



Performance Indicators Explained

The lists in the table below explain the Performance Indicators (PIs) in the MSC Fisheries Standard v2.0 Default Assessment Tree, along with a list of information used by certifiers (CABs) to score each PI.

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Performance Indicator (PI)	Summary	Information used by Certifiers to score
Principle 1 – Sustainable fish stocks		
1.1.1 Stock Status	<p>Performance Indicator (PI) 1.1.1 examines the impact of the fishery on the target stock /species and whether or not the species / stock status is at a sustainable level.</p> <p>In simple terms it looks to verify firstly that the stock status is likely to be above the Point of Recruitment Impairment (PRI) and secondly that the stock is fluctuating around a target level consistent with Maximum Sustainable Yield (MSY).</p>	<ul style="list-style-type: none"> - Catch and effort data for the fishery under assessment (logbook and/or sales data, details of number of licences and size, type and number of active vessels or days at sea, number of pots, etc. as per most appropriate measure of effort) - Most recent scientific advice to managers - Most recent stock assessment report - Information on how the reference points are derived (if not included in the stock assessment report) - Information on trends in catch/landings, fishing mortality, CPUE and recruitment (if not included in the stock assessment report) - Information detailing how the points of potential recruitment impairment (PRI) and maximum sustainable yield (MSY) could be evaluated in the fishery (if not included in the stock assessment report) - For a key Low Trophic Level (LTL) species, multi-species stock assessment models or other information that assesses ecosystem-based reference points
1.1.2 Stock Rebuilding	<p>PI 1.1.2 looks at the rebuilding and recovery of a stock that is depleted below the levels required to achieve an 80 score on PI 1.1.1.</p> <p>The PI is only scored where the score for 1.1.1 (stock status) is less than 80, indicating that the stock is either not regarded as ‘fluctuating around’ MSY or is less than highly likely (i.e. 80th percentile) to be above the PRI.</p>	<ul style="list-style-type: none"> - Most recent scientific advice and stock assessment reports - Future simulations of the outcome of different management strategies (if not included in the scientific advice) - Management or rebuilding plan and timeframes (if not included in the scientific advice) - Information on the management decision made in response to scientific advice on rebuilding (e.g. changes to TAC or effort regulation currently in force)
1.2.1 Harvest Strategy	<p>PI 1.2.1 seeks to verify that there is a robust and precautionary harvest strategy in place.</p> <p>A harvest strategy is the combination of monitoring, stock assessment, harvest control rules (HCRs) and management actions that are required to bring about the sustainable management of the fishery.</p>	<ul style="list-style-type: none"> - Management plan (single- or multi-species) - Scientific advice and stock assessment reports - List of data used in stock assessment (if not given in stock assessment report) - Details of strategy to manage discards of target species - Information on review of harvest strategy - Logbooks (e.g. including information on shark finning, as appropriate) - Observer records - Information on National Plan of Action for sharks

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1.2.2 Harvest Control Rules & Tools	<p>PI 1.2.2 assesses whether a fishery has well defined and effective harvest control rules (HCRs) in place.</p> <p>An HCR is a set of pre-agreed rules or actions used for determining a management action in response to changes in indicators of stock status with respect to defined ‘trigger’ reference points.</p>	<ul style="list-style-type: none"> - Management plan, including internal rules and triggers for modifying fishing effort when available data suggest that current levels are too high - Details of how management has responded to scientific advice over the last few years (e.g. time series of TACs or effort controls such as number of licences, etc., as compared to scientific advice) - List of regulations applying to the stock as a whole (catch and effort limitations, quota limits, minimum sizes, gear restrictions and technical measures, etc.)
1.2.3 Information / Monitoring	<p>PI 1.2.3 requires that relevant information is collected to support the harvest strategy.</p> <p>Sound and precautionary fisheries management requires the timely use of reliable information to enable analysis and ultimately management feedback response.</p>	<ul style="list-style-type: none"> - Details of all the data used in the stock assessment (e.g. stock structure, productivity, fleet composition, stock abundance, fishery removals) - Analysis of the uncertainties and gaps in these data sets (should both be included in the stock assessment report)
1.2.4 Assessment of Stock Status	<p>PI 1.2.4 requires that there is an adequate assessment of the stock status.</p> <p>There are many different approaches to stock assessment and a key consideration for this PI is the appropriateness of the assessment method to the scale of the fishery.</p>	<ul style="list-style-type: none"> - Most recent stock assessment report, giving full details of data and models used, sensitivity analyses, different scenarios tried, etc. (Sometimes to get this information, you have to backtrack through several years of stock assessment reports because the most recent may say for example ‘analysis based on 2010 stock assessment with the following changes ...’) - Peer review report for stock assessment or at least information that has been peer reviewed (peer review comments may be included in the final version of the stock assessment report) - Science Working Group papers, where available - Evidence of precautionary approach in assessment

Performance Indicator (PI)	Summary	Information used by Certifiers to score
Principle 2 – Minimising environmental impacts		
2.1.1 Primary Species Outcome	<p>PI 2.1.1 ensures that other species caught by the fishery are either not depleted, or that there is an assurance that the fishery under assessment is not hindering the ability of those stocks to recover.</p> <p>The benchmark applied for PI 2.1.1 is lower than what is applied under Principle 1.</p>	<ul style="list-style-type: none"> - Catch data for the fishery under assessment (logbook and/or sales data) - Most recent scientific advice - Most recent stock assessment or other report giving details of reference points or other biologically based limits - Management plan or details of management actions taken in relation to scientific advice (e.g. time series of TACs or effort) - Logbooks - Risk assessments - Observer reports - National Plans of Action (e.g. sharks)
2.1.2 Primary Species Management Strategy	<p>PI 2.1.2 seeks to ensure that there is management in place for primary species to ensure the fishery does not pose a risk of serious or irreversible harm to their stocks/populations.</p> <p>It also encourages the development and implementation of technologies and operational methods to minimise mortality of unwanted catch of primary species.</p>	<ul style="list-style-type: none"> - Management plan, if any - List of regulations applying to the fishery (e.g. TAC and quotas, effort restrictions, etc.) - Details of measures or strategy to manage these species - Observer records - Reviews/studies undertaken of other mitigation measures if there are unwanted (i.e. discarded, unused) catches
2.1.3 Primary Species Information	<p>PI 2.1.3 focuses on the availability and quality of information to inform outcome and management.</p> <p>It seeks to ensure that information on the nature and extent of primary species is adequate to determine the risk posed by the fishery and the effectiveness of the strategy to manage primary species.</p>	<ul style="list-style-type: none"> - Most recent stock assessment report or other analysis of stock status - Results of monitoring - Review of fishing surveys

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2.2.1 Secondary Species Outcome	<p>PI 2.2.1</p> <p>The focus of scoring is on the main secondary species – i.e. those that the fishery catches most of (more than 5% of catches), or that certifiers conclude to be less resilient.</p>	<ul style="list-style-type: none"> - Catch data for the fishery under assessment (logbook and/or sales data) or if discarded, details of quantities discarded (e.g. from observer reports or logbooks) - Stock assessment report, if available - Any information that might pertain to the stock status (e.g. trends in catch, CPUE, survey data, size frequency, scientific reports, etc.) - Logbooks - Risk assessments - Observer reports
2.2.2 Secondary Species Management Strategy	<p>PI 2.2.2 focuses on the management that is in place to manage the impact of fisheries upon those species.</p> <p>The consideration of the management in place for secondary species must be seen (and scored) in the context of the definition of secondary species which includes a comparatively lower level of management (as compared with primary or P1 species).</p>	<ul style="list-style-type: none"> - Management plan, if any - List of regulations applying to the fishery in relation to these species (e.g. obligations to discard or retain, move-on rules, closed areas, etc.) - Details of measures or strategy to manage these species - Observer reports - Reviews/studies undertaken of other mitigation measures if there are unwanted (i.e. discarded, unused) catches
2.2.3 Secondary Species Information	<p>PI 2.2.3 relates to the presence and quality of the information that is available to inform outcome and management.</p> <p>In particular there is a requirement that the information on the nature and amount of secondary species taken is adequate to determine the risk posed by the fishery and the effectiveness of the strategy to manage secondary species.</p>	<ul style="list-style-type: none"> - Any information that might pertain to the stock/population status (e.g. trends in catch, CPUE, survey data, size frequency, scientific reports, etc.) - Results of monitoring - Review of fishing surveys
2.3.1 ETP Species Outcome	<p>PI 2.3.1 ensures that the direct and indirect impacts of the fishery on ETP species are known and are either within national/international limits, or are not hindering the recovery of ETP species.</p> <p>Endangered, Threatened or Protected (ETP) species are 'in scope' species that are recognised by</p>	<ul style="list-style-type: none"> - List of protected species applicable to the jurisdiction concerned - Data on negative interactions with any species on this list (observer reports, logbooks) - Data on negative interactions with seabirds, marine mammals and turtles, if any (observer reports, logbooks); how many and what kind (e.g. non-injurious, injury, fatal) - Observer reports - Risk assessment of impacts of fishing

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	<p>national threatened species legislation or species that are listed in binding international agreements such as the Convention on International Trade in Endangered species (CITES).</p>	
2.3.2 ETP Species Management Strategy	<p>PI 2.3.2 focuses on the management that is in place to manage the impact on ETP species that are vulnerable to being impacted by the fishery in the assessment area.</p> <p>Management strategies should be precautionary, should meet national and international requirements (where these are present) and should ensure that the fishery does not hinder recovery of any ETP species.</p>	<ul style="list-style-type: none"> - Any regulations that apply to the fishery in relation to these species (e.g. gear modifications, restrictions on fishing practices, closed areas or seasons) - Details of any actions taken by the fishery in this regard (e.g. training in handling, recording of interactions) - Details of strategy to reduce negative interactions with these species - National Plans of Action (e.g. marine mammals, bird, turtles, etc.) - Observer reports - Reviews of other possible mitigation measures
2.3.3 ETP Species Information	<p>PI 2.3.3 assesses the adequacy of information, both to determine the risk posed to ETP species by the fishery and to evaluate the effectiveness of the strategy to manage impacts on ETP species.</p>	<ul style="list-style-type: none"> - Details on the population status and trends of relevant species (e.g. stock assessment reports, IUCN red listing details, scientific surveys or other analyses) - Data on negative interactions with these species (observer reports, logbooks) and outcome, if known
2.4.1 Habitats Outcome	<p>PI 2.4.1 assesses the impact of the fishery on the habitats that are encountered.</p> <p>The MSC vocabulary describes a habitat as ‘the chemical and bio-physical environment including biogenic structure, where fishing takes place’.</p>	<p>For demersal gear:</p> <ul style="list-style-type: none"> - Details of gear (e.g. for trawl – length of head and footrope, whether tickler chain, rockhopper or other, size and weight of doors; for pots – size and weight of pots, how many in a string, how many strings deployed at a time) - Details of operation of gear (e.g. the extent to which it touches the bottom, any habitat/ground restrictions to operation) - VMS maps or other information giving footprint of fishery

Performance Indicator (PI)	Summary	Information used by Certifiers to score
		<ul style="list-style-type: none"> - Details of habitat types in the area and the main or vulnerable species represented in these habitats (e.g. habitat maps, information from scientific surveys and/or observer reports) - Details of any closed areas and their purposes - Details of any other regulations designed to protect habitats (e.g. move-on rules, gear modifications or restrictions) - Details of any work done by the client to reduce habitat impacts (e.g. changes to gear or experiments on gear) <p>For pelagic gear:</p> <ul style="list-style-type: none"> - Confirm that the gear does not make contact with the bottom - Habitat risk assessment - Information on habitat classifications and habitat characteristics
2.4.2 Habitats Management Strategy	<p>PI 2.4.2 requires that there is a strategy in place that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to habitat types.</p> <p>The scoring issues focus on ensuring that a management strategy is in place, which is considered likely to work, and that there is some evidence that the strategy is meeting its objective.</p>	<ul style="list-style-type: none"> - Same as Habitat Outcome and: - Vessel operational plans - Measures and strategies for habitat protection
2.4.3 Habitats Information	<p>PI 2.4.3 assesses the adequacy of information available, both to determine the risk posed to the habitat by the fishery and to evaluate the effectiveness of the strategy to manage impacts on the habitat.</p>	<ul style="list-style-type: none"> - Habitat survey or other data giving information on changes in habitats in the fishing area over time - Details of vulnerability/resilience of the key species concerned for each habitat type

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2.5.1 Ecosystem Outcome	<p>PI 2.5.1 assesses the status of the ecosystem as a whole, and in particular the fishery's impact on the ecosystem.</p> <p>This requires that the fishery does not cause serious or irreversible harm to the key elements of ecosystem or the underlying ecosystem structure and function to a point which would hinder the ecosystem resilience or ability to recover from impact.</p>	<ul style="list-style-type: none"> - Multi-species stock assessments and fishery management plans, where available - Ecopath or Ecosim models, where available - Diet analysis of the main target, managed and non-managed species (i.e. what do they eat and what eats them) - Any relevant scientific papers that might shed light on ecosystem structure and function
2.5.2 Ecosystem Management Strategy	<p>PI 2.5.2 requires that there is management in place to ensure the fishery does not pose a risk of serious or irreversible harm to ecosystem structure and function.</p> <p>Scoring issues focus on the degree to which measures are combined into an effective overall strategy, the level of implementation and the likelihood of success.</p>	<ul style="list-style-type: none"> - Multi-species stock assessments and fishery management plans, where available - Ecosystem management plan, where available - Observer data - Review of implementation of strategies
2.5.3 Ecosystem Information	<p>PI 2.5.3 focuses on ecosystem information, ensuring there is an adequate understanding of the ecosystem functions.</p>	<ul style="list-style-type: none"> - Ecopath or Ecosim models, where available - Diet analysis of the main target, managed and non-managed species (i.e. what they eat and what eats them) - Any relevant scientific papers that might shed light on ecosystem structure and function

Performance Indicator (PI)	Summary	Information used by Certifiers to score
Principle 3 – Effective Management		
3.1.1 Legal and/or Customary Framework	<p>PI 3.1.1 provides the legal foundation for all subsequent P3 questions.</p> <p>It requires that a management system exists within an appropriate and effective legal and/or customary framework</p>	<ul style="list-style-type: none"> - Copies of any local, national or international laws, acts, policies and regulations that have an impact on the fishery and its management - Details of any group that depends on the fishery for food and/or livelihood - Dispute resolution procedures
3.1.2 Consultation, Roles & Responsibilities	<p>PI 3.1.2 ensures that roles and responsibilities are identified within existing fisheries management legislation in the fishery management plan.</p> <p>This should identify the function of the management authority, its objectives and the interested parties, while clarifying their respective roles, rights and responsibilities.</p>	<ul style="list-style-type: none"> - List of organisations (statutory, commercial, NGO or other) involved in the fishery and their roles - Details of the consultation process - Evidence of stakeholder consultation/participation - Evidence of feedback to stakeholders and consideration of their views
3.1.3 Long-term Objectives	<p>PI 3.1.3 seeks to ensure that management policy has clear long-term objectives to guide decision-making that are consistent with MSC Fisheries Standard and incorporates the precautionary approach.</p>	<ul style="list-style-type: none"> - Copies of any local, national or international laws, acts, policies and regulations that have an impact on the fishery and its management
3.2.1 Fishery-specific Objectives	<p>PI 3.2.1 ensures that management plans include short- and long-term objectives.</p> <p>Objectives are important statements of what an individual and/or organisation intends to achieve and against which progress can be measured.</p>	<ul style="list-style-type: none"> - Fishery management plan - Policy documents specifically related to this fishery - Regulations for this fishery
3.2.2 Decision-making Processes	<p>PI 3.2.2 looks at decision-making processes for fisheries governance.</p>	<ul style="list-style-type: none"> - Information on decision-making processes - Evidence that decisions are made in response to issues identified in research/monitoring - Formal reporting of fishery performance and management actions - Judicial decisions and response - Information on availability of information to stakeholders

Performance Indicator (PI)	Summary	Information used by Certifiers to score
3.2.3 Compliance & Enforcement	<p>PI 3.2.3 assesses whether the Monitoring, Control and Surveillance (MCS) mechanisms are adequate to ensure the management and conservation measures in a fishery are enforced and complied with, and that illegal, unreported or unregulated (IUU) fishing is avoided or minimised.</p> <p>MCS systems are considered one of the key principles of effective fisheries management.</p>	<ul style="list-style-type: none"> - Inspection reports - Details of types and frequency of inspections at sea and quayside - Observer reports - Details of any finding of non-compliance with outcome (e.g. prosecutions) and actions taken to rectify - Education programs
3.2.4 Monitoring and Management Performance Evaluation	<p>PI 3.2.4 examines whether evaluations have taken place in recent years, and whether external agencies or stakeholders review fisheries management.</p>	<ul style="list-style-type: none"> - Review documents of the management performance or process, if any - Corrective actions - Annual reports - Peer reviewed reports on aspects of the management system