Guide to the Rapid Assessments

Scope and Purpose

The California Ocean Protection Council (OPC) is responsible for implementing AB 1217 by designing and implementing a California voluntary Sustainable Seafood program that will highlight the state's fisheries. This project was conducted in part to inform the Ocean Protection Council's (OPC) California Sustainable Seafood Initiative (CSSI). For more information on CSSI, visit the OPC's website. California Ocean Science Trust (OST) conducted a set of rapid assessments of 11 fisheries to begin the process of identifying which California fisheries may be eligible for possible Marine Stewardship Council (MSC) certification, as well as California's own certification standards. Rapid assessments are a preliminary look at selected fisheries[1] based on public scientific information about the fishery and interviews with fishery managers and scientists; the purpose of these assessments is to synthesize existing scientific knowledge to gain an initial understanding of how each fishery might measure up against MSC certification standards. Each rapid assessment falls somewhere in between a formal rapid assessment and MSC Pre-assessment (Figure 1). The information generated can help identify key gaps in understanding, potential fishery improvement projects, and critical research questions.

Included in each rapid assessment is a synopsis of the fishery and an evaluation against the standards of the MSC sustainable fisheries certification program. The MSC certification program is based on three core principles which include: 1) Health of the fish stock, 2) Impacts to the ecosystem, and 3) Fishery management system; within these principles, 31 performance indicators (PI) are used to evaluate how well each fishery meets the principles (Figure 2).

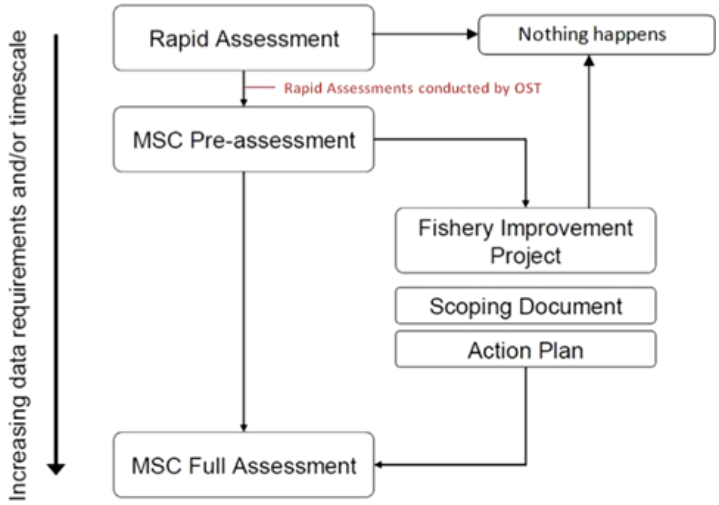


Figure 1. Framework to show types of analyses one could undertake to measure the performance of a fishery (modified from MRAG 2011). The assessments conducted by OST fall in between a rapid assessment and MSC pre-assessment.

[1]Please refer to Appendix A at the end of this document for an overview of how fisheries were selected for rapid assessments.

Figure 2. The Marine Stewardship Council (MSC) Assessment Tree. MSC certification is based on three principles which are represented through 31 performance indicators (PI). The following diagram illustrates the component groupings (orange boxes) and PIs (white boxes) that were established for rating fisheries against the MSC Principles and Criteria for Sustainable Fishing.

Rapid Assessment Framework

The guide below provides a framework for navigating the rapid assessments, including the rating system and key questions used to evaluate each MSC performance indicator (PI); information in the rapid assessments addresses these PIs when possible. We strongly recommend referring to this guide when you are reviewing the rapid assessments.

Possible unit(s) of Certification

The 'unit of certification[1]' is the unit that is assessed by certifiers against the MSC environmental standard. It is defined as the fishery or fish stock (a biologically distinct unit) combined with the fishing method/gear and practice (the vessel/s) pursuing that stock.

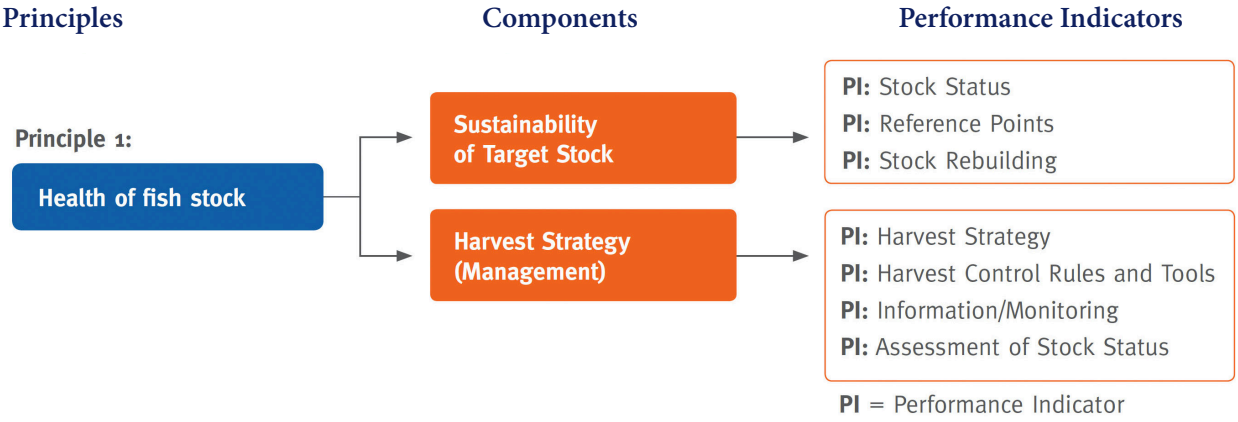
Rating System

Rapid assessments are not scored numerically and are not meant to determine the sustainability of a fishery. Instead, rapid assessments provide a preliminary look at how much information is available for each MSC performance indicator, where there are data gaps that need to be filled, and the likelihood of a PI passing an MSC assessment with the available data. These assessments are also not meant to evaluate management strategies, but rather if management strategies exist and the amount of information that is available on the strategies. A general color-coded rating of green, yellow, or gray is used to indicate the amount of information available for each PI and how the PI might measure up against MSC standards.

	Enough information is available to assess the PI; the PI would likely score high on an MSC assessment
	Some information is available, but more is needed to assess the PI; the PI would likely pass an MSC assessment
	Information is not available to assess the PI

[1]Definition of 'unit of certification' may be accessed at: http://www.msc.org/documents/schemedocuments/directives/TAB_D_003_Unit_Of_Certification.pdf/view

MSC Principle One: Resource Sustainability (Health of fish stock)



Criteria – A fishery must be conducted in a manner that does not lead to over-fishing or depletion of the exploited populations and, for those populations that are depleted; the fishery must be conducted in a manner that demonstrably leads to their recovery.

Sustainability of Target Stock

Stock status (PI 1.1.1)[1]: Is there a high degree of certainty that the stock is at a level which maintains high productivity and has a low probability of recruitment overfishing? Is there a high degree of certainty that the stock has been fluctuating around its target reference point, or has it been above its target reference point in recent years?

Reference points (PI 1.1.2): Are limit (LRP) and target reference points (TRP) explicit or implicit, appropriate, and justified for the stock such that the stock is maintained at a level consistent with BMSY or some proxy?

Stock rebuilding (PI 1.1.3): Where the stock is depleted, is there evidence of stock rebuilding within a specified timeframe? (Note: This PI is only triggered if PI 1.1.1 scores <80 and will not be 'scored' during the rapid assessment)

Harvest Strategy (Management)

Performance of the harvest strategy (management) (PI 1.2.1): Is there a robust and precautionary harvest strategy (monitoring, assessment, harvest control rules and management actions) in place? Is it responsive to the state of the stock, with evidence to support that it is able to maintain stocks at target levels?

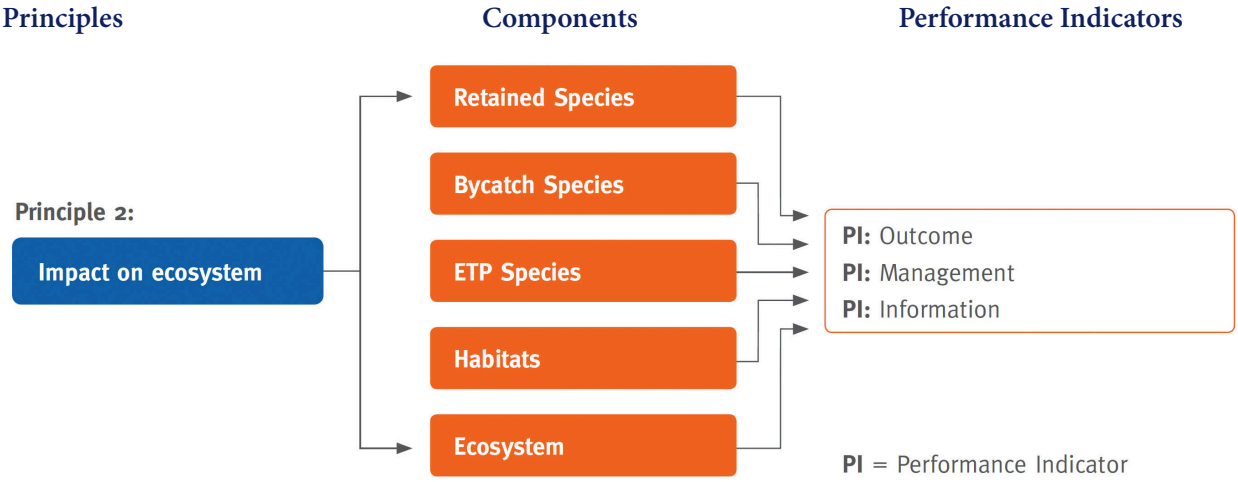
Harvest control rules and tools (PI 1.2.2): Are there well defined and effective harvest control rules in place that limit exploitation rates as the limit reference points are approached? Is there clear evidence to indicate tools in use are effective in achieving the exploitation levels required under the harvest control rules?

Information and monitoring (PI 1.2.3): Is relevant information (on stock structure, stock productivity, fleet composition, stock abundance, fishery removals and other information such as environmental information) collected to support the harvest strategy?

Assessment of stock status (PI 1.2.4): Is there an adequate assessment of the stock? Are assessment methods tested and found to be reliable (internally and externally peer reviewed)?

[1]Note: For California's Sustainable Seafood Program, this category must score an 80 or higher during an MSC assessment.

MSC Principle Two: Impact on Ecosystem



Criteria – Fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem (including habitat and associated dependent and ecologically related species) on which the fishery depends.

The focus of Principle 2 is non-target species and stocks – the target fishery's effect on the 5 specific components. This section assesses each of the defined sections below per fishing gear method for each parameter apart from the ecosystem. The assessment should be for the impact of the removal of the target species as a whole on the wider ecosystem.

Non-Target Retained Species

This section is about those species that are caught and landed along with the target species, discussed according to gear type.

Status of non-target retained species (PI 2.1.1): Does the fishery pose a risk of serious or irreversible harm to the retained species and/or hinder recovery of depleted retained species? Are target reference points defined for retained species?

Management strategy (PI 2.1.2): Is there a strategy in place for managing retained species that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to retained species?

Information and monitoring (PI 2.1.3): Is the information on the nature and extent of retained species adequate to determine the risk posed by the fishery and the effectiveness of the strategy to manage retained species? Is information available on the catch of all retained species?

Bycatch Species (discarded species)

This section is about those species which are caught and subsequently discarded as part of the fishery. The difference from non-target retained species is that these are always discarded. This section is discussed according to gear type.

Status of bycatch species (PI 2.2.1): Does the fishery pose a risk of serious or irreversible harm to the bycatch species or species groups and hinder the recovery of depleted bycatch species or species groups? Are bycatch species within their biological limits?

Management strategy (PI 2.2.2): Is there a strategy in place for managing bycatch species that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to bycatch species?

Information and monitoring (PI 2.2.3): Is the information on the nature and extent of all bycatch adequate to determine the risk posed by the fishery and the effectiveness of the strategy to manage bycatch? Is information available on the amount of all bycatch?

Endangered, Threatened, & Protected (ETP) Species

This section includes species that are subject to international treaty and/or national and state legislation.

ETP species outcome (PI 2.3.1)[1]: Does the fishery pose a risk of serious or irreversible harm to ETP species and or hinder recovery of ETP species? Does the fishery meet national and international requirements for protection of ETP species?

ETP species management strategy (PI 2.3.2): Does the fishery have in place precautionary management strategies designed to meet national and international requirements, ensure the fishery does not pose a risk of serious or irreversible harm to ETP species, ensure the fishery does not hinder recovery of ETP species, and minimize mortality of ETP species?

ETP species information (PI 2.3.3): Is relevant information (i.e. magnitude of all impacts, mortalities and injuries) collected to support the management of fishery impacts on ETP species, including information for the development of the management strategy, information to assess the effectiveness of the management strategy, and information to determine the outcome status of ETP species?

Habitat

Habitats outcome (PI 2.4.1): Does the fishery cause serious or irreversible harm (i.e. changes are expected to take much longer to recover than in an un-fished situation) to habitat structure, considered on a regional or bio regional basis and function?

Habitat management strategy (PI 2.4.2): Is there a strategy in place that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to habitat types?

Information and monitoring (PI 2.4.3): Is information (distribution of habitat types across the species range) adequate to determine the risk posed to habitat types by the fishery and the effectiveness of the strategy to manage impacts on habitat types?

Ecosystem

Ecosystem encompasses trophic structure, communities, and biodiversity to name a few, and is discussed according to entire species.

Ecosystem outcome (PI 2.5.1): Does the fishery cause serious or irreversible harm (indirectly) to the key elements of ecosystem structure and function (trophic relationships, biodiversity, etc.)?

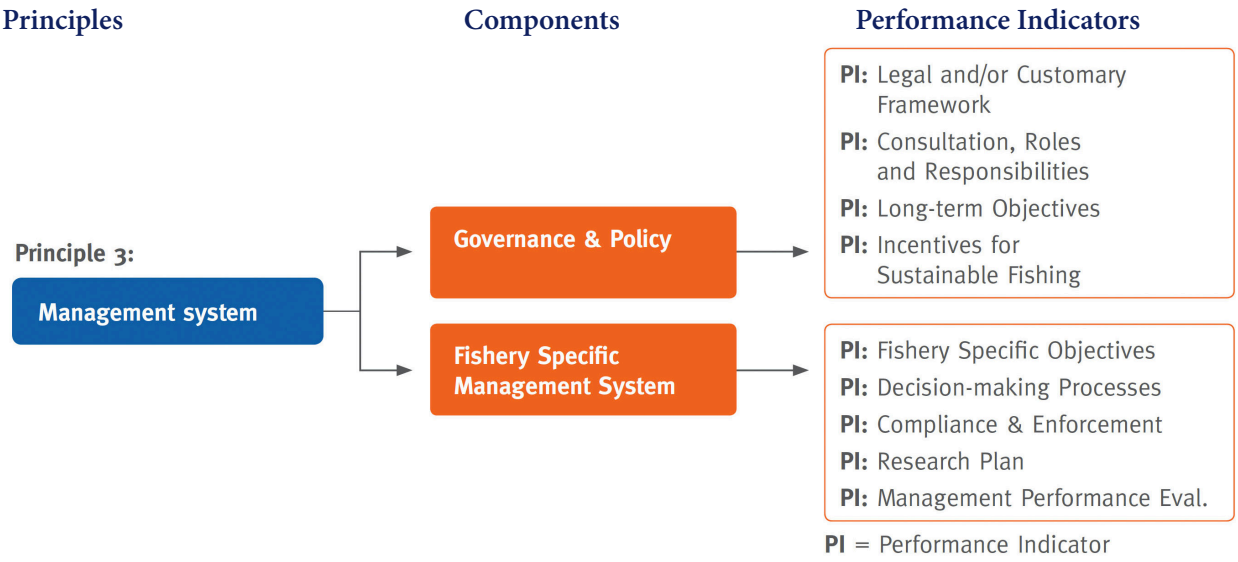
Ecosystem management strategy (PI 2.5.2): Are there measures in place, based on well understood functional relationships between the fishery and elements of the ecosystem, to ensure the fishery does not pose a risk of serious or irreversible harm to ecosystem structure

[1]Note: This includes one of the two performance indicators that the California certification will require a higher score (80) than MSC (60 on any PI, and an average of 80 at the Principle level).

and function?

Ecosystem information and monitoring (PI 2.5.3): Is there adequate knowledge and understanding of the impacts on target, bycatch, retained and ETP species and habitats?

MSC Principle Three: Management System



Criteria - The fishery is subject to an effective management system that respects local, national and international laws and standards and incorporates institutional and operational frameworks that require use of the resource to be responsible and sustainable.

Governance and Policy

This section describes the overarching management system. The goal is to put this fishery in the broader management context.

Legal and/or customary framework (PI 3.1.1): Does the management system exist within an appropriate and effective legal and/or customary framework which ensure that it is capable of delivering sustainable fisheries in accordance with MSC Principles 1 and 2?

Consultation, roles and responsibilities (PI 3.1.2): Does the management system have effective consultation processes that are open to interested and affected parties? Are the roles and responsibilities of organizations and individuals who are involved in the management process clear and understood by all relevant parties?

Long term objectives (PI 3.1.3): Does the management policy have clear long-term objectives to guide decision-making that are consistent with MSC Principles and Criteria and incorporate the precautionary approach?

Incentives for sustainable fishing (PI 3.1.4): Does the management system provide economic and social incentives for sustainable fishing and does not operate with subsidies that contribute to unsustainable fishing?

Fishery Specific Management System

This section discusses the governance structure of the fishery itself.

Fishery specific objectives (PI 3.2.1): Does the fishery have clear, specific short- and long-term objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2?

Decision-making processes (PI 3.2.2): Does the fishery-specific management system include effective decision-making processes that result in measures and strategies to achieve the objectives and have an appropriate approach to actual disputes in the fishery under assessment?

Compliance and enforcement (PI 3.2.3): Do monitoring, control and surveillance mechanisms ensure the fishery management measures are enforced and complied with?

Research plan (PI 3.2.4): Does the fishery have a comprehensive research plan that addresses the information needs of management?

Monitoring and management performance evaluation (PI 3.2.5): Is there a system for monitoring and evaluating the performance of the fishery-specific management system against its objectives? Is there effective and timely review of the fishery-specific management system?