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July 15, 2009

Mr. Michael Lodge
Independent Adjudicator
c/o Marine Stewardship Council
Mountbarrow House, 3rd floor, 6-20 Elizabeth Street
London, SW1W 9RB, UK
Submitted via Email to hakeobjections@msc.org

RE: Reconsideration of Final Report and Certification Determination

Dear Mr. Lodge,

TAVEL Certification Inc and the assessment team for the US/ Canada Pacific Hake MSC Fishery Certification Assessment have reviewed the objections submitted by Oceana and the Monterey Bay Aquarium, the supplemental submissions from Greenpeace and the Marine Fish Conservation Network as well as the objection response submitted by one of the certification assessment clients, the Pacific Whiting Conservation Co-operative. The team has considered all the information submitted during the objection process and has confirmed that there is neither any new evidence nor any persuasive presentation of existing evidence that cause the team to change any of the scores or the final outcome determination presented in the Final Certification Report, dated May 15, 2009.

It is important to reiterate that TAVEL Certification has followed the requirements of the MSC Fisheries Certification Methodology (MSC FCM), version 6 which is currently in force. The MSC Fisheries Assessment Methodology, version 1 was not in force at the time and was not used in this assessment. The certification assessment process, as defined by the FCM and the MSC Principles and Criteria (MSC Standard) demonstrated that the fishery is well managed and sustainable and should be certified. Certain fishery science and management elements were deemed to score less than 80 and as a result, fifteen conditions were imposed. As per the requirements for certifications with conditions, the fishery clients were able to submit a Corrective Action Plan that was supported by Fisheries and Oceans Canada and the Pacific Fisheries Management Council. The plan was subsequently accepted by the assessment team and TAVEL's Certification Decision Review Board, in keeping with accreditation requirements.

In Appendix 1, TAVEL and its assessment team have provided responses to the issues raised by the objectors below. We have addressed Section 4.1a by providing the specific MSC Fisheries Certification Methodology (FCM) requirements for the procedure of drafting and finalizing performance indicators and scoring guideposts. We demonstrate that the objectors were invited to provide feedback on the performance indicators and that there was no feedback from either of two objecting stakeholders or the two supporting stakeholders.

In Section 4.1b of the objection form (copied below), the objectors have stated that TAVEL did not take the 2009 assessment into consideration in its assessment of the fishery. We have briefly presented the timeline of the fishery certification evaluation to demonstrate that at the point of finalization of the draft report for its release on April 1st, the evaluation process, the report preparation process and peer reviews were completed by March 10th, the date of the final release of the 2009 Pacific Hake stock assessment and that certification had progressed well beyond the point of scoring new information from the latest assessment. We also clearly demonstrate that there is a mechanism in the MSC FCM to incorporate new assessment information through the annual surveillance audit process.

Finally, in Section 5, we provide specific responses to the issues raised in relation to each performance indicator.

In Appendix 2 and 3, we have provided responses to the issues raised by the objection supporter stakeholders.

TAVEL Certification and the assessment team are committed to concluding this objection process as soon as possible. We are available to respond to the requirements of the next phase of the objection process at your earliest convenience.

Sincerely,

Steve Devitt, TAVEL Certification Lead Auditor

Max Stocker, Ph.D., Principle 1 Assessor
Jeremy Collie, Ph.D., Principle 2 Assessor
Mark Pedersen, M.Sc., Principle 3 Assessor

CC: Jan Jacobs, PWCC
Brad Pettinger, OTC
Shannon Mann, APHF

Chris Ninnes, MSC
Daniel Hoggarth, MSC
Maylynn Engler, MSC
Dan Averill, MSC
Wes Toller, ASI

Jim Ayers, Oceana
Ed Cassano, Monterey Bay Aquarium
John Hocevar, Greenpeace
Ken Stump, Marine Fish Conservation Network

PART FOUR: OBJECTION PURSUANT TO PARAGRAPH 4.8.2 (A)

4.1 Please identify:

a) the procedure(s) that you or your organisation believe were omitted or incorrectly followed by the certification body in the conduct of this assessment and the relationship of these matters to the MSC's procedural rules, as set out in the MSC Fisheries Certification Methodology, Fishery Assessment Methodology, TAB Directives or any other rules that were in force at the time of the assessment; and/or

Objectors Submitted: Some of the Performance Indicators in the Pacific hake assessment tree do not provide for correct interpretation of the MSC Principles, Criteria, and Sub-criteria: etc.....

TAVEL Response>

The MSC Fisheries Certification Methodology states, in Section 2.3, Determining Sub-criteria, Performance Indicators and Scoring Guideposts and their weighting prior to the assessment visit the following requirements specifically raised by the Objectors.

MSC FCM 2.3.3 The assessment team shall define, for the fishery being assessed, the scoring guideposts for each performance indicator (60, 80 and 100 as per 2.3.2).

- TAVEL defined performance indicators and scoring guideposts for the assessment of the fishery. These were published in draft format on October 3rd, 2007 and in final form on December 19, 2007. The Pacific Hake assessment tree predates the new MSC Default Assessment Tree.

MSC FCM 2.3.4 The draft assessment tree (including Principles, Criteria, any Sub-criteria, Performance Indicators and Scoring Guideposts) shall be publicly available and provided to stakeholders for at least 30 days prior to the on-site assessment visit to enable any stakeholder who wishes to comment a chance to do so.

- TAVEL Certification notified potential stakeholders of the opportunity to comment on draft performance indicators on October 3rd including emails sent to Dr. George Leonard of the Monterey Bay Aquarium and Dr. Michael Hirshfield of Oceana. Neither of these individuals nor the objecting organizations which they represented provided any feedback on the performance indicators. TAVEL received comments on the PISGs from one ENGO and the MSC and the team took those comments into consideration and made some changes to the PISGs which were subsequently finalized and released on December 19, 2007.

MSC FCM 2.3.5 The draft assessment tree shall also be submitted to the MSC for discussion and comment 30 days prior to the first on-site assessment visit by the assessment team.

- TAVEL Certification provided PISGs to the MSC for discussion and comment on October 3, 2007.

MSC FCM 2.3.6 Any comments or changes to the assessment tree suggested by the MSC, the client or any stakeholder shall be considered by the assessment team, and if appropriate, a revised assessment tree will be prepared by the assessment team for use in the following stages of the assessment.

- TAVEL Certification provided specific written response to the issues raised in the MSC review and made changes to the PISGs which the team deemed appropriate and defensible.

The objectors did not provide any material feedback during the preparation of the performance indicators and as such, their objection to the formulation of the PISGs clearly demonstrates that they did not have these concerns at the time of drafting or did not communicate them at that time.

Our opinion is that this component of the objection should be dismissed.

4.1.b) any other irregularity in the fishery assessment process that you or your organisation believe made a material difference to the fairness of the assessment.

In short, the basis of objectors position is that TAVEL did not consider the March 2009 results in its determination.

TAVEL Response> TAVEL and its assessment team do not accept this criticism. The MSC certification process is clearly defined and is supposed to consider not only "information" available but, more importantly, is supposed to assess the "process" by which said information is used to manage the fishery.

The fishery assessment process that is employed by NMFS is conducted on an annual cycle for this stock, which includes a fishery that runs from May to November. A survey conducted during the summer months on a biennial basis and an assessment process, which is conducted in the fall and winter, culminates in a fishery decision in March of the following year. Furthermore, it is important to point out that NMFS considers this stock to be highly important as it is the only Pacific west coast stock which is evaluated with an annual stock assessment and STAR Panel process.

TAVEL was explicit that the certification assessment was based on the March 2008 assessment and that all discussions related to the certification evaluation were related to that cycle. TAVEL conducted its assessment meetings in July 2008, which makes it clear that the assessment is based on the March 2008 assessment. We provided the client draft report in December, after additional feedback from the client and agencies. Peer review comments were received in March and the draft report was published on April 1, 2008.

The 2009 Draft Pacific Hake Stock Assessment was made available on February 25, 2009 when the March briefing book was posted on the Pacific Fisheries Management Council's web site. This was the first time the STAR-reviewed assessment was available to the public. However, the assessment was not considered final until after the SSC's review (March 8) and subsequent Council adoption of the assessment and management decision-making on March 10. March 10 would therefore be the earliest date the stock assessment could be considered final. However, the legal process for specifying the fishery as required by US law was concluded on May 5, 2009 with the issuance of the Federal Register Notice of the 2009 Biennial Specifications and Management Measures for the Pacific Whiting fishery off Washington, Oregon, and California.

This certification assessment was complex and resulted in 15 certification conditions, a number of which are directly linked to issues raised by the objections. The process of clarifying the certification conditions and attaining consensus on the client's proposed action plan was long and arduous, but nevertheless, very important for ensuring the future sustainability of the fishery.

To expect that TAVEL or the certification team would propose, or the client would accept, to have the scoring process, report preparation and condition setting process set aside because a new assessment was available two weeks prior to the publication of the draft report is neither logical nor is it a requirement of the MSC Fisheries Assessment Methodology.

4.2 Please state why you or your organisation believes that the failure to follow procedures by the certification body has significantly affected the result of the Determination such that the Determination should be altered?

Objectors Submitted: As stated above (4.1b), we submitted information into the record during the comment period relevant to the circumstances at the date of the Determination but that information was not considered by the certifier. Beyond our submissions, this information was reasonably available to the certification body during the assessment process. Had this information been considered, it would have made a material difference to the outcome of the assessment. What is more, it is unreasonable to dismiss the 2009 Pacific hake assessment and subsequent management decisions as this information provides evidence that the fishery is being conducted in a manner not consistent with MSC principles and criteria.

TAVEL Response> The assessment team does not believe that the 2009 results should be considered in the current certification process, however the team and client fully recognize that the annual surveillance audit process will evaluate the fishery on an annual basis and thus will consider the both the stock assessment and management results as well as the fishery results during that evaluation process.

The objectors state that the information was reasonably available to the assessment team. This is clearly not the case as the stock assessment results were not finalized until March 10, by the adoption of the Pacific Fisheries Management Council. On March 10, the fishery visits had been completed, the fishery scored, the certification report had been drafted, provided to the clients, the client's had responded to the conditions and the action plan was in full development for approval. The peer review process had started and one peer review was completed on March 4 and the second was received by TAVEL on March 13. The final approvals of the proposed action plan from clients and agencies and sign off by the assessment team was completed in the last week of March.

PART FIVE: OBJECTION PURSUANT TO PARAGRAPH 4.8.2 (B)

PI 1.1.3.1 PI 1.1.4.3 and PI 1.1.5.1

Performance Indicators	1.1.3.1 Assessment models are appropriate to the biology of the stock and the nature of the fishery 1.1.4.3 The harvest strategy can be shown to be precautionary (including appropriate response to uncertainty). 1.1.5.1 Current stock size is above limit reference point.
Reason	4.8.2 (b) (iii) The scoring decision was arbitrary or unreasonable in the sense that no reasonable certification body could have reached such a decision on the evidence available to it
Rationale	The scoring of Performance Indicators 1.1.3.1 and 1.1.4.3 fails to fully recognize the significant flaws from the single species MSY approach currently used to manage Pacific hake, including repeated statements by the Scientific and Statistical Committee (SSC) that an F40% approach and 40-10 control rule may not be sufficient for Pacific hake as it will lead to the stock being overfished: "*… the population dynamics of whiting may not match the*

default harvest policy for groundfish. If the fishery were to be conducted under the F40% harvest policy over an extended period, the biomass would be expected to fluctuate at a level well below B40%. Given that whiting recruitment is very variable, application of the 40-10 harvest policy will lead to frequent excursions into the overfished zone. The SSC recommends that an appropriate harvest policy for whiting be further investigated."
–SSC Supplemental Report March 2008 and SSC Supplemental Report March 2009

And…

"If the 40-10 control rule is used to determine Optimum Yields (OYs), the stock is predicted to drop to below the overfished threshold of 25% of the unfished biomass (25% B_0) even though the OYs are predicted to decline from over 500,000t to, for the base model, 184,000t. As such, the whiting stock should be considered to be "Approaching an Overfished State" if catches are to be based on the 40-10 control rule. The catch for 2005 was 360,306t. The results of the assessment can be used to determine the ability to remain above the overfished threshold.

For example, a constant catch of 200,000t would maintain the spawning biomass above the overfished threshold until 2009 with 50% probability while a constant catch of 400,000t would result in the stock being below the overfished threshold in 2008 with at least 50% probability."
–SSC March 2006

The 2006 SSC report is available at:
http://www.pcouncil.org/bb/2006/0306/agf4b_supp_ssc.pdf
The 2008 SSC report is available at:
http://www.pcouncil.org/bb/2008/0308/F3b_SUP_SSC.pdf and
that 2009 SSC report is available at:
http://www.pcouncil.org/bb/2009/0309/G1b_SUP_SSC_0309.pdf

The SSC statements were available at the time of the MSC assessment.

The harvest strategy for Pacific hake is based on a F40% Maximum Sustainable Yield single-species harvest strategy with the 40-10 control rule. So, even from a single species perspective the Scientific and Statistical Committee has warned that this harvest strategy will lead to the hake population becoming overfished. This is not a precautionary harvest strategy for this valuable prey species in the California Current Large Marine Ecosystem. No assurance is provided that this heavily fished population provides sufficient prey for natural predators and does not impact the ecosystem.

Further, managers demonstrated in 2006, 2007 and 2009 that they are willing to set catch levels that drive the population toward and below the overfished threshold.

Given this information, the current assessment models and management are not appropriate to the biology of the stock or the nature of the fishery, therefore the score of 80 for subcriterion 1.1.3.1 is unreasonable. In fact, the TAVEL Final

	Determination Report (p. 94) states “The harvest strategy has not been demonstrated to be precautionary” Therefore, it is unreasonable to conclude that the fishery even meets the SG 60 guidepost for sub-criterion 1.1.4.3, which states: “a precautionary harvest strategy has been defined but not evaluated to determine effectiveness.” In addition, the statements by the SSC clearly show that Sub- Criterion 1.1.5.1 should have been scored less than SG 80, since that would have required the stock to be around the target reference point currently and in the future. Therefore, MSC Criterion 2 should have been assessed, which would have revealed that Appropriate rebuilding measures are not currently in place, putting Performance Indicator 1.2.1 below SG 60.

TAVEL Response> The objectors have ignored how the MSC fishery evaluation process works. Performance of the fishery, via the evidence provided in response to each performance indicator, is evaluated against the defined scoring guideposts of 60, 80 and 100.

Below, we present the PIs named in this section and provide our scoring rationale and rebuttal of the points raised by the objectors.

PI 1.1.3.1

1.1.3.1	Assessment models are appropriate to the biology of the stock and the nature of the fishery.	• There is a generic model which does not account for specific characteristics of either the biology of the species or the nature of the fishery.	• The stock is assessed with a statistical, age structured model, and takes account of all major sources of fishing mortality. • The assessment model incorporates all relevant sources of data including fishery independent surveys on the target stock.	• The assessment model is fully spatially structured, and takes account of all sources of mortality on the target species, including predation mortality.
Weight		**25.0**	**Score** **US=85 CAN=85**	

Scoring Rationale: A score of 85 was given for this PI because the assessment model is a statistical age-structured model which accounts for all major sources of fishing mortality. The model accounts incorporates all sources of information on relative abundance (both adult and juvenile abundance indices) in addition to fisheries dependent information on age-compositions. Additional score above 80 was awarded because the model also accounts for the implicit spatial structure of the population

through the use of time varying selectivity curves for both the Canadian and U.S. fishing fleets, but is not fully spatially structured.

Objectors Submitted: Given this information, the current assessment models and management are not appropriate to the biology of the stock or the nature of the fishery, therefore the score of 80 for subcriterion 1.1.3.1 is unreasonable. In fact, the TAVEL Final Determination Report (p. 94) states "The harvest strategy has not been demonstrated to be precautionary"

TAVEL Response>

PI 1.1.3.1 is specifically investigating the nature of the assessment model. The scoring guideposts provide specific qualifications for the type of model from a generic, non-specific model to a fully spatially structured model.

Based on the information provided, the scores are justified and the team does not suggest any change or reconsideration of this score. The objectors have not provided any proof to suggest that following are not true;

- The stock is assessed with a statistical, age structured model, and takes account of all major sources of fishing mortality.

- The assessment model incorporates all relevant sources of data including fishery independent surveys on the target stock.

PI 1.1.4.3

1.1.4.3	The harvest strategy can be shown to be precautionary (including appropriate response to uncertainty).	• A precautionary harvest strategy has been defined but not evaluated to determine effectiveness.	• The harvest strategy has been demonstrated to be effective and precautionary, based on past management responses.	• The harvest strategy or management procedure has been formally evaluated and demonstrated to meet management targets with acceptable levels of probability.
Weight		**25.0**	**Score** **US=70 CAN=70**	

Scoring Rationale: The 40:10 rule has not been formally evaluated for a stock such as Pacific hake with high recruitment variability and insufficient information to reliably estimate reference points. The fishery was in the precautionary zone in 1998, 1999, 2000 and 2001. The harvest strategy has not been demonstrated to be precautionary. Management Strategy Evaluation should be used to evaluate the performance of the stock assessment, the 40:10 rule, and their interplay with management decisions (including all important sources of uncertainty: measurement, process, and implementation errors). A score of 70 was given.

Condition: The management strategy needs evaluation to test the performance of the 40:10 rule applied to hake, a species with high recruitment variability and uncertain reference points. A report demonstrating that the harvest strategy is effective and precautionary based on past management responses must be prepared within two years.

Objectors Submitted: Given this information, the current assessment models and management are not appropriate to the biology of the stock or the nature of the fishery, therefore the score of 80 for subcriterion 1.1.3.1 is unreasonable. In fact, the TAVEL Final Determination Report (p. 94) states "The harvest strategy has not been demonstrated to be precautionary"

Therefore, it is unreasonable to conclude that the fishery even meets the SG 60 guidepost for sub-criterion 1.1.4.3, which states: "a precautionary harvest strategy has been defined but not evaluated to determine effectiveness."

TAVEL Response> The requirement of the 60SG has been met. A harvest strategy has been defined which, at the time of definition, was considered precautionary. The Assessment Team also notes that the hake quotas are not based only on the 40:10 harvest rule. During the past years, the Optimum Yield recommended by the STAR Panel and the Pacific Fisheries Management Council has been substantially less than the Allowable Biological Catch that was calculated from the 40:10 harvest rule. These adjustments, for bycatch and other reasons, make the harvest strategy more precautionary, even though the strategy has not been formalized.

The Assessment Team agrees that the current 40:10 harvest strategy has not been demonstrated to be effective and precautionary, based on past management responses, which is the requirement for the 80 SG. The client has also agreed and has accepted the proposed certification condition and provided an acceptable action plan.

Based on the information provided, the scores are justified and the team does not suggest any change or reconsideration of this score.

PI 1.1.5.1

1.1.5.1	Current stock size is above limit reference point.	•There is a reasonable chance that the stock is currently above the limit reference point (probability 25 to 50%).	•The stock is being maintained above the limit reference point (probability >50%) and is likely to be around the target reference point currently and in the future.	• The stock has been above the limit reference point in all years. •There is a very high probability that the stock is currently above the limit reference point (>90%).
Weight		**50.0**	**Score** **US=90 CAN=90**	

Scoring Rationale: Based on the official assessment, there is a high probability that the hake stock is currently above the limit reference point. The median estimate of depletion of the spawning stock biomass is 37%. There is a >50% and <90% probability that the spawning stock

biomass is above the abouve the limit reference point. However, the stock has been estimated to be at the limit reference point in 2000 and 2001. Therefore, a score of 90 was awarded.

Objectors Submitted: In addition, the statements by the SSC clearly show that Sub- Criterion 1.1.5.1 should have been scored less than SG 80, since that would have required the stock to be around the target reference point currently and in the future. Therefore, MSC Criterion 2 should have been assessed, which would have revealed that Appropriate rebuilding measures are not currently in place, putting Performance Indicator 1.2.1 below SG 60.

TAVEL Response> Based on the 2008 stock assessment, which is the basis of the Principle 1 evaluation for certification, there is no current indication that the stock status is below the limit reference point. None of the three assessment documents in 2008 projected the stock to fall below the limit reference point in 2009 with the 2008 Optimum Yield of 364 kt. Fig. 34 from Sinclair and Grandin (2008) indicates that the probability of $B_{2009} < 0.25B_0$ was less than 0.5. Table 8 from Martell (2008) indicates a risk of 0.15 that $B_{2009} < 0.25B_0$ with the 2008 Optimum Yield. Finally, Table 16 on page 128 of Helser et al. (2008) did not project $B_{2009} < 0.25B_0$ by 2011. The projections indicated that biomass is likely to be around the target reference point in the near future. Criterion 2 was not scored because the Pacific hake stock was not in a depleted state at the time of the assessment. The Assessment team has reworded the scoring rationale in response to the objection (see above). On this basis, the team asserts that the scores are justified and does not suggest any change or reconsideration of this score. However, the team has suggested that a revised scoring rationale, as seen below, be included in the final report to provide clarification of the awarded score.

> **Revised Scoring Rationale**: Based on the accepted 2008 stock assessment, there is a high probability that the hake stock is currently above the limit reference point. The median estimate of depletion of the spawning stock biomass is 37%, which is around the target reference point of B40% (Helser et al. 2008). There is a >50% and <90% probability that the spawning stock biomass is above the limit reference point (Martell 2008). None of the three assessment documents in 2008 projected the stock to fall below the limit reference point in 2009 with the 2008 Optimum Yield of 364 kt. However, the stock has been estimated to be at the limit reference point in 2000 and 2001. Therefore, the 100 SG was considered partially met and a score of 90 was awarded.

PI 2.1.4.1, PI 2.1.4.2, PI2.1.5.1, PI2.1.5.2

Performance Indicators	2.1.4.1 Impact on ecosystem structure and function from the removal of target species have been assessed. 2.1.4.2 Impacts on ecosystem structure and function from the removal of non-target species have been assessed. 2.1.5.1 Levels of acceptable impact on ecosystem function have been determined and reviewed 2.1.5.2 Management strategies are in place to avoid and/or to reduce impacts (i.e., physical impacts, lost gear, operational waste, effects on ecosystem structure).
Reason	4.8.2 (b) (iii) The scoring decision was arbitrary or unreasonable in the sense that no reasonable certification body could have reached such a decision on the evidence available to it.
Rationale	It is widely recognized that fisheries have ecosystem effects but the consequences of fishing on food webs and modifying trophic structure has not been incorporated into the scientific advice that informs policy and management (NRC 2002 as in Oceana, *et al*. April 30, 2009.) It is clear when reviewing the

	Pacific hake assessment and management process that there is no consideration of the catch amount on ecosystem structure, productivity, function and diversity. The PFMC and NMFS do not prepare an ecosystem chapter to accompany the stock assessment process and ecosystem information is not brought forward to managers when considering different catch level alternatives. Furthermore, the 40-10 management strategy for determining catch levels does not include any consideration of ecosystem impacts. Pacific hake play a major functional role in the marine ecosystem as a key prey for many top predators and fishes and as a predator on lower trophic marine life such as herring, krill, shrimp and juvenile salmon. Below are a sampling of studies that document the importance of Pacific hake (whiting) as prey: **[TAVEL> References removed and can be seen in the original objection form.]** Despite understanding the great ecological importance of Pacific hake in the California Current Large Marine Ecosystem, and recognizing that ecosystem information is not analyzed or included in the management process, TAVEL Certification gives the fishery a passing score for Performance Indicators 2.1.4.1, 2.1.4.2, 2.1.5.1 and 2.1.5.2. The scoring of 80 for Performance Indicator 2.1.4.1 is unreasonable. While the report lists several sources indicating that Pacific hake are important prey items, predators, and a major part of the California Current Large Marine Ecosystem, none of those studies specifically assess the effects of Pacific hake removals by the fishery, as called for in the scoring guideposts. The TAVEL Determination does not reference any qualitative estimates of the ecosystem impacts of removal of the target species. Furthermore, the report does not identify any investigations that were underway at the time of the assessment that identify potential impacts or reduce them to acceptable levels. In fact, the report acknowledges that such “acceptable levels” are not currently defined. Therefore, it is unreasonable to score this Performance Indicator above SG 60. The scoring of 80 for Performance Indicator 2.1.4.2 is arbitrary. As stated in the TAVEL Final Report, the first bullet of SG 80 is not met as there not quantitative information regarding the ecosystem consequences of removal of non-target species. However, the information supporting that the second bullet of SG 80 does not seem to be based on factual information. The TAVEL Final Report states that “information does suggest that there are no unacceptable fishery impacts. The argument is that because non-target species in the hake fishery constitute a small component of the ecosystem, their removal as bycatch has correspondingly small ecosystem effects.” The primary non-target species in the hake fishery are groundfish and salmon, which play major roles in their respective ecosystems. As such, the fishery does not meet either bullet of SG 80. The scoring of 2.1.5.1 is unreasonable. The argument is made that assessment data for hake and for non-target species are sufficient to determine levels of acceptable impact on ecosystem function. But, management has not yet

	determined the levels of acceptable impact, and this "acceptable impact" is not defined anywhere in the Final Report. The condition set for this Performance Indicator states that "to reach a score of 80, client must provide, within two years, evidence that levels of acceptable impacts are estimated and regularly reviewed." If levels of acceptable impacts had already been determined, there would not be a need for this condition. As such, this Performance Indicator does not meet SG 80. The scoring of 2.1.5.2 is unreasonable. The Pacific hake fishery is not managed as a forage fish, and management does not take ecosystem effects into account when setting quotas; the hake fishery is managed under single species management objectives under the 40-10 harvest strategy, which does not include any ecosystem considerations. In addition, as mentioned above, acceptable levels of impact have not yet been determined. The Determination Report claims that EFH Amendments provide management strategies to protect physical habitat, yet the area closures to protect habitat do not apply to Pacific hake mid-water trawls. Furthermore, while it is known that mid-water trawls come into contact with the ocean floor (Pacific EFH EIS 2005), no management measures have been established to avoid or reduce such impacts. In fact, the Alaska EFH EIS (2005) estimated that mid-water trawls used to catch pollock (many of which are the same vessels that target Pacific hake) contact the seafloor 44% of the time. Since the 40-10 harvest strategy does not consider ecosystem impacts and Pacific hake is exempt from EFH management measures to protect habitat, this fishery clearly does not meet SG 60 "limited management strategies exist to avoid and/or to reduce impacts on the ecosystem; and strategies are untested but similar to strategies successfully implemented in other fisheries." Moreover, the Final Determination Report arbitrarily downplays the importance of assessing fishing impacts on community structure, ecosystem function, habitats or the populations of associated species, by stating that Sub-criterion 2.1.4 "is of the least importance because it is unlikely that the fishery is having a qualitative impact on the structure and function of the ecosystem" (TAVEL Final Report, p.100). This conclusion is unreasonable, illogical, and not based on any factual information, particularly given the vast scientific literature documenting the ecosystem importance of Pacific hake. These Performance Indicators are of great importance as they are directly linked to MSC Principle 2, "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." If the fishery management system were actively incorporating ecosystem information into stock assessment advice, then managers would likely reduce the fishery catch accordingly to avoid pushing the stock into the overfished category. Instead, managers have raised the Allowable Biological Catch to historic levels based on single species management objectives.

TAVEL Response> Below, we present the PIs named in this section and provide our scoring rationale and rebuttal of the points raised by the objectors.

PI 2.1.4.1

2.1.4.1	Impacts on ecosystem structure and function from the removal of the target species have been assessed.	• Ecosystem impacts from the removal of the target species are qualitatively estimated. • Investigations are underway to identify potential impacts and, where necessary, reduce them to acceptable levels.	• Some quantitative information is available on consequences of current levels of removal of target species. • Information suggests that there are no unacceptable fishery impacts on ecosystem structure and function within key fishing areas.	• The ecological consequences of current levels of removal of target species have been quantified by direct study and documented. • There are no unacceptable impacts on ecosystem structure and function.
Weight		**75.0**	**Score** **US=70 CAN=70**	

Scoring Rationale: Pacific hake is an important prey species for several predator species. For example, hake has a frequency of occurrence of 83% in the diet of threatened Stellar sea lions of the U.S. west coast (Baraff and Loughlin 2000) and was assumed to constitute 22% of the sea lion diet by Field et al. (2006). The first bullet of the 80 SG is met in that ecosystem models have evaluated the consequences of hake removal on predator and prey species. The second bullet is not met because unacceptable fishery impacts on ecosystem structure and function are not known, therefore a score of 70 is justified. Many ecosystem impacts are linear; thresholds are unknown (Phil Levin, NMFS).

Condition: To achieve a score of 80 or higher, the client must use available data on the consequences of removal of the target species to determine whether there are any unacceptable fishery impacts on ecosystem structure and function within key fishing areas. The milestones are to synthesize the results of existing ecosystem models within 2 years and to assess whether unacceptable fisheries impacts are occurring within 4 years.
[This condition is related to conditions for PIs 2.1.5.1 and 2.2.1.1 below.]

Objectors Submitted:

The scoring of 80 for Performance Indicator 2.1.4.1 is unreasonable. While the report lists several sources indicating that Pacific hake are important prey items, predators, and a major part of the California Current Large Marine Ecosystem, none of those studies specifically assess the effects of Pacific hake removals by the fishery, as called for in the scoring guideposts. The TAVEL Determination does not reference any qualitative estimates of the ecosystem impacts of removal of the target species. Furthermore, the report does not identify any investigations that were underway at the time of the assessment that identify potential impacts or reduce them to acceptable levels. In fact, the report

acknowledges that such “acceptable levels” are not currently defined. Therefore, it is unreasonable to score this Performance Indicator above SG 60.

TAVEL Response> PI 2.1.4.1 had a score of 70, not 80, which is indicated in three separate locations in the report. The ecosystem models (Ecopath with Ecosim) of Field et al. (2006) provide quantitative information on the consequences of current levels of removal of target species. Investigations underway at the time of the assessment include a spatially explicit model of the California Current ecosystem (Brandt et al. 2007) and an Integrated Ecosystem Assessment being conducted by NMFS. On this basis, the 60 SG and the first bullet of the 80 SG were met.

The Assessment Team found no obvious evidence of unacceptable fishery impacts on ecosystem structure and function. However, the studies cited above are general ecosystem models, which were not designed to investigate impacts of the hake fishery per se. Furthermore, there has been no clear definition of what would constitute an unacceptable ecosystem impact. Therefore, the second bullet under the 80SG has not been met and a condition has been imposed to improve performance by isolating the impacts of the hake fishery and defining levels of unacceptable impacts.

PI 2.1.4.2

2.1.4.2	Impacts on ecosystem structure and function from the removal of non-target species have been assessed.	• Ecosystem impacts from the removal of non-target species are qualitatively estimated. • Investigations are underway to identify potential impacts and, where necessary, reduce them to acceptable levels.	• Some quantitative information is available on consequences of current levels of removal of non-target species. • Information suggests that there are no unacceptable fishery impacts on ecosystem structure and function within key fishing areas.	• The ecological consequences of current levels of removal of non-target species have been quantified and documented. • There are no unacceptable impacts on ecosystem structure and function.
Weight		**25.0**	**Score** **US=80 CAN=80**	

Scoring Rationale: The 60 SG is met. Again, the client response concerns bycatch and not its ecosystem impacts. There is qualitative information regarding the ecosystem consequences of removal of non-target species but not quantitative. For example, bycatch of coastal rockfish species could cause an increase in small demersal fishes, which would favor predators such as lingcod (Phil Levin, NMFS). Impacts are minor, information does suggest that there are no unacceptable fishery impacts. The argument is that because non-target species in the hake fishery constitute a small component of the ecosystem, their removal as bycatch has correspondingly small ecosystem effects.

A score of 80 is justified.

Objectors Submitted: The scoring of 80 for Performance Indicator 2.1.4.2 is arbitrary. As stated in the TAVEL Final Report, the first bullet of SG 80 is not met as there not quantitative information regarding the ecosystem consequences of removal of non-target species. However, the information supporting that the second bullet of SG 80 does not seem to be based on factual information. The TAVEL Final Report states that "information does suggest that there are no unacceptable fishery impacts. The argument is that because non-target species in the hake fishery constitute a small component of the ecosystem, their removal as bycatch has correspondingly small ecosystem effects." The primary non-target species in the hake fishery are groundfish and salmon, which play major roles in their respective ecosystems. As such, the fishery does not meet either bullet of SG 80.

TAVEL Response> The scoring rationale is based on a *de minimus* argument. The catch of non-target species is approximately 0.2% of the hake catch. On the basis of biomass only, the ecosystem impact of removing non-target species would be commensurately small. Of course bycatch species (e.g. rockfish, salmon) have different functional roles than hake, such that impacts can't be assessed only by the biomass removed. The bycatch of non-target species is strictly regulated and can result in the closure of the entire Pacific hake fishery, as in 2008. These regulations are primarily to conserve the bycatch species themselves, but also, implicitly, to conserve their ecosystem functions. Thus, the impacts on ecosystem structure and function from the removal of non-target species can be evaluated through the stock assessments of these non-target species. These stock assessments (e.g. for rockfish species) provide quantitative information on the consequences of current levels of removals and include Environmental Impact Statements. The Assessment Team assumes that, as long as bycatch limits in the hake fishery are not exceeded, that there are no unacceptable ecosystem impacts from the removal of non-target species. The Assessment Team asserts that the score of 80 is justified and does not suggest any change or reconsideration of this score. However the assessment team has revised the wording of the scoring rationale in response to the objection (see below).

> **Revised Scoring Rationale**: The 60 SG is met. Some information regarding the ecosystem consequences of removal of non-target species exists. For example, bycatch of coastal rockfish species could cause an increase in small demersal fishes, which would favour predators such as lingcod (Phil Levin, NMFS, pers. comm.). Available information suggests that there are no unacceptable fishery impacts. The catch of non-target species is approximately 0.2% of the hake catch. On the basis of biomass only, the ecosystem impact of removing non-target species would be commensurately small. The bycatch of non-target species is strictly regulated, primarily to conserve the bycatch species themselves, but also, implicitly, to conserve their ecosystem functions. Thus, the impacts on ecosystem structure and function from the removal of non-target species can be evaluated through the stock assessments of these non-target species. These stock assessments (e.g. for groundfish species) provide quantitative information on the consequences of current levels of removals. The Assessment Team asserts that, as long as bycatch limits in the hake fishery are not exceeded, that there are no unacceptable ecosystem impacts from the removal of non-target species. Therefore a score of 80 is justified.

PI 2.1.5.1

2.1.5.1	Levels of acceptable impact on ecosystem function have been determined and reviewed.	• There is some information to determine acceptable impacts for main target and non-target species and habitats, but estimates have not been completed.	• Levels of acceptable impacts for key components of the ecosystem within main fishing areas have been estimated and are regularly reviewed (e.g. < 10 years).	• Levels of acceptable impact (e.g. biological reference points) for key populations and habitats have been estimated and are subject to frequent review (e.g. 1 – 5 years).
Weight		**31.9**	**Score** **US=70 CAN=70**	

Scoring Rationale: The 60 SG is met. The argument is made that assessment data for hake and for non-target species are sufficient to determine levels of acceptable impact on ecosystem function. Modeling studies don't indicate a large direct impact of hake on the euphasid population. If hake is overfished, it is possible that some of the hake competitors would have more food (e.g. salmon). Competitors could include pinnipeds, birds, and some fish. Conversely, overfishing of hake could reduce the food available to predator populations. Impacts on the ecosystem function can be considered minor; however unacceptable impact levels have not been determined and reviewed. Therefore the 80 is not met.

Condition: To reach a score of 80, client must provide, within two years, evidence that levels of acceptable impacts are estimated and regularly reviewed. This PI should score 80 upon completion of PI 2.1.4.1 above.

Objectors Submitted: The scoring of 2.1.5.1 is unreasonable. The argument is made that assessment data for hake and for non-target species are sufficient to determine levels of acceptable impact on ecosystem function. But, management has not yet determined the levels of acceptable impact, and this "acceptable impact" is not defined anywhere in the Final Report. The condition set for this Performance Indicator states that "to reach a score of 80, client must provide, within two years, evidence that levels of acceptable impacts are estimated and regularly reviewed." If levels of acceptable impacts had already been determined, there would not be a need for this condition. As such, this Performance Indicator does not meet SG 80.

TAVEL Response> The Objectors are correct, the 80 SG bullet has not been met, a score of 70 was issued and a condition imposed.

PI 2.1.5.2

2.1.5.2	Management strategies are in place to avoid and/or to reduce ecosystem impacts (i.e. Physical impacts, lost gear, operational waste, effects on ecosystem structure).	• Limited management strategies exist to avoid and/or to reduce impacts on the ecosystem. • Strategies are untested but similar to strategies successfully implemented in other fisheries.	• Management strategies exist to detect and to reduce impacts, although these have not been fully tested. • The management strategies are designed and proven to adequately protect key aspects of the ecosystem within main fishing areas.	• Tested management strategies are in place to detect and to reduce impacts. • The management strategies are designed and proven to adequately protect ecosystems and habitats throughout the range of the fishery.
Weight		**22.1**	**Score** **US=90 CAN=90**	

Scoring Rationale: The client submission included a long list of acts and orders, some of which relate to the ecosystem effects of Canada's hake fishery. These were taken from the DFO website: http://www.dfo-mpo.gc.ca/acts-loi-eng.htm. The new Fisheries and Oceans Canada Regulatory Plan (2008–09) will be posted in the coming months. The US hake fishery is governed by the Magnuson-Stevens Act. Fishing vessels are subject to Coast Guard inspection for compliance with and operational waste regulations.

The 80 SG is met. The assessment team heard testimony that ecosystem impacts are minor, which suggests that management strategies are effective at avoiding adverse impacts. A score of 90 is justified, as parts of both elements of the 100 SG are addressed

Objectors Submitted: The scoring of 2.1.5.2 is unreasonable. The Pacific hake fishery is not managed as a forage fish, and management does not take ecosystem effects into account when setting quotas; the hake fishery is managed under single species management objectives under the 40-10 harvest strategy, which does not include any ecosystem considerations. In addition, as mentioned above, acceptable levels of impact have not yet been determined. The Determination Report claims that EFH Amendments provide management strategies to protect physical habitat, yet the area closures to protect habitat do not apply to Pacific hake mid-water trawls. Furthermore, while it is known that mid-water trawls come into contact with the ocean floor (Pacific EFH EIS 2005), no management measures have been established to avoid or reduce such impacts. In fact, the Alaska EFH EIS (2005) estimated that mid-water trawls used to catch pollock (many of which are the same vessels that target Pacific hake) contact the seafloor 44% of the time. Since the 40-10 harvest strategy does not consider ecosystem impacts and Pacific hake is exempt from EFH management measures to protect habitat, this fishery clearly does not meet SG 60 "limited management strategies exist to avoid and/or to reduce impacts on the ecosystem; and strategies are untested but similar to strategies

successfully implemented in other fisheries."

TAVEL Response> Testimony was provided that bottom contact in the mid-water trawl fishery for whiting is rare. Lost gear is also rare (2 cases in Canada, none since 2000). The Objectors statement implying that mid-water trawls used to catch pollock contact the seafloor 44% of the time, based on the Alaska EFH EIS (2005) is only partially true because it applies only to the Eastern Bering Sea (EBS) area over soft bottom. It does not apply to the Aleutian Islands or Gulf of Alaska, where the contact of pollock midwater trawling is zero. Based on the current scoring rationale and background provided to the Team, there is no justification to assume the bathymetric conduct of the mid-water fishery for pollock in the EBS is the same as the fishery for whiting off the Pacific coast. Operational waste is regulated by the Coast Guards. Effects on ecosystem structure are not regulated explicitly, but they are regulated implicitly through quotas and bycatch limits.

Performance Indicators	2.2.2.5 Management strategies are in place to keep the impacts of the fishery on listed and/or protected species within agreed and sustainable limits.
Reason	4.8.2 (b) (iii) The scoring decision was arbitrary or unreasonable in the sense that no reasonable certification body could have reached such a decision on the evidence available to it.
Rationale	The Final Report states that Performance Indicator 2.2.2.5 meets SG 80. This decision is unreasonable. The 2007 hake fishery was closed early (July 26, 2007) because the bycatch limit for widow rockfish was exceeded (NOAA Memorandum, 'Closure of the 2007 Pacific Whiting Fisheries', July 25, 2007). The bycatch limit was subsequently increased so the fishery could reopen. Just prior to the 2007 closure, an illegal dumping incident occurred, whereby a skipper disabled the electronic monitoring system and dumped a load of bycatch overboard. The dumped fish (about 3,000 lbs) washed ashore near Oysterville, Washington. Another incident occurred when a processing plant attempted to grind rockfish bycatch without recording it on a fish ticket. The skipper and a shoreside processor in Washington State were indicted (Groundfish Management Team (GMT) Report on Consideration of Inseason Adjustments, Pacific Fisheries Management Council, Agenda Item G.3.b, Supplemental GMT Report, September 2007**:** 11 pp.). Regulators closed much of the directed west coast Chinook salmon fishery in April 2008 due to dangerously low projected returns compared to previous years – only 54,000 individuals, less than half of the spawning escapement goal range of 122,000-180,000 adult natural spawning and hatchery fish. However, Chinook bycatch levels have not been controlled in the hake fishery. As in previous years, the take of 11,000 Chinook by the hake fishery triggers consultation under the Endangered Species Act. This trigger for "consultation" is of concern to salmon fishermen and others, who believe that Chinook bycatch should be controlled by a hard cap, that closes the hake fishery if reached, and that consultation should be revisited to consider Endangered Species Act listed populations and other runs not meeting conservation objectives. Given this information, take levels *have* exceeded the permitted levels, and management has *not* adequately protected key listed and protected species, and as such PI 2.2.2.5 does not meet SG 80.

PI 2.2.2.5

2.2.2.5	Management strategies are in place to keep the impacts of the fishery on listed and/or protected species within agreed and sustainable limits.	• Limited management strategies exist to identify and avoid/reduce fishery impacts on protected species. • Programs to mitigate impacts are under development. • Strategies are untested but similar to strategies successfully implemented in other areas.	• Management strategies are implemented to detect and to reduce fishery impacts on key listed and protected species within the main fishing areas. • Take levels do not exceed the permitted levels. • Strategies are proven to adequately protect key listed and protected species	• Tested management strategies are implemented to detect and to reduce impacts on all protected, endangered, or threatened species. • Strategies are proven to adequately protect all listed (rare, threatened or endangered) and protected species.
Weight		**30.0**	**Score** **US=90 CAN=90**	

Scoring Rationale: The 80 SG is met. Take levels are within the permitted levels. The take of marine mammals in the US fishery is approximately four per year. NMFS consults regularly with the Fish and Wildlife Service regarding seabirds and marine mammals (Vanessa Tuttle, NMFS). For species listed under the Endangered Species Act, Biological Opinions indicate the level of harvest to prevent harm. The first bullet of SG 100 can be considered met because existing management strategies keep the fishery impacts within permitted levels, so a score of 90 is justified. Specific proof that management strategies adequately protect all ETP species has not been provided, so a score of 100 can not be awarded.

Objectors Submitted:

The Final Report states that Performance Indicator 2.2.2.5 meets SG 80. This decision is unreasonable.

The 2007 hake fishery was closed early (July 26, 2007) because the bycatch limit for widow rockfish was exceeded (NOAA Memorandum, 'Closure of the 2007 Pacific Whiting Fisheries', July 25, 2007). The bycatch limit was subsequently increased so the fishery could reopen. Just prior to the 2007 closure, an illegal dumping incident occurred, whereby a skipper disabled the electronic monitoring system and dumped a load of bycatch overboard. The dumped fish (about 3,000 lbs) washed ashore near Oysterville, Washington. Another incident occurred when a processing plant attempted to grind rockfish bycatch without recording it on a fish ticket. The skipper and a shoreside processor in Washington State were indicted (Groundfish Management Team (GMT) Report on Consideration of Inseason Adjustments, Pacific Fisheries Management Council, Agenda Item G.3.b, Supplemental GMT

Report, September 2007**:** 11 pp.).

TAVEL Response> It is important to recall that MSC Principle 2 Criteria 2 deals explicitly with species which have explicit designation as Endangered, Threatened This PI is specifically aimed at asking whether strategies have been defined to keep the impacts of the fishery on those species which are designated as ETP within agreed and sustainable limits. The assessment team identified that ETP species include listed stocks of Chinook salmon, Stellar sea lion, and the marbeled murrelet. Widow rockfish are a depleted species, which are addressed under Principle 2 Criteria 3. Compliance of the fishery is assessed under Principle 3, Criteria 7.

The Assessment Team asserts the scores are justified and the team does not suggest any change or reconsideration of this score.

Objectors Submitted:

Regulators closed much of the directed west coast Chinook salmon fishery in April 2008 due to dangerously low projected returns compared to previous years – only 54,000 individuals, less than half of the spawning escapement goal range of 122,000-180,000 adult natural spawning and hatchery fish. However, Chinook bycatch levels have not been controlled in the hake fishery. As in previous years, the take of 11,000 Chinook by the hake fishery triggers consultation under the Endangered Species Act. This trigger for "consultation" is of concern to salmon fishermen and others, who believe that Chinook bycatch should be controlled by a hard cap, that closes the hake fishery if reached, and that consultation should be revisited to consider Endangered Species Act listed populations and other runs not meeting conservation objectives.

Given this information, take levels *have* exceeded the permitted levels, and management has *not* adequately protected key listed and protected species, and as such PI 2.2.2.5 does not meet SG 80.

TAVEL Response> The information offered by the Objectors is misleading. The official reported Chinook bycatch for the entire US hake fishery is as follows:

2005	2006	2007	2008	2009 (to date)
11,916 Chinook	3,975 Chinook	6,186 Chinook	3,380 Chinook	580 [1]Chinook

The catch record indicates that the take level was exceeded in 2005, however NMFS took emergency action to close the fishery at that time, which indicates that the process worked. Since then, the industry has also clearly demonstrated a willingness to address this problem by change of fishing locations when Chinook bycatch increases. In recent years, since 2005, the industry has not exceeded the 11,000 target for Chinook. The team was satisfied that the management strategies are adequate to monitor the catch of ETP species and that those measures have been tested and can clearly reduce impacts on protected, endangered or threatened species via inseason closures.

[1] 2009 Pacific Whiting Fishery Preliminary Report #8. NMFS, July 7, 2009. http://www.nwr.noaa.gov/Groundfish-Halibut/Groundfish-Fishery-Management/Whiting-Management/2009/index.cfm

PI 2.1.3.1

Performance Indicators	2.1.3.1 There is adequate knowledge of the physical impacts of fishing gear on habitats, especially essential fish habitat.
Reason	4.8.2 (b) (i) The certification body made a mistake as to a material fact.
Rationale	The TAVEL Final Determination Report states that "… midwater trawl gear components only make bottom contact infrequently", and cite the 2005 Final Groundfish Essential Fish Habitat (EFH) Environmental Impact Statement (EIS). This EFH EIS does not state that mid-water trawl gear only has infrequent bottom contact. It only states that "midwater trawls are generally towed above the ocean floor, although they may be used near the bottom." The EIS does not give any percentages of time that midwater trawls are used on the bottom. However, the Final Environmental Impact Statement for Essential Fish Habitat Identification and Conservation in Alaska shows that midwater trawls contact the bottom 44% of the time, and generate a 20% (median) reduction per gear contact on the living and non-living seafloor structure. Without information suggesting that the Pacific hake fishery is fished differently than Alaska midwater trawls, this is the best available information. Given this information, TAVEL certification's claim that bottom contact is infrequent is unjustified. While Fishery Managers are aware that Pacific hake midwater trawling contacts the bottom, Performance Indicator 2.1.3.1 is clearly below SG 60, as the EFH EIS does not estimate the effects of habitat perturbations of this activity nor are the main impacts of gear use on habitat identified. There is not enough data to prove that there are no unacceptable impacts on habitat from the gear. Furthermore, though it is not a Performance Indicator, the TAVEL Final Certification Report (p. 108) makes it clear that fishery managers have not implemented closure areas to protect habitat in the Pacific hake fishery.

2.1.3.1	There is adequate knowledge of the physical impacts of fishing gear on habitats, especially essential fish habitat.	• Main impacts of gear use on the habitat are identified including extent and location of impact. • Effects of habitat perturbations are estimated and appear stable under current levels.	• Impacts of gear use on the habitat are identified, including extent and location of use. • There are no unacceptable impacts on habitat.	• There is detailed knowledge of the types of gear used in the fishery. • Fishing effort is quantified by gear type. • The physical impacts on the habitat due to use of gear have been studied and quantified.
Weight		**25.0**	**Score** **US=90 CAN=90**	

Scoring Rationale: The 80 SG is met in that this is a mid-water trawl fishery with infrequent bottom contact. In the pelagic zone, there is very little impact on habitat structure. Again, the client submission dealt mainly with bycatch. It is unclear to what extent the Canadian area closures affect the hake fishery and whether mid-water trawling is prohibited in these areas. Because large hake tend to aggregate at depth, there is an incentive to fish near the bottom. The first two bullets of the 100 SG are met therefore a score of 90 is justified.

TAVEL Response> The Objectors are in error with their statement (referring the 2005 Final Groundfish Essential Fish Habitat Environmental Impact Statement): "This EFH EIS does not state that mid-water trawl gear only has infrequent bottom contact. It only states that "midwater trawls are generally towed above the ocean floor, although they may be used near the bottom." In fact, the Objectors left out the first portion of the paragraph where the EIS states on page 14 of Appendix 8 (of Appendix A): "Midwater trawls, also called pelagic or off-bottom trawls, are trawls where the doors may be in contact with the seabed (although they usually are not), while the footrope generally remains suspended above the seafloor, but may contact the bottom on occasion." This certainly can be interpreted by a reasonable person as infrequent bottom contact.

The Objectors reference the Final Environmental Impact Statement for Essential Fish Habitat Identification and Conservation in Alaska. That EIS also states: "Pelagic trawls are fished with doors that do not contact the seafloor, so any door effects are eliminated. Finally, because the pelagic trawls unprotected footrope effectively precludes the use of these nets on rough or hard substrates, they do not affect the more complex habitats that occur on those substrates."

Net specialist Dan Oliver, of Net Systems Inc. (Nor'eastern Trawl Systems, Inc.), Bainbridge Isle, WA (personal communication with Mark Pedersen July 13, 2009) has been involved with design and construction of pelagic nets for both the Alaskan Pollock fisheries and the Pacific whiting fishery. In general, the bottom type in the majority of the Bering Sea is different than the variety of bottom types over which the whiting fishery is conducted off the Pacific coast. Whiting tend to be off bottom, up in the water column compared to pollock in the Bering Sea. In the Bering Sea, fishers will sometimes fish on "carpet sign" which indicates pollock concentrations on the bottom. It is during these times that bottom contact can be made with midwater trawl gear. The Assessment Team has not heard of any information that fishers use such a technique off the Pacific coast for whiting.

The Objectors cite that midwater trawls "generate a 20% (median) reduction per gear contact on the living and non-living seafloor structure." These estimates were not derived from Pollock midwater trawl studies off Alaska but were results from bottom trawl studies for Norwegian lobster in the Irish Sea and blue whiting off of Maine. These are not applicable to the Pacific coast because of differences in substrate types, species, and gear operations.

According to the FAO (FAO. © 2001-2009. Fishing Gear Types. Midwater trawls. In: *FAO Fisheries and Aquaculture Department* [online]. Rome. Updated 21 October 2008. [Cited 13 July 2009]. http://www.fao.org/fishery/geartype/207/en) regarding environmental impacts of midwater trawls: No impact on bottom habitats and bottom structures.

PI 3.7.2

Performance Indicators	3.7.2 Surveillance and enforcement are in place to ensure that the fishery complies with requirements of the management system.
Reason	4.8.2 (b) (iii) The scoring decision was arbitrary or unreasonable in the sense that no reasonable certification body could have reached such a decision on the evidence available to it.
Rationale	Just prior to the 2007 closure, an illegal dumping incident occurred, whereby a skipper disabled the electronic monitoring system and dumped a load of bycatch overboard. The dumped fish (about 3,000 lbs) washed ashore near Oysterville, Washington. Another incident occurred when a processing plant attempted to grind rockfish bycatch without recording it on a fish ticket. The skipper and a shoreside processor in Washington State were indicted (Groundfish Management Team (GMT) Report on Consideration of Inseason Adjustments, Pacific Fisheries Management Council, Agenda Item G.3.b, Supplemental GMT Report, September 2007**:** 11 pp.). The Enforcement Consultants Report to the Pacific Fishery Management Council identifies a number of needs to ensure surveillance and enforcement including for vessels: • "Need for a strong regulation packet. • Install adequate number of cameras including high resolution "ramp" camera. • Secure camera against tampering (unplug, etc…) • Only allow daytime fishing and haul back. • No onboard camera monitors. • Provide ability to download daily information for patrol officer review at a time of boarding. • Better define "operational discards." • Major penalties for monitoring violations. • Require video monitoring and maximum retention – catcher vessels. • Require mandatory logbook – catcher processors." And for processing plants: • "100% third party compliance monitoring of all offloads. • Direct Enforcement access to monitors and data." PFMC Agenda Item G.3.c Supplemental EC Report. September 2007. These examples highlight that current levels of enforcement and surveillance are not sufficient to prevent major acts of noncompliance with key management measures; therefore, the score is clearly below SG 60.

3.7.2	Surveillance and enforcement are in place to ensure that the fishery complies with requirements of the management system.	• Surveillance activities and enforcement measures are reactive and focused on key management measures. • Fishery compliance with management measures has been monitored sporadically but has not been fully demonstrated.	• Enforcement systems have been implemented and there is control and high compliance with most management measures that affect fishing mortality over the key fishing areas	• There is a high degree of control on and compliance with all regulations that affect fishing mortality and stock health, for target and non-target populations, over all fishing areas.
Weight		**14.3**	**Score** **US=75 CAN=95**	

Scoring Rationale: As score of 75 is appropriate for the US fishery. Certainly enforcement systems have been implemented, although the most activity occurred in 2007, with very little before that. In June 2007, there was a two-day joint marine fisheries enforcement training in Newport Oregon with the 3 states, NOAA and the USCG. There was at least one saturation emphasis in 2007 of the shoreside sector and a state citation issued to a processor for grinding up (wastage) and not reporting rockfish bycatch, one Oregon hake fisher was cited for unlawful possession of a salmon, and the investigation and prosecution of the *F/V Raven* discard case. Most enforcement has been reactive. There just are not enough human resources to have effective and efficient pro-active enforcement. One very significant issue is timeliness of the field officers' (mainly state) ability to obtain the on-board camera hard drive data. Currently it is reviewed by Archipelago, then goes to federal management staff, then to federal enforcement. Sometimes a year goes by before the data is available to make a state case (D. Mathews, NMNF, pers. comm.).

There seems to be consensus, however, that high compliance may or may not be attained (most likely, not). It all depends on how "high" is defined. Most hake enforcement jurisdictions agree that 40% of the fishers always try to be compliant, 40% may take advantage of a situation if risk to the resource and getting caught is low, and 20% will break the rules if reward is high, and the risk of getting caught is low. Most compliance is seen with the at-sea processor co-op, and motherships, while lower compliance is suspected with the catcher vessels that deliver to both motherships and shore-side. Some shore-side operations are chronically suspect, although one processor has hired an additional oversight staff to try to regain credibility. Washington shoreside enforcement needs at least 3 new officers dedicated for marine commercial fisheries enforcement and Oregon needs double that to assure control and compliance.

For the Canadian fishery, there is information to support a score a 95. There is no doubt enforcement systems have been implemented (In 2007, 801 hours of Officer time was expended on the groundfish

trawl fishery. A further 14,260 hours of dedicated air surveillance time was utilized in 2007. There is one file on the commercial hake fishery where a vessel was detected fishing prior to hailing out. A warning was issued in this case, and there is comprehensive monitoring (but Certified Observers are not enforcement personnel) and severe management sanctions for non-compliance. The result is that during the past 11 years the Canadian IVQ system can be judged effective because no TACs have been exceeded over these years. While it can be inferred from this fact that there is control and high compliance, there is little actual enforcement data readily available to support this notion (because it is collected regionally). On the DFO website dealing with C&P, enforcement issues and strategies listed do not include any commercial groundfish (or hake) elements (only habitat, First Nations, Recreational and Commercial Salmon). The IFMP list priorities, but presents nothing on past results. It would be desirable for Canada to provide quantitative evidence in regard to hake enforcement activities, such that the level of control and degree of compliance can be quantified.

Condition: (US Only) The fisheries client actively supports the implementation of Amendment 10 to the Council's Groundfish FMP (which requires electronic monitoring of all catcher vessels targeting hake and delivering to shoreside processors, and 100% observation of all whiting landings by compliance monitors at shoreside processors). Provide a summary report within two years which demonstrates a high degree of effectiveness.

TAVEL Response> The US fishery achieved a score of 75 which resulted in a condition against the fishery. The fact that there have been individual incidents within the fishery and processing sectors which have been detected and addressed through the sanction system is indicative that the system works. The clients have agreed to implement Amendment 10, which will in fact address the issues identified in the Enforcement Consultant's 2007 Report. The client fishery has clearly demonstrated that the 60 SG has been met, while the objectors provide no specific information to the contrary. The objectors appear to agree that implementation of the Enforcement Consultant list of needs is required, and that is consistent with the condition imposed on the US fishery, which is specified in the Client Action Plan.

5.2 For each issue identified in question 5.1, please state why you or your organisation believes that the effect of the score in relation to one or more of the particular performance indicators in question was material to the outcome of the Determination such that the Determination should be altered?

We have indicated that the following performance indicators should have been scored below the SG 60 scoring guideposts, therefore this fishery should not be certified:
Performance Indicators 1.1.3.1, 1.1.4.3, 1.1.5.1, 1.2.1, 2.1.4.1, 2.1.3.1, 2.1.5.2, 3.7.2

In addition, we have identified that the following aspects of the Final Assessment Tree do not provide for correct interpretation of MSC Principles.

Performance Indicators 2.1.5.1, 2.1.5.2, 2.2.2.5 and scoring guidepost 60 for Performance Indicator 1.1.3.1 all do not adequately assess the intent of the MSC Principles, Criteria and Subcriteria (as explained above in section 4.1(a)).

Therefore, the Determination should not be finalized until the Assessment Tree is corrected to align with the MSC Principles.

TAVEL Response> We have addressed these issues in the responses above.

Appendix 2: Objection Response to Greenpeace Submission

Mr. Steven Devitt
TAVEL Certification Inc.
Suite 815, 99 Wyse Road
Dartmouth, N.S. B3A 4S5

July 6, 2009

Dear Mr. Devitt,

Greenpeace would like to take this opportunity to provide its comments on the recent Notice of Objection led by Oceana and the Monterey Bay Aquarium regarding TAVEL Certification Marine Stewardship Council assessment of Pacific hake mid-water trawl fishery. Greenpeace supports the objection due to irregularities in the assessment process which violate MSC principles. This letter summarizes our concerns and further explains our support of the objection.

During the certification process, several omissions occurred which could lead to wrongful certification of the fishery in question. Though these omissions are addressed elsewhere within the Fishery Assessment Methodology, they should be applied to the Pacific hake Assessment tree to ensure compliance with MSC principles.

> **TAVEL>** It is important to note that the Pacific Hake fishery assessment started in 2007, well before the MSC released the Fishery Assessment Methodology in July 2008. The evaluation of the Pacific Hake fishery is being conducted under the original assessment tree which was drafted in the fall of 2007, released for comment in October 2007 and finalized in December 2007. All stakeholders, including Greenpeace were notified of the opportunity to comment on the performance indicators and only one comment was received. The assessment team and TAVEL concluded that the final performance indicators provided an accurate interpretation of the MSC Principles and Criteria.

Under Performance Indicator 2.1.5.1, the fishery is required to determine the acceptable levels of impact on ecosystem function, later reviewing and updating these impacts. Greenpeace supports further requiring the fishery to comply with and update compliance with these acceptable levels within the Pacific hake assessment tree.

> **TAVEL>** This issue is addressed in detail in the Oceana/ MBAq objection comments under PI 2.1.5.1.

Under Performance Indicator 2.1.5.2, performance indicators for management strategies are indistinct and may lead to miscommunication from the fishery as well as a violation of MSC Principle 2. Greenpeace supports a separate performance indicator for strategies regarding physical impacts, operational waste and ecosystem impacts in order to take all facets of management strategies into account. Through strengthening of this performance indicator, TAVEL can more clearly take bycatch and waste breaches into account.

> **TAVEL>** This issue is addressed in detail in the Oceana/ MBAq objection comments under PI 2.1.5.2. As indicated above, there was a public comment period for the assessment tree in 2007. The performance indicators cannot be changed at this stage of the assessment.

Under Performance Indicator 2.2.2.5, there is no performance indicator regarding bycatch that is neither listed nor protected. Greenpeace supports strengthened management of bycatch regarding non-target species.

> **TAVEL>** MSC Principle 2 Criteria 2 (PIs 2.2.1.1, 2.2.2.1 – 2.2.2.5) deal only with bycatch species

which are endangered, threatened protected.

Under Performance Indicator 1.1.3.1, Scoring Guidepost 60 does not account for specific characteristics of species within the fishery assessment model. Greenpeace supports use of assessment models that take biology of species and nature of the fishery into account.

TAVEL> This issue is addressed in detail in the Oceana/ MBAq objection comments under PI 1.1.3.1.

TAVEL Certification Inc. did not use the most current scientific information when performing the assessment, setting a catch level that is expected to lead to overfishing. Greenpeace supports a revision of the fishery catch levels using the most current data.

TAVEL> This issue is addressed in detail in the Oceana/ MBAq objection comments under Objection Form Section 4.1b.

Mid-water trawling contacts the ocean floor during almost half of its usage. Greenpeace supports use of different gear to harvest fish that does not pose a threat to the sea floor.

TAVEL> This issue is addressed in detail in the Oceana/ MBAq objection comments under PI 2.1.3.1.

Due to prior incidents regarding dumping and misuse of bycatch, Greenpeace supports stricter video monitoring on vessels and in processing plants.

TAVEL> This issue is addressed in detail in the Oceana/ MBAq objection comments under PI 3.7.2.

In conclusion, Greenpeace supports the objections posed by Oceana and the Monterey Bay Aquarium. The Assessment Team must revisit its assessment of the fishery and the assessment process in order to ensure sustainability of the fishery and the Pacific hake.

Sincerely,

John Hocevar
Oceans Campaign Director
Greenpeace USA

Appendix 3: Objection Response to Marine Fish Conservation Network Submission

Via e-mail to hakeobjections@msc.org

July 8, 2009

Michael Lodge
Independent Adjudicator
c/o Marine Stewardship Council
Mountbarrow House, 3rd floor, 6-20 Elizabeth Street
London, SW1W 9RB, UK

RE: Pacific hake trawl fishery certification

Dear Mr. Lodge:

On behalf of the Marine Fish Conservation Network (Network) and its nearly 200 member groups nationwide, we are writing in support of a jointly filed objection by the Monterey Bay Aquarium and Oceana to the proposed MSC certification of the Pacific hake (whiting) fishery. As you may recall, the Network co-signed comments dated April 30, 2009 on TAVEL Certification Inc.'s assessment of the Pacific hake fishery in which we objected to TAVEL's conclusion that the hake fishery should be certified by the MSC. We reiterate that current management of the fishery would not be consistent with any of the three MSC principles and therefore certification should be denied.

Pacific hake is a major forage species in the California Current and is the largest fishery by volume off the west coast of the continental U.S. and Canada, thus we are especially concerned by the prospect of MSC giving its seal of approval to a risk-prone, recruitment-driven fishery that is almost certain to be overfished by next year and that has been managed with little regard for its impacts on the marine food web. Our reasons for supporting the objection include:

- The current 40-10 harvest strategy has been found deficient for management of Pacific hake by the Pacific Fishery Management Council's own Scientific and Statistical Committee (SSC). The SSC has written: "*Given that whiting recruitment is very variable, application of the 40-10 harvest policy will lead to frequent excursions into the overfished zone. The SSC recommends that an appropriate harvest policy for whiting be further investigated*" (SSC Supplemental Report March 2008 and SSC Supplemental Report March 2009).

TAVEL CERTIFICATION INC.

TAVEL> This issue is addressed in detail in the Oceana/ MBAq objection comments under PI 1.1.4.3.

- The estimated stock biomass is currently at a historic minimum, is well below the target biomass, and is projected to continue to decline under the current fishing strategy, with a high likelihood of dropping below the overfished threshold by 2011. Recruitment has been weak, and the fishery has relied on a single large year class to sustain historically high catch levels.

  TAVEL> This issue is addressed in detail in the Oceana/ MBAq objection comments under PI 1.1.5.1.

- The TAVEL certifier has not considered the most recent assessment data in making its determination. The TAVEL report is based on the 2008 stock assessment, but newer information in the 2009 assessment paints a bleaker picture of the stock's status. The uncertainties associated with the status of this stock illustrate the importance of considering the most recent scientific information to assess the "sustainability" of this fishery.

  TAVEL> This issue is addressed in detail in the Oceana/ MBAq objection comments under Objection Form Section 4.1b.

- The management of the fishery does not consider or account for ecosystem impacts on dependent and related species in the California Current ecosystem, even though Pacific hake is a major forage fish. The current fishing strategy does not address predator needs, either in aggregate or in specific areas where fishing occurs. The 40-10 control rule does not account for the scientific uncertainty associated with predation when setting of acceptable biological catch (ABC).

  TAVEL> This issue is addressed in detail in the Oceana/ MBAq objection comments under PI 1.1.4.3

- The management system has failed to assess or address the impacts of midwater trawl gear on benthic habitat, despite recognition that the gear contacts the seafloor and could be having significant impacts.

  TAVEL> This issue is addressed in detail in the Oceana/ MBAq objection comments under PIs 2.1.4.1, 2.1.4.2 and 2.1.5.1.

- The management system lacks an effective system of bycatch monitoring to reduce rockfish and endangered salmon bycatch. Incidents involving illegal dumping and disabling of on-board video monitoring equipment have led to calls for more effective measures that have not been adopted.

  TAVEL> This issue is addressed in detail in the Oceana/ MBAq objection comments under PI 3.7.2.

For all these reasons, as detailed in the Notice of Objection and in earlier correspondence, we urge the Independent Adjudicator to reject the determination and find that the Pacific hake fishery does not warrant certification at this time.

Sincerely,

Ken Stump, Policy Director
Marine Fish Conservation Network
600 Pennsylvania Ave. SE Suite 210
Washington, D.C. 20003