in recent years, these have been combined; older issues were re-categorized accordingly. Annual counts of issues raised for each category were then calculated.