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MSC Evaluation of Oregon Pink Shrimp Fishery  
Final Performance Indicators and Scoring Guideposts

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## **Guide to Performance Indicators and Scoring Guideposts**

### **Introduction to Scoring Methodology**

#### **Application of the MSC Principles and Criteria for Sustainable Fishing**

The MSC Principles and Criteria provide the overall requirements necessary for certifying that a fishery meets the Marine Stewardship Council's environmental standard for being well-managed and sustainable.

The certification methodology adopted by the MSC involves the application and interpretation of the Principles and Criteria to the specific fishery undergoing assessment. This is necessary, as the precise assessment of a fishery will vary with the nature of the species, capture method used etc.

Accordingly, the assessment team for the Candidate Fishery has developed, from the MSC Principles and Criteria, a structured hierarchy of 'Performance Indicators' and 'Scoring Guideposts' in order to carry out the assessment. Performance indicators represent separate areas of important information (e.g. Indicator 1.1.1.3 requires a sufficient level of life history information on the target species and stock, 1.1.2.1 requires information on the effects of the fishery on the stock and so on). These indicators therefore provide a detailed framework of performance attributes necessary to meet the MSC Criteria in the same way as the Criteria provide the factors necessary to meet each Principle. Beside each indicator, individual 'Scoring Guideposts' (60, 80 and 100) are identified. It is at this level that the performance of the fishery is measured. It is important to note that the absolute numeric values assigned to each of these guideposts are not intended to reflect any type of percentile scoring system but were established by the MSC to help the assessment teams facilitate weighting and combining different performance indicators (see further discussion below).

#### **Scoring Methodology**

For each Performance Indicator, the fishery's management characteristics are compared with pre-specified attributes for each of three Scoring Guidepost to establish a score. A 60 score is intended to reflect 'must pass, sustainable performance', a score of 80 represents 'exemplary performance', while a 100 score reflects 'perfect performance.' In order for a fishery to be certified it must accomplish three things:

- Achieve 'must pass, sustainable performance' for every performance indicator (as defined by a score of least 60);
- Must achieve 'exemplary performance' for each principle (an average aggregated score of 80 for each principle);

- A commitment to continuous improvement for each indicator from must pass, sustainable performance up to the exemplary performance level (as defined by agreed actions to improve any indicator's score to at least 80 if it has been scored between 60 and 80 in the assessment).

In fisheries where any given indicator scores below 60, a fishery cannot pass the evaluation process and be awarded certification until the performance issue(s) identified can be corrected to the satisfaction of the certification body and its expert evaluation team.

The evaluation framework noted above is referred to as the fishery assessment tree. It represents a hierarchical application of the Principles and Criteria. The scoring guideposts used to rate an indicator are meant to be hierarchical in that to meet a particular score, the scoring guideposts of all lower scores should also have been met. For any given criterion, sub-criteria and performance indicators are identified as appropriate to the nature of the fishery. All sub-criteria and indicators are weighted indicating their relative importance in setting the overall scores for the fishery. The weighting process will proceed after the evaluation team has received public comments on this draft and been able to incorporate the comments to create a final set of sub-criteria, indicators, and scoring guideposts for use in the evaluation process.

The key to understanding the criteria is to understand the differences between the MSC Principles. Principle 1 focuses on the target population, defined as target species or target stocks. Under this principle, the fundamental areas of concern which identify sound fisheries management are:

1. The definition of the target stocks;
2. The quality of monitoring and stock assessment programs;
3. The specific management goals for target stocks;
4. The procedures to ensure the recovery of target stocks if they are depleted; and
5. The fisheries are conducted in a manner that does not impair reproductive performance (e.g. the fishery does not significantly change the age, size and genetic structure of the target stocks).

An understanding of the context of the Pink Shrimp stock is important for consideration under MSC Principle 1. The Oregon pink shrimp fishery is a component of a coast-wide stock. Within OR waters, shrimp are harvested primarily by OR permitted harvesters, although some harvest is conducted by Washington or California permitted harvesters. Hence, the Oregon fishery has to be considered within this multi-jurisdictional coast wide fishery.

Principle 2 focuses on the impact of the Oregon trawl fishery on the ecosystem and non-target populations. The Principle 2 assessments determine how the candidate fishery management deals with:

1. The importance of maintaining a productive, functional and diverse ecosystem;
2. Provisions to minimize the fishery impacts on endangered, threatened, protected or icon species; and
3. Procedures that ensure the recovery of any depleted non-target stocks or degraded ecosystems.

Some considerations of the ecosystem context under Principle 2 are as follows. Pink shrimp are a lower trophic level species which provide food for many different fish species. The population is thought to be effected primarily by environmental variables such as decadal ENSO events. The food web has changed in responses to oceanic regime shifts with significant population fluctuations of upper trophic level prey species. Overlain on these shifts are changes in the climate, which may affect larval recruitment success. Principle 2 will also examine the known impacts of the trawl gear used in the fishery.

Principle 3 focuses on Oregon's management and operational framework that has been put in place to achieve the management goals. Some indicators under Principle 3 appear to overlap with indicators under Principles 1 and 2, however, the Principles 1 and 2 are concerned with the outcomes of a management system respecting the fact that the resources are maintained at the desired levels of abundance, while Principle 3 is concerned with evaluating whether all of the processes for reaching management objectives are in place. Components unique to Principle 3 include:

1. The evaluation of the consultation process;
2. The procedures used to control fisheries;
3. The extent of internal and external review of the management system;
4. The compliance with legal and administrative requirements; and
5. The implementation of responsible fishing practices.

The evaluation of MSC Principle 3 with respect to the Oregon pink shrimp fishery takes into account relevant biological, technical, economic, social and environmental aspects for both the commercial and recreational sectors. The assessment team is specifically looking for an adaptive management program with cooperation between stakeholders. The assessment will also look for well-characterized catch and bycatch data from the commercial sectors of the fishery. In addition, this assessment investigates compliance with relevant local, national and international laws and standards. Particularly, we are looking at Oregon's management and regulatory approach to the shrimp fishery with considerations of linkages to other jurisdictions (eg. WA, CA).

## **Concurrence between TAVEL Certification Assessment Tree and MSC Principles and Criteria**

The following three pages present a diagrammatic presentation of how the assessment team has defined Performance Indicators and Scoring Guidelines to verify the requirements of the MSC Principles and Criteria.

### **Final Performance Indicators and Scoring Guidelines**

The remaining pages of this document display the finalized Performance Indicators and Scoring Guidelines for the Oregon Pink Shrimp Fishery.

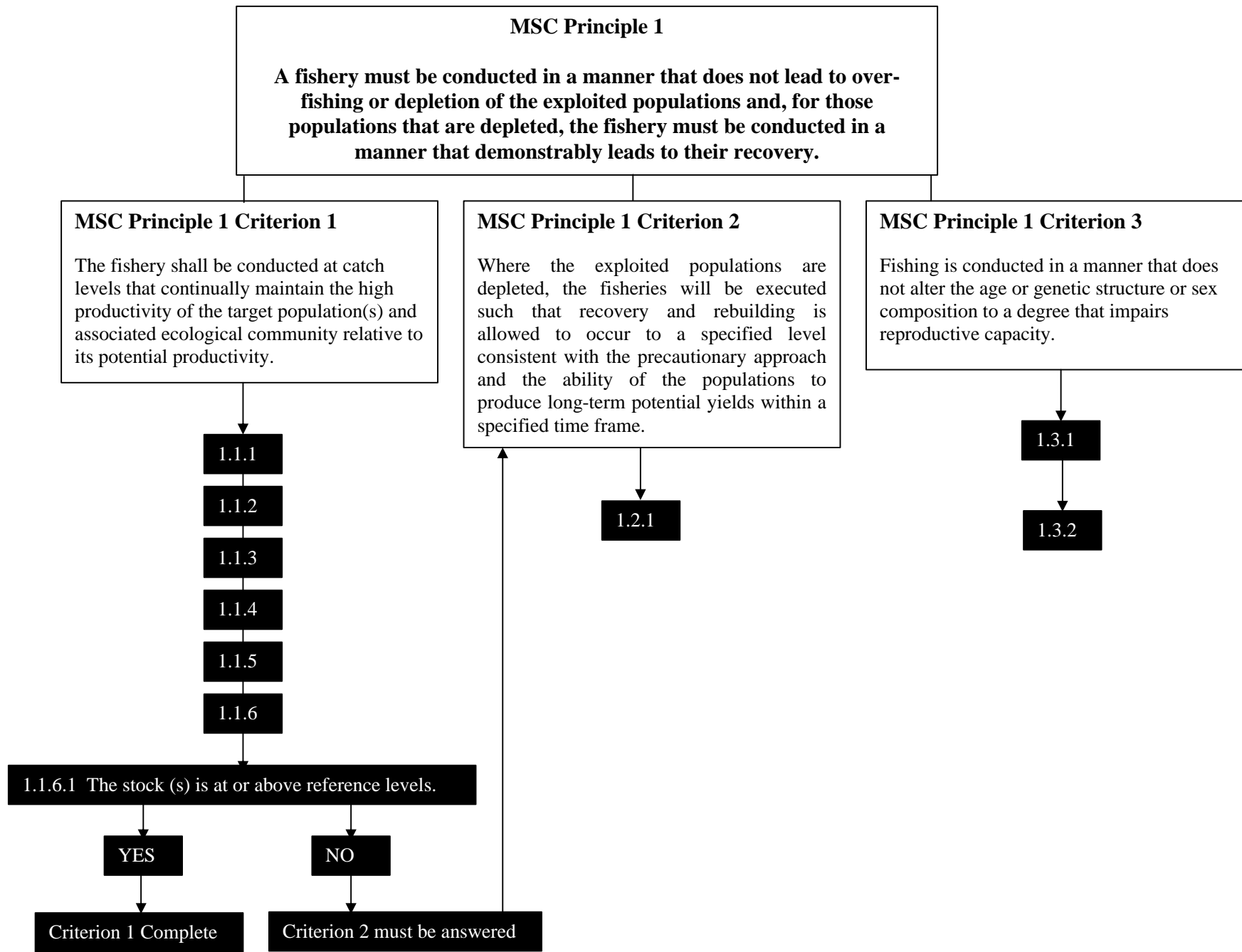
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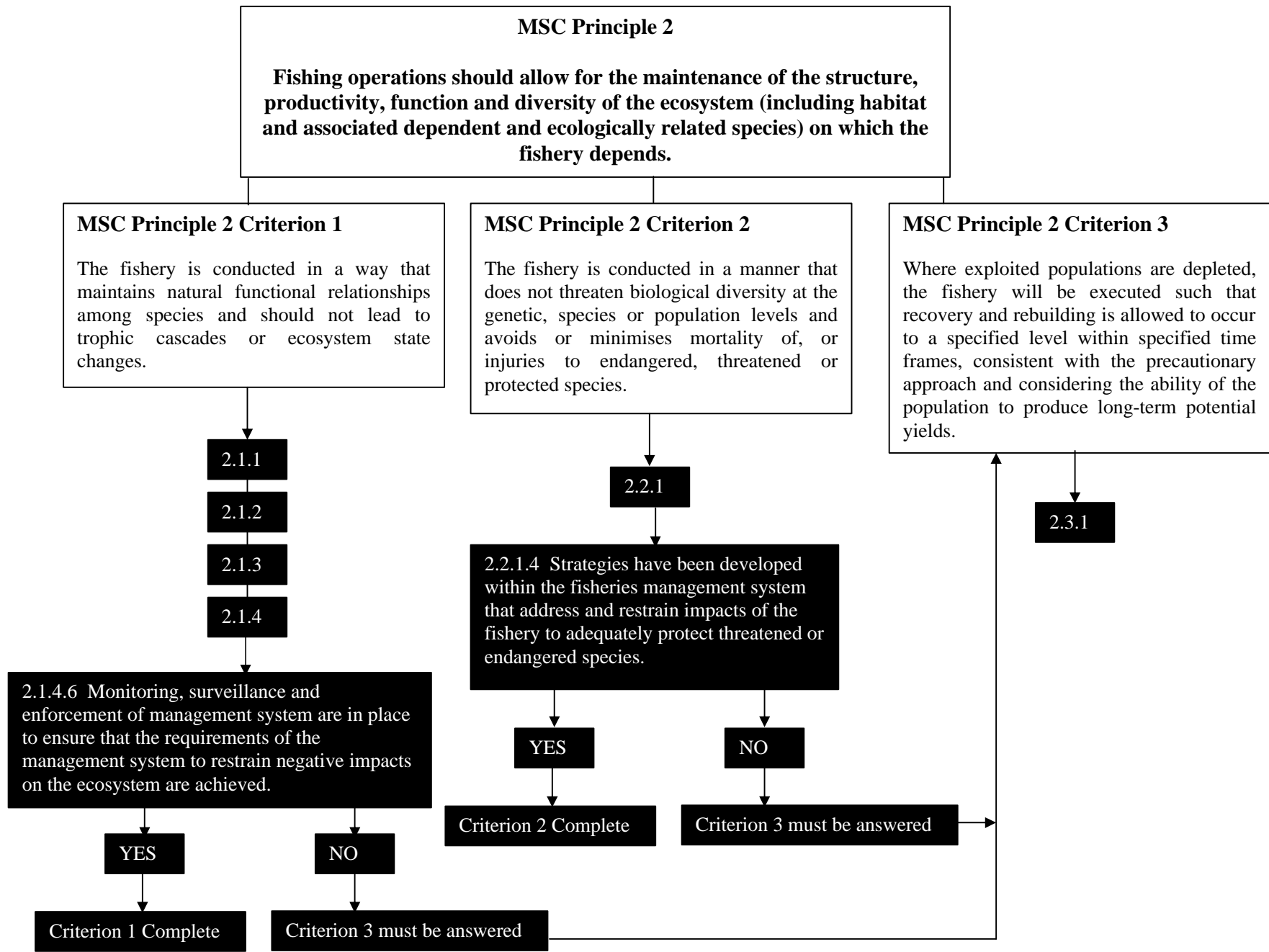
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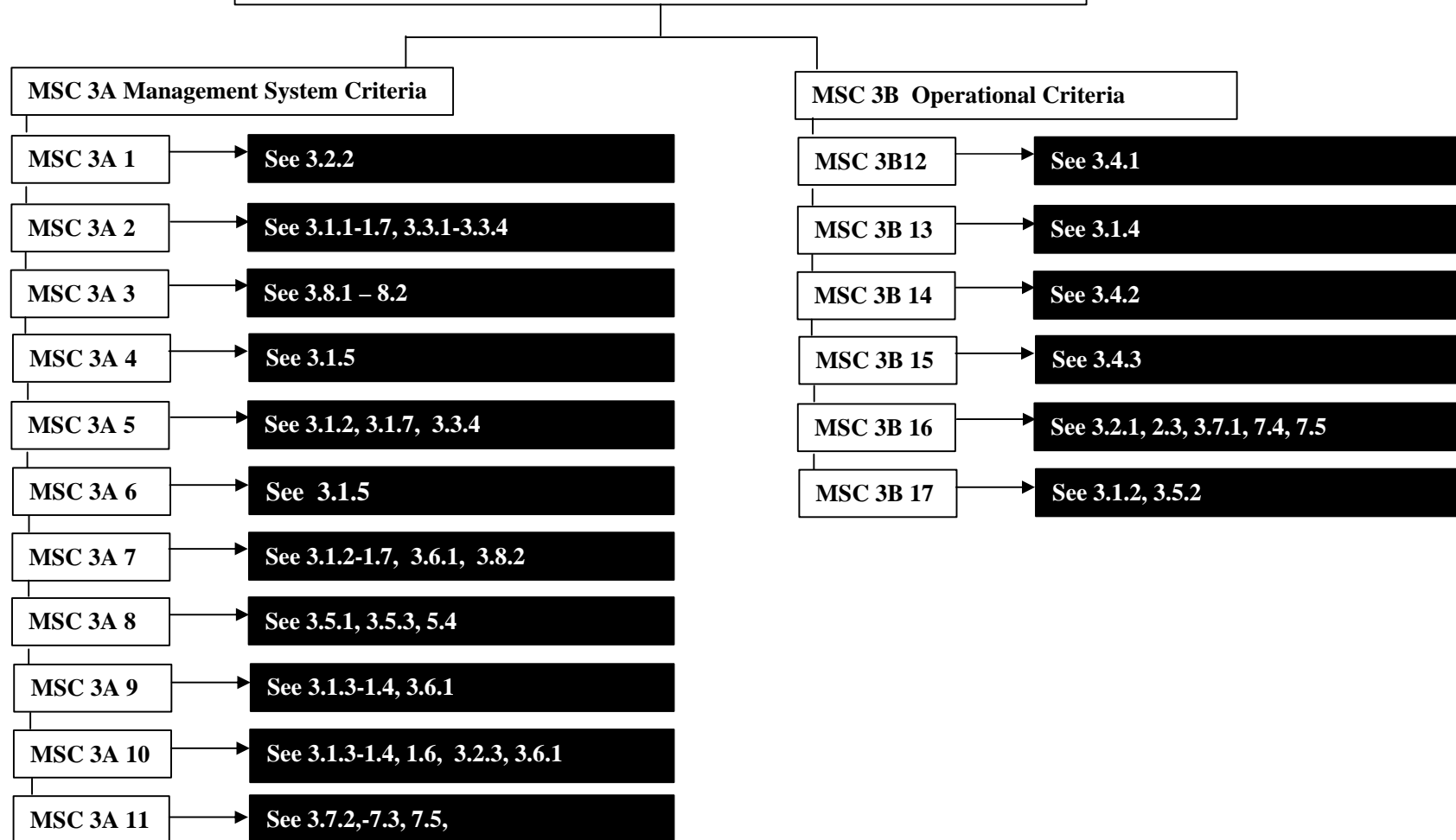
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### MSC Principle 3

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.



<b>MSC Principle 1</b>	<b>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.</b>
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<i>Intent</i>	<i>The intent of this principle is to ensure that the productive capacities of resources are maintained at high levels and are not sacrificed in favor of short term interests. Thus, exploited populations would be maintained at high levels of abundance designed to retain their productivity, provide margins of safety for error and uncertainty, and restore and retain their capacities for yields over the long term.</i>
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<b>1.1 - MSC Criterion 1</b>	<b>The fishery shall be conducted at catch levels that continually maintain the high productivity of the target population(s) and associated ecological community relative to its potential productivity.</b>
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<b>1.1.1 TAVEL Sub-Criterion</b>	There should be sufficient information on the target species and stock identity to allow the effects of the fishery on the stock to be evaluated.
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1.1.1.1	The target species is readily identifiable and distinguishable from congeners.	<ul style="list-style-type: none"> <li>• Misidentification is possible given the similarities among Pandalids. This increases recording errors of catches, but does not significantly compromise the integrity of monitoring.</li> </ul>	<ul style="list-style-type: none"> <li>• Misidentification of the target species is unlikely. Misidentification has little or no effect on the recording errors of catches.</li> </ul>	<ul style="list-style-type: none"> <li>• The target species is readily identified by fishers and by regulators. Catches are recorded appropriately.</li> </ul>
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1.1.1.2	Geographical range and migration patterns of the target stock are known.	<ul style="list-style-type: none"> <li>• A fishery dependent estimate of the geographical range of the target species is available. The management unit(s) approximate the stock distribution.</li> </ul>	<ul style="list-style-type: none"> <li>• A reliable fishery-independent estimate of the geographical range of the target species is available including information on temporal and spatial migration patterns.</li> </ul>	<ul style="list-style-type: none"> <li>• The complete geographic range of the target species, including migration patterns, is understood, verified and updated periodically.</li> </ul>
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1.1.1.3	The life history of the species is understood. Age, sex, maturity, natural mortality, growth and fecundity are defined.	<ul style="list-style-type: none"> <li>• Aspects of the life history are sufficiently understood to support a basic evaluation of the effects of fishing.</li> </ul>	<ul style="list-style-type: none"> <li>• Critical elements of the life history of the species are clearly documented and understood to support a comprehensive qualitative evaluation of the effects of fishing.</li> </ul>	<ul style="list-style-type: none"> <li>• All aspects of the life history of the species are clearly documented and understood, facilitating a comprehensive quantitative evaluation of the effects of fishing.</li> </ul>
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1.1.1.4	Spawning and nursery areas and the timing critical to both are identified.	<ul style="list-style-type: none"> <li>• There is some information on primary location of spawning and nursery areas/times.</li> </ul>	<ul style="list-style-type: none"> <li>• Spawning and nursery areas/ times are known.</li> </ul>	<ul style="list-style-type: none"> <li>• Spawning and nursery areas/times are sufficiently well documented to support closed areas/seasons where and when necessary.</li> </ul>
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SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100
1.1.1.5	Information is collected on the abundance, distribution and composition of the stock.	<ul style="list-style-type: none"> <li>• Fishery dependent and/or fishery independent indices are available on the abundance, distribution and composition of the stock.</li> <li>• Qualitative information exists on the appropriateness of the indices as proportional indicators of stock size.</li> </ul>	<ul style="list-style-type: none"> <li>• Uncertainties have been identified and reduced to allow trends to be determined from indices.</li> <li>• Fishery dependent and fishery independent indices are available on the abundance, distribution and composition of the stock.</li> <li>• Uncertainties in indices have been fully analyzed.</li> <li>• Indices are consistent and there is clear evidence that they are representative of the stock size.</li> </ul>
1.1.1.6	There are studies characterizing the environmental effects (both physical and biological) on population dynamics.	<ul style="list-style-type: none"> <li>• There is evidence of studies on the effects of biological and physical influences on the population.</li> <li>• Research is encouraged and ongoing.</li> </ul>	<ul style="list-style-type: none"> <li>• There is sufficient knowledge of biological and physical factors affecting abundance, distribution, survival and year class strength to infer the effects on population dynamics.</li> <li>• There is extensive and well-documented knowledge of biological and physical factors affecting abundance, distribution, survival and year class strength to allow estimation of the effects on population dynamics.</li> </ul>
1.1.1.7	There are sufficient fishery and/ or fishery-independent indices available to evaluate the effects of fishing and ecosystem changes on recruitment variability	<ul style="list-style-type: none"> <li>• There are indices used to qualitatively evaluate the effects of fishing and ecosystem changes on recruitment variability.</li> </ul>	<ul style="list-style-type: none"> <li>• There are fishery dependent and/or fishery-independent (e.g. oceanographic and fishery research surveys) indices which are used to analyze the effects of fishing and ecosystem changes on recruitment variability.</li> <li>• There are fishery and fishery-independent, standardized, time-series indices that are used to quantify the effects of fishing and ecosystem changes on recruitment variability and to provide short and medium-term recruitment forecasts.</li> </ul>
<b>1.1.2 TAVEL Sub-Criterion</b>		There should be sufficient information on the fishery to allow its effects on the target stock to be evaluated.	
1.1.2.1	All fishing related mortality is recorded/estimated. This includes landings, discards, and incidental mortality (adult and juvenile).	<ul style="list-style-type: none"> <li>• Sufficient information is available to allow accurate estimate to be made of landings.</li> <li>• Qualitative estimates of discards are available.</li> </ul>	<ul style="list-style-type: none"> <li>• Landings and discards are accurately recorded in log books as required by regulation.</li> <li>• Discards are well estimated for adult and juvenile shrimp.</li> <li>• Landings and discards are accurately monitored and fishing mortality is known.</li> </ul>

SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100	
1.1.2.2	Fishing effort is known and standardized.	<ul style="list-style-type: none"> <li>Nominal effort data are available which can be used to estimate effective fishing effort well enough to support a rudimentary analysis for tracking trend in the stock.</li> </ul>	<ul style="list-style-type: none"> <li>Accurate estimates of effective fishing effort are available and support a high degree of confidence in the evaluation of change in stock size over time by statistical area.</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive records of fishing effort are kept and recorded at levels of temporal and spatial resolution to compute standardized, effective fishing effort, supporting a very high degree of confidence in the evaluation of change in stock size over time.</li> </ul>
1.1.2.3	Commercial fishing vessels, gear and methods are characterized for the fishery.	<ul style="list-style-type: none"> <li>General fishing methods and gear type are known for the fishery.</li> <li>Information is available on the size and composition of the fleet, but is not regularly updated.</li> <li>Seasonal and geographical variations in fishing pattern are estimated.</li> </ul>	<ul style="list-style-type: none"> <li>Main fishing methods and gear type are known for the fishery and information is available on location of fishing from fishing logs.</li> <li>Information on the size and composition of the fleet is recorded and updated at regular intervals.</li> <li>Seasonal and geographical variations in fishing pattern are known.</li> </ul>	<ul style="list-style-type: none"> <li>All fishing methods and gear types employed in the fishery are specifically characterized by fishing ground and season.</li> <li>Representative at-sea observer coverage records information on fishing practices.</li> <li>Seasonal and geographical variability in fishing pattern, is recorded and regularly reviewed.</li> </ul>
1.1.2.4	Gear and fishing method selectivity for the target species is known.	<ul style="list-style-type: none"> <li>Information is available on selectivity and qualitative changes in selectivity.</li> </ul>	<ul style="list-style-type: none"> <li>Selectivity is well estimated for key locations and times.</li> </ul>	<ul style="list-style-type: none"> <li>Full selectivity has been estimated, including locations and times of fishing over a suitable time series.</li> </ul>
<b>1.1.3 TAVEL Sub-Criterion</b>	Reference levels which maintain high productivity have been developed for spawning stock abundance and/or fishing mortality.			
1.1.3.1	There are reference levels that are appropriate for the stock, respect limit and target objectives and take ecosystem effects into account. These reference levels include fishing mortality rates and/or spawning stock abundance.	<ul style="list-style-type: none"> <li>Reference levels have been chosen and are justified by general agreement among regional fishery scientists and fishers following qualitative analysis of the fishery and consideration of traditional knowledge.</li> <li>Conditions that reflect unfavorable environmental conditions have been incorporated but not verified.</li> </ul>	<ul style="list-style-type: none"> <li>Reference levels are justified based on stock biology and dynamics, demonstrated environmental influences and traditional knowledge.</li> <li>Sources of uncertainty, variability and data limitations are known and some are accounted for, providing a margin of safety with respect to fishing mortality and/or stock abundance.</li> </ul>	<ul style="list-style-type: none"> <li>All sources of uncertainty, variability and data limitations are accounted for providing reference levels that include margins for safety with respect to fishing mortality and stock abundance.</li> </ul>

SCORING CRITERIA		SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100
1.1.3.2	Reference levels are consistent with international standards.	<ul style="list-style-type: none"> <li>Reference levels are being developed to meet international standards.</li> </ul>	<ul style="list-style-type: none"> <li>Reference levels are established and are consistent with international standards.</li> </ul>	<ul style="list-style-type: none"> <li>Reference levels meet or exceed international standards.</li> </ul>
<b>1.1.4 TAVEL Sub-Criterion</b>		There is a well defined and effective harvest strategy to manage the target stock.		
1.1.4.1	There are mechanisms in place to control harvest as required for management of the stocks.	<ul style="list-style-type: none"> <li>Mechanisms exist to monitor and, when necessary, control harvest but have not been tested.</li> </ul>	<ul style="list-style-type: none"> <li>Mechanisms are in place to adjust harvest as and when required to maintain, or allow the target stock to return to, productive levels.</li> </ul>	<ul style="list-style-type: none"> <li>Mechanisms are responsive, relevant and timely, mechanism performance has been evaluated and demonstrate a high degree of effectiveness.</li> </ul>
1.1.4.2	Clear, effective harvest control decision rules are described, communicated and enforced.	<ul style="list-style-type: none"> <li>Informal harvest control decision rules exist consistent with stock health indices.</li> <li>Harvesters are aware of harvest control decision rules.</li> <li>Implementation is underway.</li> </ul>	<ul style="list-style-type: none"> <li>Explicit decision rules, linked to stock health indices have been developed and implemented.</li> <li>Industry participates in the crafting and implementation of decision making framework.</li> <li>Rules are being evaluated for effectiveness.</li> </ul>	<ul style="list-style-type: none"> <li>Explicit, tested decision rules are consistent with reference levels.</li> <li>They are periodically evaluated and are being enforced.</li> </ul>
<b>1.1.5 TAVEL Sub-Criterion</b>		There is a comprehensive stock assessment.		
1.1.5.1	The assessment methods/models provide a comprehensive assessment of the stock. These include, but are not limited to, provision for catch and effort data, age and/or sex structure of the catch and population, stock size indices, relationship of recruitment to spawning stock and evaluation of the effects of environmental variables.	<ul style="list-style-type: none"> <li>Assessments evaluate indices of stock status that are generally believed to reflect abundance, production and mortality.</li> <li>The indices are primarily qualitative and address aspects of the species biology, including the effects of the physical and biological environment.</li> </ul>	<ul style="list-style-type: none"> <li>Assessments evaluate indices of stock status that have been shown to reflect abundance, production and mortality.</li> <li>The indices model aspects of the species biology, including the effects of the physical and biological environment.</li> </ul>	<ul style="list-style-type: none"> <li>Complex assessment models are used, capturing all major features appropriate to the biology and ecology of the species and the nature of the fishery.</li> <li>The assessment models include statistical fitting of the data and address both process and measurement error.</li> </ul>

SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100	
1.1.5.2	The assessment evaluates the overall coast wide pink shrimp stock.	<ul style="list-style-type: none"> <li>• A qualitative evaluation has been done, indicating that findings from the Oregon fishery apply to the total stock area.</li> </ul>	<ul style="list-style-type: none"> <li>• A quantitative assessment has been done that includes fishery data from some areas outside the Oregon fishing areas.</li> </ul>	<ul style="list-style-type: none"> <li>• A quantitative assessment has been done that includes fishery and fishery-independent data for the total stock area from British Columbia to California.</li> </ul>
1.1.5.3	The assessment evaluates current stock size and/or fishing mortality relative to reference levels.	<ul style="list-style-type: none"> <li>• Provisional estimates of the current stock size and/or fishing mortality relative to reference levels are available.</li> </ul>	<ul style="list-style-type: none"> <li>• A qualitative assessment of the current stock size and fishing mortality relative to the reference levels has been completed and is reviewed periodically.</li> </ul>	<ul style="list-style-type: none"> <li>• Regular assessment makes a reliable evaluation of the current stock size and/or fishing mortality relative to the reference levels.</li> </ul>
1.1.5.4	The assessment includes an evaluation of the consequences of harvest strategy options.	<ul style="list-style-type: none"> <li>• The assessment makes an initial approximation of the consequences of harvest strategy options.</li> </ul>	<ul style="list-style-type: none"> <li>• The assessment includes a robust approximation of the consequences of harvest strategy options.</li> </ul>	<ul style="list-style-type: none"> <li>• The assessment evaluates the consequences of harvest strategy options and evaluates stock trajectories under decision rules.</li> </ul>
1.1.5.5	The assessment takes sufficient account of major uncertainties in data (including evaluation of assumptions) to provide a robust assessment of the stock.	<ul style="list-style-type: none"> <li>• Major uncertainties and underlying assumptions are identified. Some attempt has been made to evaluate these in the assessment.</li> </ul>	<ul style="list-style-type: none"> <li>• The assessment takes into account major uncertainties in the data. The most important assumptions have been evaluated, the consequences are known.</li> </ul>	<ul style="list-style-type: none"> <li>• The assessment addresses all significant uncertainties in the data and evaluates the assumptions in terms of importance, trend direction and potential bias to the assessment.</li> </ul>
1.1.5.6	Uncertainties and assumptions are reflected in the assessment of management options.	<ul style="list-style-type: none"> <li>• Assumptions and major uncertainties and possible implications are recognized and are reported in the management process.</li> </ul>	<ul style="list-style-type: none"> <li>• The implications of major uncertainties and assumptions are addressed in the management process through the use appropriate decision rules.</li> </ul>	<ul style="list-style-type: none"> <li>• All significant uncertainties, assumptions and appropriate decision rules are addressed and reflected in the management process.</li> <li>• Methods for addressing uncertainty are periodically evaluated with appropriated changes to decision rules.</li> </ul>
1.1.5.7	Methods/models used in the assessment are considered up to date and are fully reviewed by independent peer analysis.	<ul style="list-style-type: none"> <li>• The assessment process is considered adequate to evaluate stock status relative to reference levels, and has successfully passed internal peer review.</li> </ul>	<ul style="list-style-type: none"> <li>• Assessment has passed independent peer review.</li> </ul>	<ul style="list-style-type: none"> <li>• The assessment process is considered state-of-the art by international standards.</li> </ul>

SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100
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<b>1.1.6 TAVEL Sub-Criterion</b>	The stock is at the appropriate, environmentally-linked reference level.		
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1.1.6.1	The spawning stock is at or above the reference level.	<ul style="list-style-type: none"> <li>Assessments suggest the spawning stock is likely above the reference level, or if below the reference level or declining, an appropriate recovery/rebuilding plan has been implemented (go to 1.2)</li> </ul>	<ul style="list-style-type: none"> <li>Assessments indicate the stock is above the reference level and not declining.</li> </ul>	<ul style="list-style-type: none"> <li>Assessments demonstrate the stock is above the reference level and is either stable or increasing.</li> </ul>
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1.1.6.2	The fishing mortality is below the reference level.	<ul style="list-style-type: none"> <li>Assessments infer that fishing mortality does not exceed the reference level.</li> </ul>	<ul style="list-style-type: none"> <li>Assessments indicate that the fishing mortality does not exceed the reference level.</li> </ul>	<ul style="list-style-type: none"> <li>Assessments demonstrate that the fishing mortality does not exceed the reference level and is either stable or decreasing.</li> </ul>
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<b>1.2 - MSC Criterion 2</b>	<b>Where the exploited populations are depleted, the fisheries will be executed such that recovery and rebuilding is allowed to occur to a specified level consistent with the precautionary approach and the ability of the populations to produce long-term potential yields within a specified time frame.</b>		
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<b>Scoring Intent</b>	<b>The MSC Technical Advisory Board directs that this Criterion is only scored in the instance that the candidate fishery is determined to be in a depleted state hence a recovery plan is already in action. The decision whether the fishery is in a depleted state will be made at the beginning of the Fishery Assessment process.</b>		
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1.2.1	When the stock is below the reference abundance level, and/or the fishing mortality is above the reference level, there are measures designed and implemented for recovery and rebuilding.	<ul style="list-style-type: none"> <li>Appropriate recovery and rebuilding measures are being implemented through reduction in exploitation.</li> <li>Measures are implemented even if they have not been tested. Fishing mortality is further reduced if the stock remains below the reference level.</li> </ul>	<ul style="list-style-type: none"> <li>A recovery plan is in place, implementing appropriate protective measures that mitigate recruitment failure within the plan's time frame.</li> <li>Measures have been tested and can be shown to aid in maintaining reproductive potential.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate and proven protective measures are being implemented to improve recruitment potential by increasing the reproductive capacity as quickly as possible.</li> <li>Total fishing mortality is nearly zero if the stock is below the reference level.</li> </ul>
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SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100
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<b>1.3 - MSC Criterion 3</b>	<b>Fishing is conducted in a manner that does not alter the age or genetic structure or sex composition to a degree that impairs reproductive capacity.</b>		
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1.3.1	The effects of the fishery on age or sex or genetic composition of the population does not impair reproductive capacity.	<ul style="list-style-type: none"> <li>The knowledge of the effect of fishing on the biological characteristics such as age, size, sex, sex change and fecundity is adequate to identify potential threats to the reproductive capacity of the target stock.</li> </ul>	<ul style="list-style-type: none"> <li>The knowledge of the effect of fishing on biological characteristics such as the age, size, sex, sex change and fecundity is adequate to detect threats from fishing on the reproductive capacity of the target stock.</li> </ul>	<ul style="list-style-type: none"> <li>There is extensive knowledge of the effect of fishing on biological characteristics such as the age, size, sex, sex change, fecundity and genetic structure of the target stock.</li> <li>Knowledge is adequate to quantify how fishery induced changes in these characteristics impact reproductive capacity.</li> </ul>
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1.3.2	Adverse fishery impacts on reproductive capacity will be considered by management and remedial action incorporated in management planning and processes.	<ul style="list-style-type: none"> <li>Potential threats have been identified and are considered in the planning process.</li> </ul>	<ul style="list-style-type: none"> <li>Known threats are addressed through remedial action specified in management plans.</li> </ul>	<ul style="list-style-type: none"> <li>Management plans contain harvest control rules that address specific quantified fishery impacts on reproductive capacity.</li> </ul>
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<b>MSC Principle 2</b>	<b>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.</b>		
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<i>Intent</i>	<i>The intent of this principle is to encourage the management of fisheries from an ecosystem perspective under a system designed to assess and restrain the impacts of the fishery on the ecosystem.</i>		
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<b>2.1 - MSC P2 Criterion 1</b>	<b>The fishery is conducted in a way that maintains natural functional relationships among species and should not lead to trophic cascades or ecosystem state changes.</b>		
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<b>2.1.1 TAVEL Sub-Criterion</b>	There is adequate understanding of ecosystem factors relevant to the distribution and life history of the target and non-target species.		
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2.1.1.1	The nature, distribution and availability of habitats (i.e. sediment type, substrate type, community structure, etc.) are known in relation to fishing operations.	<ul style="list-style-type: none"> <li>• Nature and distribution of all main habitats are known but information is not comprehensive or recent.</li> <li>• Seasonal fishing areas are known and mapped.</li> </ul>	<ul style="list-style-type: none"> <li>• Nature and distribution of all main habitats are known in moderate detail and information is recent.</li> <li>• Distribution of fishing operations are monitored.</li> </ul>	<ul style="list-style-type: none"> <li>• The nature, distribution and availability of all habitats types are monitored on an ongoing basis, including analysis of interannual variability.</li> <li>• Fishing effort and distribution is monitored on an ongoing, constant basis.</li> </ul>
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2.1.1.2	Information is available on non-target species directly and indirectly affected by the fishery.	<ul style="list-style-type: none"> <li>• Qualitative information is available on main non-target species affected by the fishery including their distribution and relative abundance.</li> </ul>	<ul style="list-style-type: none"> <li>• Quantitative information is available on the majority of non-target species affected by the fishery including their distribution, abundance and ecology.</li> <li>• Qualitative information including distribution and abundance is available on other non-target species affected by the fishery.</li> </ul>	<ul style="list-style-type: none"> <li>• Quantitative information is available on all non-target species affected by the fishery including their distribution, abundance and ecology.</li> </ul>
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2.1.1.3	Information is available on the structure and functioning of the food web, and the position and importance of the target species.	<ul style="list-style-type: none"> <li>• Key prey, predators and competitors are known.</li> <li>• General ecosystem roles of these species are known.</li> </ul>	<ul style="list-style-type: none"> <li>• General qualitative ecosystem knowledge exists regarding the position and general roles of pink shrimp in the food web structure and function.</li> </ul>	<ul style="list-style-type: none"> <li>• Quantitative information is available on the food web position and importance of the target species within the food web at all life stages.</li> </ul>
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2.1.1.4	Information exists on the ability of the ecosystem to recover from fishery related impacts.	<ul style="list-style-type: none"> <li>• Key elements of the ecosystem, affected by the fishery, are identified and provide some understanding of how the ecosystem may recover from fishery related impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• The main elements of the ecosystem affected by the fishery have been documented and are understood, and this provides a convincing scenario of how the ecosystem would recover from fishery related impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Fishery impacts on the functioning ecosystem have been comprehensively evaluated and have been proven to be within safe limits.</li> </ul>
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SCORING CRITERIA		SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100
2.1.1.5	Information is available on the effects of environmental variability including extreme events on target and non-target species productivity (e.g. nutrient effects).	<ul style="list-style-type: none"> <li>Some studies are available on the effects of environmental variability on both target and non-target components of productivity (e.g. recruitment of the target species, abundance of key non-target species).</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive studies are available on the effects of environmental variability on components of productivity such as recruitment of the target and non-target species.</li> </ul>	<ul style="list-style-type: none"> <li>There is ongoing monitoring and regularly updated projections on principal ecosystem components directly linked to recruitment of the target and non-target species.</li> </ul>
2.1.1.6	Sufficient information exists to support required changes in the fishery management system that will allow recovery of depleted non-target populations.	<ul style="list-style-type: none"> <li>There is some information on functional relationships, sufficient to recommend changes in fishing regulations that may reasonably be expected to recover and rebuild depleted non-target populations</li> </ul>	<ul style="list-style-type: none"> <li>There is adequate information on functional relationships to understand the implications of changes in fishery regulations designed to recover and rebuild depleted non-target populations.</li> </ul>	<ul style="list-style-type: none"> <li>There is a comprehensive understanding of functional relationships between the impacted non-target populations and the fishery.</li> <li>Intervention measures based on this understanding have been tested, and shown to be effective in promoting recovery and rebuilding of depleted non-target populations.</li> </ul>
<b>2.1.2 TAVEL Sub-Criterion</b>	Non-target species fishery impacts are comprehensively understood.			
2.1.2.1	There is information available on the nature, extent and fate of the by-catch (landings and discards of non-target species).	<ul style="list-style-type: none"> <li>The management system requires some portion of the fishery to be monitored to attempt to quantify the catch of non-target species, but the effectiveness of the measures is uncertain.</li> <li>Information available to managers from monitoring of catches of non-target species is adequate for main areas of the fishery.</li> </ul>	<ul style="list-style-type: none"> <li>The management system requires monitoring of and accounting for catch of non-target species and use or discard of that catch throughout all significant components of the fishery.</li> <li>Measures are taken to reduce the capture of non-target species, and substantial information is available.</li> </ul>	<ul style="list-style-type: none"> <li>There is 100% real-time, reliable monitoring of and accounting for catch and use or discard of non-target species throughout the fishery.</li> <li>The management measures are linked to the real-time information and have been evaluated as effective.</li> <li>The management system has achieved continued improvement in the accuracy and precision of monitoring and accounting of catch and use or discard of non-target species.</li> </ul>
2.1.2.2	There is information on unobserved fishing mortality (i.e. sources of mortality other than those above).	<ul style="list-style-type: none"> <li>Areas of potential unobserved fishing mortality are identified, but no further information is available.</li> </ul>	<ul style="list-style-type: none"> <li>Information from existing work has allowed qualitative estimates of unobserved fishing mortality to be made.</li> </ul>	<ul style="list-style-type: none"> <li>Research has been carried out on unobserved fishing mortality allowing quantitative estimates to be made and it has been determined that unobserved mortality is not significant.</li> </ul>

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<b>2.1.3 TAVEL Sub-Criterion</b>	There is adequate knowledge of the effects of gear-use on the ecosystem and extent and type of gear losses.		
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2.1.3.1	There is adequate knowledge of the physical impacts on the habitat resulting from use of gear.	<ul style="list-style-type: none"> <li>• Main impacts of gear use on the habitat are identified including extent and location of use.</li> <li>• Some effects of habitat perturbations have been estimated for similar gear in similar habitats.</li> </ul>	<ul style="list-style-type: none"> <li>• All types of impacts of gear use on the habitat are identified including extent and location of use.</li> <li>• Main habitat impacts have been inferred qualitatively.</li> </ul>	<ul style="list-style-type: none"> <li>• All types of impacts on the habitat resulting from the use of gear have been studied and quantified.</li> </ul>
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2.1.3.2	Gear loss during fishing operations and its effects are known (i.e. ghost fishing).	<ul style="list-style-type: none"> <li>• Some recording of gear losses takes place.</li> <li>• The effects of ghost fishing have not been estimated.</li> </ul>	<ul style="list-style-type: none"> <li>• There is knowledge of the type, quantity and location of gear lost during fishing operations.</li> <li>• Estimates of the ghost fishing mortality are made.</li> </ul>	<ul style="list-style-type: none"> <li>• There is detailed knowledge of the type, quantity and location of gear types lost during fishing operations because recording requirements are verified by independent observer coverage.</li> <li>• The impacts of ghost fishing mortality on target and non-target species and habitats have been measured.</li> </ul>
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<b>2.1.4 TAVEL Sub-Criterion</b>	Strategies have been developed within the fisheries management system to address and restrain any significant negative impacts of the fishery on the ecosystem.		
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2.1.4.1	Assessments of fishery impacts on ecosystem structure and/or function, habitats and on the populations of associated species are conducted.	<ul style="list-style-type: none"> <li>• Some assessments of the main impacts of the fishery on ecosystem structure and function, habitats have been conducted.</li> </ul>	<ul style="list-style-type: none"> <li>• Regular assessments of the impacts of the fishery on ecosystem structure and function, habitats and associated species populations (that may depend on shrimp as forage) are carried out and there is periodic feedback for improvement of assessment tools.</li> </ul>	<ul style="list-style-type: none"> <li>• Regular assessments are carried out and there is a frequent feed back mechanism for improvement of assessment tools.</li> </ul>
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2.1.4.2	All significant effects of the fishery on the ecosystem have been identified and quantified.	<ul style="list-style-type: none"> <li>• Main impacts of the fishery on the ecosystem are inferred from existing information, but have not been investigated in detail.</li> </ul>	<ul style="list-style-type: none"> <li>• There is a comprehensive evaluation of the effects of the fishery on the ecosystem based on existing information.</li> </ul>	<ul style="list-style-type: none"> <li>• The effects of the fishery on the ecosystem have been characterized by appropriate comparative and/or experimental studies.</li> </ul>
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SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100	
2.1.4.3	Management objectives are set in terms of impact identification and avoidance/reduction.	<ul style="list-style-type: none"> <li>• Management objectives exist that characterize most important impacts, and have identified possible impact avoidance/reduction techniques.</li> </ul>	<ul style="list-style-type: none"> <li>• Management objectives are set to detect and reduce adverse impacts on key ecosystem components, and are undergoing tests for effectiveness.</li> </ul>	<ul style="list-style-type: none"> <li>• Tested management objectives are set to detect and reduce all significant adverse impacts. These are designed to adequately protect ecosystems, habitats and populations of target and non-target species.</li> </ul>
2.1.4.4	Levels of acceptable impact are determined and reviewed.	<ul style="list-style-type: none"> <li>• There is sufficient information to determine acceptable impacts to some key non-target species and habitats.</li> </ul>	<ul style="list-style-type: none"> <li>• Levels of acceptable impacts for most key non target species and habitats have been determined and are reviewed periodically.</li> </ul>	<ul style="list-style-type: none"> <li>• Levels of acceptable impact for all key populations and habitats have been determined and are subject to frequent review and adjustment.</li> </ul>
2.1.4.5	Management responds to assessment results and is effective in preventing any significant negative impacts of the fishery on the ecosystem.	<ul style="list-style-type: none"> <li>• Management considers assessment results and demonstrates a commitment to restraining significant negative ecosystem impacts.</li> <li>• Testing of effectiveness of measures that prevent significant impact are underway.</li> </ul>	<ul style="list-style-type: none"> <li>• Management responds to assessment results in accordance to the requirements of existing law and promulgates measures that have demonstrated to be effective in restraining the most significant negative ecosystem impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Management responds proactively to assessment results, and promulgates measures that clearly result in prevention of significant negative ecosystem impacts.</li> </ul>
2.1.4.6	Monitoring, surveillance and enforcement of the management system are in place to ensure that the requirements of the management system to restrain negative impacts on the ecosystem are achieved.	<ul style="list-style-type: none"> <li>• Monitoring, surveillance and enforcement policies exist.</li> <li>• Required monitoring, surveillance and enforcement activities are focused on key fishing areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Monitoring, surveillance and enforcement activities cover most fishing areas.</li> <li>• These activities are periodically evaluated, resulting in changes as warranted.</li> </ul>	<ul style="list-style-type: none"> <li>• Monitoring, surveillance and enforcement of the management system is ongoing in all OR waters.</li> <li>• Evaluation is quantitative and regular, resulting in timely changes to the management system, if necessary.</li> </ul>

SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100
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<b>2.2 - MSC P2 Criterion 2</b>	<b>The fishery is conducted in a manner that does not threaten biological diversity at the genetic, species or population levels, and avoids or minimizes mortality of, or injuries to endangered, threatened, or protected species.</b>
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<b>2.2.1 TAVEL Sub-Criterion</b>	Fishing is conducted in a manner that does not have unacceptable impacts on recognized protected, endangered or threatened species.
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2.2.1.1	There is adequate information on the presence and populations of protected, endangered or threatened (PET) species.	<ul style="list-style-type: none"> <li>• There is a program implemented to identify PET species directly related to the fishery.</li> <li>• There is periodic monitoring of the general population trends and status of PET species.</li> </ul>	<ul style="list-style-type: none"> <li>• Key PET species directly related to the fishery have been identified and characterized.</li> <li>• Populations are monitored and assessed on a regular basis.</li> </ul>	<ul style="list-style-type: none"> <li>• There is knowledge of all populations of PET species directly or indirectly related to the fishery including their dynamics.</li> <li>• Regular monitoring of PET species is undertaken, supported by research programs to assess threats and promote their conservation.</li> <li>• The type and distribution of critical habitats have been identified.</li> </ul>
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2.2.1.2	Interactions of the fishery with endangered, threatened, and protected species are adequately characterized.	<ul style="list-style-type: none"> <li>• The main interactions directly related to the fishery are known through independent monitoring.</li> </ul>	<ul style="list-style-type: none"> <li>• Quantitative estimates are made of the effects of interactions with key species directly related to the fishery.</li> <li>• There is a requirement to record and report all incidental mortalities.</li> </ul>	<ul style="list-style-type: none"> <li>• Reliable quantitative estimates are made of the interactions of all populations directly related to the fishery, and qualitative information is available on indirect impacts.</li> <li>• Adequate enforcement assures incidental mortalities are recorded and reported.</li> </ul>
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2.2.1.3	The level of interaction that results in an unacceptable risk to PET species is known.	<ul style="list-style-type: none"> <li>• The level of interaction that results in an unacceptable risk is known for the PET species most likely to be affected by the fishery, within the key fishing areas.</li> </ul>	<ul style="list-style-type: none"> <li>• The level of interaction that results in an unacceptable risk is known for most of the PET species affected by the fishery, through the most of its range.</li> </ul>	<ul style="list-style-type: none"> <li>• The level of interaction that results in an unacceptable risk on all PET species is known for the full range of the fishery.</li> </ul>
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SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100	
2.2.1.4	Strategies have been developed within the fisheries management system that address and restrain impacts of the fishery to adequately protect threatened or endangered species.	<ul style="list-style-type: none"> <li>• Management measures exist in terms of impact identification and avoidance/reduction in relation to threatened and endangered species.</li> </ul>	<ul style="list-style-type: none"> <li>• Management measures ensure that impacts on PET species are quantified and that impacts are reduced to be within acceptable risk limits.</li> <li>• These are designed to adequately protect aspects of the ecosystem within main fishing areas, considered to be of high conservation importance.</li> </ul>	<ul style="list-style-type: none"> <li>• Management measures to detect and reduce impacts on PET species have been tested and verified.</li> <li>• These are designed to protect ecosystems, habitats and populations of target and non-target species.</li> </ul>
2.2.1.5	The effects of the fishery on biological diversity and productivity have been determined.	<ul style="list-style-type: none"> <li>• There are some reports linking the effects of the fishery on biological diversity.</li> <li>• Qualitative estimates of impacts on biological diversity have been inferred using general information from similar fisheries and the scientific literature.</li> </ul>	<ul style="list-style-type: none"> <li>• Effects on biological diversity and productivity within fishing areas are qualitatively understood.</li> <li>• Research has been conducted to characterize the impacts of fishing to biological diversity in OR pink shrimp fishing areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Quantitative effects on biological diversity and productivity are well documented, and OR fishery related impacts are monitored and regularly assessed.</li> </ul>
<b>2.3 - MSC P2 Criterion 3</b>		<b>Where exploited populations are depleted, the fishery will be executed such that recovery and rebuilding is allowed to occur to a specified level within specified time frames, consistent with the precautionary approach and considering the ability of the population to produce long-term potential yields.</b>		
<b>Scoring Intent</b>		<b>The MSC Technical Advisory Board directs that this Criterion is only scored in the instance that non target species are determined to be in a depleted state hence a recovery plan is already in action. The decision whether the non target species are in a depleted state will be made at the beginning of the Fishery Assessment process.</b>		

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<b>2.3.1 TAVEL Sub-Criterion</b>	There are management measures in place that allow for the rebuilding of affected populations.
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2.3.1.1	Management measures are in place to modify fishery practices to minimize further degradation of depleted non-target populations.	<ul style="list-style-type: none"> <li>• Informal management measures exist allowing modification of fishing practices to reduce unacceptable mortality of non-target depleted populations.</li> </ul>	<ul style="list-style-type: none"> <li>• Effective management measures (e.g. reducing fishing effort, requiring gear modifications, setting bycatch quotas) are in place to modify fishery practices in light of the identified unacceptable impacts.</li> <li>• Affected non-target species fishing mortality is nearly zero if the affected population is below the limit reference point.</li> </ul>	<ul style="list-style-type: none"> <li>• Monitoring programs periodically verify the effectiveness of management measures to modify fishery practices when necessary.</li> <li>• Total fishing mortality is zero if the non-target population is below the limit reference point.</li> </ul>
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2.3.1.2	Rebuilding mechanisms allow for recovery of affected populations.	<ul style="list-style-type: none"> <li>• Rebuilding mechanisms for depleted populations have been identified and implementation is underway.</li> <li>• Testing of effectiveness of these mechanisms is underway.</li> </ul>	<ul style="list-style-type: none"> <li>• Rebuilding mechanisms to promote recovery of the affected population within specific time frames are implemented.</li> <li>• Mechanisms have been tested and can be shown to allow rebuilding of the affected populations.</li> <li>• Affected non-target species fishing mortality is nearly zero if the affected population is below the limit reference point.</li> </ul>	<ul style="list-style-type: none"> <li>• Specific rebuilding mechanisms are implemented to promote recovery as quickly as is possible.</li> <li>• Additional measures are being implemented to prevent problems in the future.</li> <li>• Total fishing mortality is zero if the population is below the limit reference point.</li> </ul>
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<b>MSC Principle 3</b>	<b>The fishery is subject to an effective management system that respects local, national and interjurisdictional laws and standards and incorporates institutional and operational frameworks that require use of the resource to be responsible and sustainable.</b>
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<i>Intent</i>	<i>The intent of this principle is to ensure that there is an institutional and operational framework for implementing Principles 1 and 2, appropriate to the size and scale of the fishery.</i>
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<b>3.1 TAVEL Criterion 1</b>	The management system has a clearly defined scope capable of achieving MSC Principles 1 and 2 and their associated criteria. This includes short and long-term objectives and associated strategies including those for managing the ecological impacts of fishing, consistent with a well-managed fishery.
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SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100	
3.1.1 ( <i>Relates to MSC Criterion 3.2</i> )	All agencies (state, federal, interjurisdictional) in the fisheries management system have clear-cut lines of responsibility. Their functions, particularly those involving interactions between these authorities are clearly defined.	<ul style="list-style-type: none"> <li>• State, federal and interjurisdictional organizations responsible for interacting in the management process have been identified.</li> <li>• Functions and responsibilities among entities are generally understood.</li> </ul>	<ul style="list-style-type: none"> <li>• Functions and responsibilities requiring interactions among the entities are explicitly defined and codified.</li> <li>• Interactions between agencies are effective and operate without conflict.</li> </ul>	<ul style="list-style-type: none"> <li>• Interactions between entities are periodically evaluated and modified where necessary.</li> </ul>
3.1.2 ( <i>Relates to MSC Criteria 3.2, 3.5, 3.7</i> )	The management system contains clear short- and long-term objectives	<ul style="list-style-type: none"> <li>• Short- and long-term resource and environment objectives are implicit within the management system</li> </ul>	<ul style="list-style-type: none"> <li>• The management system contains explicit short- and long-term resource and environment objectives that are periodically evaluated</li> </ul>	<ul style="list-style-type: none"> <li>• The management system contains clear and explicit short- and long-term resource, environmental, and socio-economic objectives that are regularly measured by performance indicators.</li> </ul>
3.1.3 ( <i>Relates to MSC Criteria 3.2, 3.7, 3.9, 3.10</i> )	The management system incorporates and applies an adaptive and responsible exploitation strategy.	<ul style="list-style-type: none"> <li>• Management objectives seek to maintain stocks at high levels of productivity.</li> <li>• The harvest control strategy is informal but consistent with objectives.</li> <li>• The harvest control strategy takes into consideration uncertainties in the status of the stocks.</li> <li>• The management system provides for making estimates of all catches, landings and by-catch and conducting an annual assessment of the status of target stocks.</li> </ul>	<p>A responsible management strategy is followed, including:</p> <ul style="list-style-type: none"> <li>• explicit long-term management objectives seek to maintain stocks at high levels of productivity.</li> <li>• an explicit harvest strategy which accounts for uncertainty.</li> <li>• the management system estimates all commercial catches, landings and by-catch and annually assesses the status of target stocks.</li> </ul>	<p>A responsible management strategy is followed, including:</p> <ul style="list-style-type: none"> <li>• a management plan that is explicit.</li> <li>• an explicit harvest strategy, that is precautionary, accounting for variances in survey estimates, uncertainties in stock assessment advice, and other risk factors.</li> </ul>

SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100	
<p>3.1.4 (<i>Relates to MSC Criteria 3.2, 3.7, 3.9, 3.10, 3.13</i>)</p>	<p>The management system incorporates and applies tactics (e.g. no take zones or closed areas) to manage ecological impacts (including impacts on spawning and nursery areas) of fishing using an approach consistent with MSC Principle 2.</p>	<ul style="list-style-type: none"> <li>• Where impacts have been identified, steps have been taken to develop appropriate control measures.</li> </ul>	<ul style="list-style-type: none"> <li>• Where assessments demonstrate possible ecological impacts, the management plan explicitly takes such impacts into account.</li> <li>• The regulation of the fishery to manage ecological impacts of fishing is consistent with the precautionary approach.</li> </ul>	<ul style="list-style-type: none"> <li>• The management system includes a plan with clear long-term objectives for managing ecological impacts of fishing that are explicit.</li> <li>• The plan requires regular quantitative assessments of the status of ecosystem components, taking into account all significant (identified or estimated) ecological impacts of the fishery, including but not limited to food competition, disruption of prey fields, disruption of foraging behavior, disruption to animals, impacts on spawning/nursery areas and alterations in food webs and habitats.</li> <li>• The plan includes all ecosystem components and is explicitly precautionary, accounting for uncertainty.</li> </ul>

SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100	
3.1.5 ( <i>Relates to MSC Criteria 3.2, 3.4, 3.6, 3.7</i> )	The management system takes into account socio-economic impacts in the development of management plans.	<ul style="list-style-type: none"> <li>• The fishery management system gives consideration to the long-term socio-economic interests of people and communities dependent on fishing.</li> <li>• The fishery is free from subsidies that directly and substantially promote overcapacity and excess input use.</li> <li>• The management system considers possible behavioral responses to effort control, e.g.. shorter seasons cause investments in vessel mobility.</li> <li>• Management measures exist to limit entry and prevent excessive capitalization.</li> </ul>	<ul style="list-style-type: none"> <li>• The management system incorporates objectives and strategies aimed at improving the long-term socio-economic well-being of people and communities dependent on fishing for livelihoods.</li> <li>• The fishery management system promotes measures that achieve conservation objectives in a cost-effective manner.</li> <li>• Measures for controlling effort take into account the need to reduce perverse race-to-fish incentives.</li> <li>• Management has adopted measures to prevent excess capacity growth.</li> </ul>	<ul style="list-style-type: none"> <li>• The management system has adopted explicit objectives, strategies and tactics to improve the long-term socio-economic well-being of people and communities dependent on fishing for livelihoods, while achieving conservation objectives.</li> <li>• Managers have adopted measures that give individual fishermen incentives to increase the economic value rather than the volume of catch.</li> <li>• Measures for managing effort have been adopted that reduce race-to-fish incentives.</li> <li>• The fishery management system provides incentives that foster a stewardship ethic among participants.</li> <li>• The fishery management system generates incentives that direct innovation toward maximizing value from a biologically sustainable fishery rather than toward race-to-fish volume maximization.</li> </ul>
3.1.6 ( <i>Relates to MSC Criteria 3.2, 3.7, 3.10</i> )	The management framework includes a plan to assess causes of stock declines and promote recovery.	<ul style="list-style-type: none"> <li>• The causes of decline cannot be differentiated, but some catch or effort reductions are implemented by regulation.</li> </ul>	<ul style="list-style-type: none"> <li>• The causes of decline can be differentiated into fisheries and other causes.</li> <li>• Harvest control measures to promote recovery are coordinated with other responsible authorities.</li> </ul>	<ul style="list-style-type: none"> <li>• Specific measures to remove fishery-dependent causes and adapt to other causes to promote recovery are developed in a comprehensive plan with other authorities.</li> </ul>
3.1.7 ( <i>Relates to MSC Criteria 3.2, 3.5, 3.7</i> )	Procedures exist for measuring performance relative to the objectives.	<ul style="list-style-type: none"> <li>• Measures are used to gauge performance relative to objectives.</li> </ul>	<ul style="list-style-type: none"> <li>• Periodic, comprehensive measurement of performance indicators is undertaken.</li> <li>• Management measures are adapted to meet objectives when necessary.</li> </ul>	<ul style="list-style-type: none"> <li>• Procedures are used for regular empirical measurement of performance relative to the objectives.</li> <li>• There is a regular process for adapting management measures when objectives are not being met.</li> </ul>

SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100
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<b>3.2 TAVEL Criterion 2</b>	The management system recognizes applicable legislative and institutional responsibilities and coordinates implementation on a regular, integral and explicit basis.
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3.2.1 ( <i>Relates to MSC Criterion 3.16</i> )	The fishery is managed and conducted in a manner that respects domestic law.	<ul style="list-style-type: none"> <li>The management system makes consistent efforts to operate in accordance with all substantive and procedural aspects of applicable domestic law.</li> <li>No violations have been identified that would jeopardize the management of fisheries resources.</li> </ul>	<ul style="list-style-type: none"> <li>The management system is in compliance with all substantive and procedural aspects of applicable domestic law.</li> </ul>	<ul style="list-style-type: none"> <li>The management system is clearly in compliance with all substantive and procedural aspects of applicable domestic law.</li> <li>No agent of the management system, including its component institutional entities, has been found at any time to be in violation of any order of any domestic court of jurisdiction on any matter related to performance of any statutory duty concerning the fishery.</li> </ul>
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3.2.2 ( <i>Relates to MSC Criterion 3.1</i> )	The fishery is managed and conducted such that state and interstate requirements fit with the federal regulatory standard for the fishery as per PFMC decisions and the Magnuson-Stevens Act.	<ul style="list-style-type: none"> <li>The management plan is consistent with the federal National Standards.</li> </ul>	<ul style="list-style-type: none"> <li>The management plan implicitly incorporates the federal National Standards.</li> </ul>	<ul style="list-style-type: none"> <li>The management plan explicitly incorporates and is in compliance with all aspects of the federal National Standards.</li> </ul>
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SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100
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<b>3.3 TAVEL Criterion 3</b>	The management system includes a rational and effective process for acquisition, analysis and incorporation of new scientific, social, cultural, economic and institutional information.		
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3.3.1 (Relates to MSC Criterion 3.2)	The management system solicits and takes into account relevant information from all categories of stakeholders.	<ul style="list-style-type: none"> <li>The management system has mechanisms to receive information and policy recommendations from stakeholders and technical sources within and external to the fishing community. <ul style="list-style-type: none"> <li>Information and advice is evaluated but there are no formal procedures for responding to such information and advice.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The management system has a formal and open process to solicit and receive relevant information and policy recommendations from all significant public and private stakeholders.</li> <li>The management system evaluates all information and does not discriminate against information on the basis of the stakeholder category from which it was supplied.</li> </ul>	<ul style="list-style-type: none"> <li>The management system has a stable, well-led, predictable, open and tolerant process to solicit relevant information from all public and private stakeholder interests.</li> <li>The management system evaluates information in an unbiased, objective manner and does not discriminate against information solely upon the basis of the identity of stakeholder category from which it was supplied.</li> <li>There is an active program of familiarizing stakeholder groups with the management system's principles and criteria for decision making.</li> </ul>
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3.3.2 (Relates to MSC Criterion 3.2)	The management system assesses relevant information pursuant to objective processes that incorporate all relevant stakeholder concerns.	<ul style="list-style-type: none"> <li>The management system has informal procedures for assessing and incorporating information from outside sources.</li> </ul>	<ul style="list-style-type: none"> <li>The management system has explicit procedures for assessing and incorporating information from outside sources.</li> </ul>	<ul style="list-style-type: none"> <li>The management system is periodically reviewed to ensure that all outside stakeholder interests are considered and incorporated into the decision process.</li> <li>The management authority has identified an independent party to adjudicate disputes with stakeholders.</li> </ul>
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SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100	
3.3.3 ( <i>Relates to MSC Criterion 3.2</i> )	The management system presents managers with clear, useful, and relevant information about policy options and their likely consequences.	<ul style="list-style-type: none"> <li>• The management system presents decision makers with clearly differentiated policy alternatives for action.</li> <li>• Decision makers incorporate formal and informal information to predict the consequences of various options and discriminate among them to determine best actions.</li> </ul>	<ul style="list-style-type: none"> <li>• Policy options are responsive to relevant stakeholders via a process proscribed by fisheries management law and procedures.</li> <li>• The management system's decision makers show evidence of understanding and consistently incorporating the information provided to them.</li> <li>• Technical information reflects the most recent and rigorous scientific understanding.</li> </ul>	<ul style="list-style-type: none"> <li>• The management system provides decision makers with timely and comprehensive information suitable for the nature of the decisions under consideration.</li> <li>• Managers also demonstrate consistent and precautionary procedures for accounting for information gaps and uncertainties.</li> <li>• Procedures for addressing information gaps are in place and are regularly utilized.</li> </ul>
3.3.4 ( <i>Relates to MSC Criteria 3.2, 3.5</i> )	The management system provides for timely and fair resolution of disagreements arising within the fishery management system, including any disputes with third parties with an interest in the fishery.	<ul style="list-style-type: none"> <li>• Informal dispute resolution mechanisms are in place to resolve interjurisdictional or third party conflicts.</li> </ul>	<ul style="list-style-type: none"> <li>• The management system has formal and codified mechanisms for timely resolution, of significant disputes arising within or external of the system.</li> <li>• The management system's dispute resolution procedures are clearly open and transparent.</li> </ul>	<ul style="list-style-type: none"> <li>• The management system provides for appropriate documentation of the nature and resolution of disputes.</li> <li>• The management system's dispute resolution procedures show no evidence of a pattern of discrimination against any participants in other jurisdictions or significant stakeholder interest.</li> </ul>
<b>3.4 TAVEL Criterion 4</b>		The management system and fishery implements measures and strategies (by rule or by voluntary action of the fishery) that demonstrably reduce by-catch, destructive fishing practices and operational waste.		
3.4.1 ( <i>Relates to MSC Criterion 3.12</i> )	The management system applies gear restrictions and mandatory practices to avoid catch of non-target species, minimize mortality of this catch.	<ul style="list-style-type: none"> <li>• The fisheries management system has implemented measures for minimizing catches of non-target species.</li> <li>• Qualitative evidence from at-sea and dockside observations indicates some success in reducing non-target by-catch.</li> </ul>	<ul style="list-style-type: none"> <li>• The management system uses a formal and comprehensive program to minimize catch of non-target species, including explicit by-catch objectives and strategies that reduce the take of these species to acceptable levels.</li> <li>• There is independent evidence of fishery-wide adoption of measures undertaken to reduce by-catch of non-target species.</li> </ul>	<ul style="list-style-type: none"> <li>• The management system has achieved fishery-wide acceptable by-catch objectives, resulting in a reduced catch of non-target species.</li> <li>• Management has clearly demonstrated the effectiveness of by-catch reduction measures through independent at-sea measurement.</li> </ul>

SCORING CRITERIA		SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100
3.4.2 ( <i>Relates to MSC Criterion 3.14</i> )	The fishery does not use destructive (e.g. poison, explosives) fishing practices.	<ul style="list-style-type: none"> <li>There is no evidence that destructive fishing practices take place within the fishery.</li> </ul>	<ul style="list-style-type: none"> <li>Fishery management system prohibits use of destructive fisheries practices.</li> <li>Monitoring and enforcement efforts are sufficient to identify a problem if it exists.</li> </ul>	<ul style="list-style-type: none"> <li>Active monitoring and enforcement in the fishery has verified that no destructive fishing practices exist.</li> </ul>
3.4.3 ( <i>Relates to MSC Criterion 3.15</i> )	The fishery minimizes operational waste such as lost fishing gear, oil spills, on-board spoilage of catch, etc.	<ul style="list-style-type: none"> <li>The fishery encourages the reduction of operational waste.</li> </ul>	<ul style="list-style-type: none"> <li>The fishery has established targets and implemented rules to minimize operational waste.</li> <li>There is evidence that operational wastes have been reduced.</li> </ul>	<ul style="list-style-type: none"> <li>The management system provides fishermen with incentives to minimize operational waste.</li> <li>Evaluation of the monitoring and enforcement programs demonstrate targets for reducing operational waste have been achieved.</li> </ul>
<b>3.5 TAVEL Criterion 5</b>		A research program is conducted to support management needs.		
3.5.1 ( <i>Relates to MSC Criterion 3.8</i> )	There is a research program that supports management of target species and protection of the ecosystem.	<ul style="list-style-type: none"> <li>Research supports short term information needs for stock assessment and evaluation of effectiveness of harvest control measures.</li> <li>Major areas requiring further research have been identified.</li> </ul>	<ul style="list-style-type: none"> <li>The research program provides the management system with reliable, timely information on the status of the stocks and of other ecosystem health performance indicators required for management.</li> <li>There is internal review of the content and scope of the research program.</li> <li>Longer term research periodically provides improvements in basic scientific understandings of the stock, ecosystem and fishery economics.</li> <li>Research is planned to address major gaps in knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>There are regular reviews of the content and scope of the research program by peer groups and stakeholders.</li> <li>Research provides continuing, significant progress in scientific understanding of: <ol style="list-style-type: none"> <li>Fluctuations in target and impacted non-target species</li> <li>Effectiveness of harvest strategies</li> <li>Effects of fishing on the ecosystem</li> <li>Ecosystem management strategies</li> <li>Economic considerations related to the fishery.</li> </ol> </li> <li>Funding is adequate to address significant knowledge gaps, is adjusted in a timely and appropriate manner to serve changing research priorities and is predictable over a long-term time scale.</li> </ul>

SCORING CRITERIA		SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100
3.5.2 ( <i>Relates to MSC Criterion 3.17</i> )	Fishermen assist in the collection of catch, discard and other relevant data	<ul style="list-style-type: none"> <li>Fishermen are involved in the collection of some catch, discard and other information.</li> </ul>	<ul style="list-style-type: none"> <li>Fishermen are regularly involved in the collection and recording of relevant catch, discard and other information.</li> </ul>	<ul style="list-style-type: none"> <li>Fishermen assist significantly in the collection and recording of all appropriate catch, discard and other information.</li> </ul>
3.5.3 ( <i>Relates to MSC Criterion 3.8</i> )	Relevant research is carried out by the fishing industry and other organizations and taken into consideration by the management system.	<ul style="list-style-type: none"> <li>The management system is aware of research carried out by the industry and other organizations and elements of this are taken into consideration.</li> </ul>	<ul style="list-style-type: none"> <li>Applicable research carried out the fishing industry and by other organizations is used by management.</li> </ul>	<ul style="list-style-type: none"> <li>Research is co-coordinated with existing research plans of the management system.</li> </ul>
3.5.4 ( <i>Relates to MSC Criterion 3.8</i> )	Research results are available to interested parties in a timely fashion.	<ul style="list-style-type: none"> <li>The majority of research results are available to interested parties.</li> </ul>	<ul style="list-style-type: none"> <li>Research results are available to interested parties on a regular and timely basis.</li> </ul>	<ul style="list-style-type: none"> <li>Research results are proactively made available to all interested stakeholders on a regular basis and in a timely manner.</li> </ul>
<b>3.6 TAVEL Criterion 6</b>	The management system effectively monitors all relevant performance aspects of the fishery.			
3.6.1 ( <i>Relates to MSC Criteria 3.7, 3.9, 3.10</i> )	The management system measures and records and evaluates all aspects of the fishery to provide a basis for assessments of stocks and management performance.	<ul style="list-style-type: none"> <li>The management system has a program that monitors the basic indicators of the stock health status.</li> <li>The program is subject to internal evaluation on a periodic basis.</li> <li>Monitoring results are compiled, analyzed, and disseminated to fishery managers.</li> </ul>	<ul style="list-style-type: none"> <li>There is a monitoring program that covers all indicators of stock health and management performance.</li> <li>The monitoring program has been subjected to independent outside review to identify gaps.</li> </ul>	<ul style="list-style-type: none"> <li>The management system has a comprehensive monitoring program.</li> <li>Full records are kept of monitoring results and these are made available to relevant research and management bodies.</li> <li>The results of monitoring efforts are compiled, analyzed, and disseminated to fishery managers such that management and research efforts can be informed as to needed improvements in a timely manner.</li> </ul>

SCORING CRITERIA	SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100	
<b>3.7 TAVEL Criterion 7</b>	The management system ensures that there is a high degree of compliance in the fisheries with management measures and directives regarding fishing practices required by the system			
3.7.1 ( <i>Relates to MSC Criterion 3.16</i> )	Fishermen are aware of the management system and legal and administrative requirements.	<ul style="list-style-type: none"> <li>Fishermen are aware of key management and legal requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Fishermen are aware of management and legal requirements upon them and are kept up to date with new developments.</li> </ul>	<ul style="list-style-type: none"> <li>All fishermen are aware of management legal requirements through a clearly documented and communicated mechanism such as a code of conduct.</li> </ul>
3.7.2 ( <i>Relates to MSC Criterion 11</i> )	Surveillance and enforcement are in place to ensure that requirements of the management system are complied with.	<ul style="list-style-type: none"> <li>Surveillance activities and enforcement measures are reactive and focused on key management measures.</li> </ul>	<ul style="list-style-type: none"> <li>Enforcement systems have been implemented and there is control and adequate compliance with most management measures that affect fishing mortality over the key fishing areas.</li> </ul>	<ul style="list-style-type: none"> <li>There is a high degree of control on and compliance to all regulations that affect fishing mortality and stock health, for target and non target populations, over all fishing areas.</li> </ul>
3.7.3 ( <i>Relates to MSC Criterion 11</i> )	Corrective actions can be applied in the event of non-compliance and there is evidence of their effectiveness.	<ul style="list-style-type: none"> <li>Mechanisms exist or are being developed to address non-compliance.</li> </ul>	<ul style="list-style-type: none"> <li>There are explicit measures used to address non-compliance in a formal or codified system.</li> </ul>	<ul style="list-style-type: none"> <li>Corrective actions are applied in the event of non-compliance, and these have been demonstrated to be effective.</li> </ul>
3.7.4 ( <i>Relates to MSC Criterion 3.16</i> )	There is a clear record of enforcement actions (by-catch limits, count per pound, mesh regulations and closed areas and seasons).	<ul style="list-style-type: none"> <li>Informal evidence of violations and corrective action exist.</li> </ul>	<ul style="list-style-type: none"> <li>Formal evidence of violations and corrective actions is available and readily retrievable.</li> </ul>	<ul style="list-style-type: none"> <li>Rigorous monitoring of the violations in enforcement activity is fully documented through dockside as well as investigative actions.</li> <li>Results of convictions are considered in adjusting enforcement efforts.</li> </ul>

SCORING CRITERIA		SCORING GUIDEPOST 60	SCORING GUIDEPOST 80	SCORING GUIDEPOST 100
3.7.5 ( <i>Relates to MSC Criteria 3.11, 3.16</i> )	The fishery is fully compliant with fishing regulations and directives to fishing practices.	<ul style="list-style-type: none"> <li>Information on the extent of compliance is available.</li> <li>A basic analysis of compliance has been conducted.</li> <li>The majority of harvesting is compliant.</li> </ul>	<ul style="list-style-type: none"> <li>An analysis of surveillance and monitoring activities indicate overall compliance to fishery regulations that impact fishing mortality with few exceptions.</li> <li>There is a record of consistent prosecution of violations in the fishery.</li> </ul>	<ul style="list-style-type: none"> <li>The management system has comprehensive monitoring and enforcement systems to evaluate compliance to regulations.</li> <li>The judicial system has demonstrated a consistent willingness to enforce applicable rules.</li> <li>The fishery operates with no significant patterns of non-compliance.</li> </ul>
<b>3.8 TAVEL Criterion 8</b>		The performance of the management system is regularly and candidly evaluated in a systematic fashion and the system responds positively to appropriate recommendations for change		
3.8.1 ( <i>Relates to MSC Criterion 3.3</i> )	The management system provides for program evaluation and review.	<ul style="list-style-type: none"> <li>The management system conducts informal, internal program reviews.</li> </ul>	<ul style="list-style-type: none"> <li>The management system has explicit provision for an objective, systematic, external evaluation of management performance.</li> <li>The criteria for and results of the evaluation of management performance are made public.</li> <li>Reviews are carried out at time intervals that foster continual improvements in management system</li> </ul>	<ul style="list-style-type: none"> <li>The criteria for and results of the on-going evaluation of management performance are made public and reflect input from all interested participants and stakeholders.</li> <li>The management system seeks and used the results of the on-going evaluation to improve management performance.</li> </ul>
3.8.2 ( <i>Relates to MSC Criteria 3.3, 3.7</i> )	The management system requires a response to outcomes of internal or external reviews.	<ul style="list-style-type: none"> <li>The management system is informally responsive to reviews of management performance.</li> </ul>	<ul style="list-style-type: none"> <li>The management system has established explicit objective guidelines for responding to internal and external reviews of management performance.</li> <li>The management system shows evidence of improved performance based on the results of internal and external reviews of management performance.</li> </ul>	<ul style="list-style-type: none"> <li>The management system has established comprehensive, objective standards or triggers for responding to internal and external reviews of management performance.</li> <li>The management system has demonstrated a consistent pattern of responding to the results of internal and external reviews of management performance.</li> </ul>