Action Plan for Meeting the Conditions For Continued Certification of the Gulf of Alaska (GOA) Pollock Fishery

The At-sea Processors Association (APA) submits this Action Plan for Meeting the Conditions for Continued Certification of the Gulf of Alaska (GOA) pollock fishery. APA agrees to make a good faith effort to meet the intent of the Conditions set forth in the certifier's July 2004 Final Report determining that the GOA Alaska pollock fishery is sustainably managed under the MSC Principles and Criteria. Furthermore, APA recognizes its responsibility as the Applicant/Licensee in the certified fishery to comply with annual surveillance audits by an accredited MSC certification body. APA has entered into a written agreement with Moody Marine Ltd. to perform the required audits, including monitoring implementation of Conditions set forth in this Action Plan.

Pursuant to an understanding between APA and the certification body, Scientific Certification Systems, Inc., and consistent with MSC policy, APA is willing to assign MSC logo and labeling rights to non-APA GOA pollock producers who agree to share the cost of maintaining the certification and to join in good faith efforts to meet the Conditions.

While APA agrees to undertake good faith efforts to meet the Conditions, the association is on record challenging the basis for certain Conditions, questioning the feasibility of the management authority to undertake certain actions, and asserting that some Conditions exceed the scope of the assessment process. Such concerns were transmitted to the certification body in writing by the Applicant, by participants in the GOA pollock fishery and by the National Marine Fisheries Service (NMFS). APA appreciates the consideration provided by the assessment team and certifier to issues raised by all stakeholders in the process. However, we note that a number of concerns raised by Alaska pollock producers and NMFS with regard to the Conditions remain. In fulfilling our obligations, we intend to provide to the appropriate certification body relevant information developed subsequent to the drafting of Conditions. We seek a flexible and adaptive program that will permit us to meet the intent of the Conditions based on the best information available.

Some of the concerns expressed by APA relate to shortcomings in the structure and administration of the MSC program. On July 8, 2004, APA co-signed a letter to the MSC suggesting needed improvements in the program. At least two of the issues raised in that letter pertain to the development of Conditions for the BS/AI and GOA pollock fisheries. The first issue is that the MSC must establish consistency among assessments. In APA's view, both the BS/AI and GOA pollock fisheries were held to a different and

much higher standard than any other Applicant fishery, creating competitive disadvantages that should not be present in either a science-based or market-based program.

A second issue is that APA, as a private sector Applicant, is not always in a position to effectuate the changes in management that the certification body may seek. Under such circumstances, the MSC certification methodology should require certification bodies to consult and cooperate fully with both the Applicant and the affected management authorities in drafting Conditions. Without such collaboration the assessment team is deprived of insight and expertise needed to propose improvements in candidate fisheries that best achieve conservation and management objectives in domestic law as well as the MSC's sustainability standard.

APA's Approach to Meeting the Conditions for Continued Certification.

APA will establish the Alaska Pollock MSC Certification Committee to develop and direct a program to give effect to this Action Plan for meeting the Conditions for the BS/AI and GOA pollock fisheries. The Alaska Pollock MSC Certification Committee is composed of participants in the BS/AI and GOA pollock fishery, their representatives and APA staff. The Committee could also enlist outside experts to assist with tasks needed to meet obligations under the Action Plan.

The Alaska Pollock MSC Certification Committee will consider the range of resources available to assist in the task of responding to Conditions, including possible collaboration with the Pollock Conservation Cooperative's (PCC's) Research Committee. The PCC's membership is substantially the same as the membership of APA. Among other responsibilities, the PCC Research Committee is the principal conduit between the PCC and the University of Alaska/Fairbanks (UAF), both of which entered into a partnership in 2000 to support a comprehensive marine research grants program. The UAF/PCC Research Center is funded by APA/PCC member companies and is reportedly the largest private sector marine research program in Alaska. To the extent that certain Conditions can be achieved through private sector initiatives, the UAF/PCC Research Center could be an important partner.

APA also works closely with other North Pacific marine research organizations, including the North Pacific Research Consortium, the North Pacific Research Board, the Alaska SeaLife Center and various other organizations committed to improving understanding of the GOA ecosystem. Many of the issues raised in the Conditions are being addressed by work conducted by, or sponsored by, the organizations identified above. APA will provide to the certifier information and findings developed by these respected organizations relevant to Conditions established for the GOA Alaska pollock fishery.

Most importantly, the Alaska Pollock MSC Certification Committee will coordinate with the NMFS Alaska Region office and Alaska Fisheries Science Center (AFSC), the North Pacific Fishery Management Council (the Council), and other participants in the management process, as necessary, in an effort to meet the Conditions established by the certification body.

Proposed APA Activities in Achieving the Conditions.

There is necessarily overlap among Performance Indicators, resulting in duplication of Conditions as well. After considering redundancies, the Final Report essentially sets out 14 Conditions. The following details how APA will address each of these 14 Conditions. In the majority of instances, the conditions for the GOA pollock fishery are the same as those for the BSAI pollock fishery. In each of these cases where the conditions are the same, APA will follow the same action plan as produced for the BSAI fishery. For the few conditions that are different, APA has proposed additional steps to complete the GOA Pollock Action Plan.

MSC Principle One.

Condition #1—

Indicator 1.1.1.5--The harvest strategy can be shown to be precautionary.

Condition: To improve the deficiencies in performance for this indicator, SCS requires that formal evaluation and testing of the robustness of current and any proposed new harvest strategies used to manage GOA pollock be undertaken, using methods similar to those recommended by Goodman et al. (2002). The SCS evaluation team requires that any plans to correct this deficiency lay out a step-wise plan with timelines such that at least three stages of work would be available for evaluation:

1. Prepare detailed specifications for the evaluation.
2. Undertake the evaluations.
3. Modify harvest strategies as appropriate from the results of the evaluations. (Uptake to follow NPFMC due process)

Notes related to tasks:

Designing and implementing a management strategy evaluation study is a complex task, and the SCS evaluation team does not seek to prescribe precisely how it should be done. Nevertheless, the SCS team sees this condition as the key one that will help overcome most of their concerns with regard to Principle 1, and wishes to maintain an active

involvement in monitoring progress in meeting the condition. The SCS team also considers it prudent that there be suitable opportunity for input from key stakeholders in the fishery. (Where there is substantial disagreement between stakeholders, the SCS team will be the final arbiters). Whoever is contracted to undertake the task would do well to consult and be guided by the fairly detailed proposal in sections 3.10 and 3.11 of Goodman et al (2002) as this will be used by the SCS team as a benchmark, noting that those specifications are for testing generic NPFMC harvest strategies, and will need to be adapted for the specific circumstances of GOA pollock.

In general, task 1 will involve specifying the set of performance measures against which the harvest strategies will be judged, the set of robustness tests to be undertaken, the detailed specifications of the operating models to be used, and the range of harvest strategies to be evaluated. The latter should include monitoring and assessment models as well as harvest control laws, noting that some simplification of detailed assessment models may be required for computational efficiency in testing harvest strategies. The robustness tests should include, at a minimum, the impacts of environmentally driven changes in productivity and the impacts of episodic recruitment. They should deal explicitly with key issues and uncertainties identified elsewhere in this report and cross referenced to this condition. Consideration should be given to including operating models that go beyond single species dynamics, where these are available or can be developed in suitable timeframes, and performance measures should include consideration of impacts on predators. The detailed specifications and proposal for work should be presented and discussed at an open workshop as soon as practical following certification. The proposal should specify who will undertake the work, the timelines involved, and the resources allocated to the task. At least one member of the evaluation team should attend the workshop.

The work program is to be agreed by the SCS evaluation team and the group undertaking the evaluations. The timelines can not be pre-specified, but will depend on the nature and complexity of the agreed work program. To maintain certification, progress on agreed tasks will be checked during surveillance visits at the specified time frames, or at the annual audits required by MSC if the time frames coincide.

The results of the evaluations will be made available to NPFMC, and will be presented at a second open workshop. Appropriate responses to the evaluations, including suggested changes to current harvest strategies, will be discussed and agreed in principle. Uptake of changes will follow through the due process of NPFMC decision making.

APA's Plan for Condition #1: *This Condition and the Action Plan response are similar to Principle 1; Indicator 1.1.1.5 in the BS/AI pollock fishery report. The assessment of the Alaska pollock fisheries began in January 2001. The GOA fishery was "scored" by the assessment team in 2002, and a comprehensive Draft Report recommending certification of the GOA pollock fishery was completed in October 2003. A Final Report was published in July 2004, and the Objections process continued into*

2005. Necessarily, the assessment team had to conclude its consideration of new information pertaining to this dynamic and ever-improving fishery and make its determination about the fishery's compliance with the MSC's sustainability standard. With some exceptions, the certification is based on information available to the assessment team when the GOA fishery was scored in 2002. As a result, there is considerable new information to provide to the certification body on changes and improvements in fishery management practices. Condition #1 is a good example of where substantial new information exists and should be considered by the certification body during the first annual audit.

APA will provide the contracted certification body with the final AFSC report relating to issues identified in the Goodman report immediately after issuance of the certificate or within 1 month of its availability if it is not immediately available. If the AFSC report is not available within 6 months of the issuance of the MSC certificate, APA will request a meeting between APA, NMFS, and the certification body to discuss the status and progress of the AFSC report.

If the AFSC report is available within 6 months of the issuance of the certificate, APA will request a meeting between APA, NMFS, and the certification body no later than six months after issuance of the certificate to discuss what actions will be taken in follow-up to the AFSC report and whether these actions will correspond to the requirements of the condition.

Within three months after the meeting between APA, NMFS, and the certification body (nine months after issuance of the certificate), APA will provide the certification body with a revised action plan for meeting the remaining objectives of this condition. The revised action plan should show how the condition will be met within six months after the meeting (15 months after the date of issue for the certificate).

Condition #2—

Indicator 1.1.2.1: Current stock sizes are assessed to be above the appropriate limit reference point.

To improve the deficiencies in performance for this indicator, SCS requires that:

1. The requirement for testing alternative harvest strategies (condition attached to scoring indicator 1.1.1.5) needs to take account of the considerations discussed in the evaluation for this indicator. In particular, harvest strategies should be tested for robustness against a variety of assumptions about the role of natural environmental variability on GOA stock dynamics, and performance measures should include the impacts of low stock sizes on predators of pollock. Alternative harvest strategies (harvest control rules) should be considered that provide a better

balance between stock protection, minimizing impacts on predators, and exploitation.

2. The SSC (or a suitable independent expert) should review and comment on the estimates of stock depletion in Appendix C of Dorn et al (2003) in relation to the impacts of fishing on recruitment variability and stock abundance.
3. The GOA plan team should recommend strategies to improve reliability of the annual abundance surveys, particularly in and around Shelikof Strait, to understand the interannual variability in spawning location and stock behaviour, also noting the recommendations in Godo (2003).

APA's Plan for Condition #2: *APA maintains its long-standing objection to the Principle One Performance Indicator (PI) 1.1.2.1 and the associated Scoring Guideposts. Our objection centers squarely on the stock-biomass-based nature of both the PI and its Scoring Guideposts. The MSC certification is intended as an independent benchmark for best practices in fisheries management and not a measure of fish-stock biomass at any particular moment in time. In our view, it is the management actions that remain under the control of the fishery management system, and so it is the management actions based on a given level of stock biomass and associated ecosystem conditions that should be the subject of MSC standards and evaluation (i.e., the fishery assessment, including the research tasks on which it must rest, and the harvest control rule).*

We note that PI 1.1.2.1 is the only Principle One indicator that is not focused on management actions, an observation also made by the MSC Objections Panel in their recent review of stakeholder objections concerning the low stock size for GOA pollock (paragraph 3.1). Furthermore, we note the applicability of MSC Principle One, Criterion One, as referenced in the MSC Objections Panel Report. Twenty-two performance indicators were developed to provide an operational interpretation of Criterion One, and they appropriately focused "on testing and improving the fishery assessment and harvest control rule."

> *"(T)he fishery shall be conducted at catch levels that continuously maintain the high productivity of the target population(s) and associated ecological community relative to its potential productivity."*

The focus in this Criterion is on the conduct of a fishery "at catch levels" — not at stock biomass levels.

While we disagree with the Objections Panel that B_{MSY} is a suitable limit reference point for biomass in interpreting MSC Principle One, we agree with the Panel that constant B20% was considered by the certification team in their scoring of MSC Principle One. In fact, this single constant value for B20%, which provides a fixed minimum biomass below which no directed fishing is allowed, was considered explicitly in the scoring of PI 1.1.1.3 by the certification team. (The harvest control rule results in appropriate reductions in exploitation rate at low stock sizes.)

As such it seems incongruous that the Objections Panel would remand the certification report back to the certification team, essentially to add an additional component to the 60 Scoring Guidepost of PI 1.1.2.1 which was plainly considered in the scoring of PI 1.1.1.3. In our opinion, this situation results from the flaw in the rational basis for the PI 1.1.2.1 described above, and the resulting confusion in the interpretation of Principle One Criterion One that it generated, and which formed the basis of the Objection Panel's consideration of the low stock biomass issue.

We raise this issue to continue the dialogue with the certification body about our concerns during the annual surveillance audits and to address comments of the MSC Objections Panel Report for the GOA pollock fishery. With respect to the latter, paragraphs 3.20 and 5.7 of the Objections Panel report advises that under current MSC procedures there is reason to believe that the GOA fishery could be de-certified if the stock biomass drops below the constant B20% threshold "as it approaches the low point in the production cycle."

Given the current harvest control rule, which under PI 1.1.1.3 received a score of 85, directed fishery would be suspended if the biomass drops below such a threshold. The industry is on record supporting the current harvest control rule as a means to protect other ecosystem consumers of pollock. We do not agree that having the management system take the appropriate, precautionary action, however, should result in de-certification of the fishery. Such action is fundamentally at odds with the stated purpose of the MSC program, which is to recognize precautionary, ecosystem-based management systems. In sum, because PI 1.1.2.1 is focused on stock biomass and not catch levels, implementing the appropriate management action could be welcomed by loss of MSC certification.

With that background, the following is APA's planned course of action. Condition #2 (provision #1) will be met under the GOA Action Plan response to Condition #1 (see above).

Condition #2 (provision #2) recommends that the SSC review Appendix C of the 2003 GOA pollock assessment found in the 2003 GOA SAFE report. Within one month of issuance of the certificate, APA will provide the contracted certification body with the SSC minutes from the December 2003 meeting for review and consideration of whether the information provided meets this provision of the condition. The information provided should contain not only the final determination by the SSC, but as stated in the condition a review of the information such that the certification body can determine if the review satisfied the provision in this condition.

APA believes that the minutes of the meeting go a long way to meeting provision #2 under condition 1.1.2.1. The SSC mentioned the many aspects of conservatism built into the 2003 assessment, in particular, an even more risk-averse harvest policy

mandated by the 2001 Steller sea lion reasonable and prudent alternative management (protection) measures. The SSC agreed with the extremely conservative approach recommended by the authors of the SAFE report and the GOA Plan Team given concerns over the low level of the pollock stock, and the NPFMC subsequently adopted the SSC recommendation.

With regard to that part of Condition #2 (provision 3) for improving the reliability of the annual pollock acoustic abundance survey, during 2004 the assessment authors and the AFSC Midwater Assessment and Conservation Engineering (MACE) staff collaborated on the drafting of a five-year plan to investigate alternative strategies to improve the reliability of the GOA acoustic survey. The draft strategy was motivated by the 2003 GOA pollock assessment review of Godo (2003), and was presented to the GOA Plan Team at its September, 2004 meeting. In brief, the strategy developed will provide for an evaluation of the strengths and weaknesses of a more expansive spawning-season survey versus the implementation of a summer survey that would cover most if not all of the western, central, and eastern GOA management areas.

Within one month of the issuance of the GOA pollock certificate, APA will provide to the certification body the strategy developed by the AFSC MACE Program to improve the reliability of the GOA acoustic survey.

Condition #3—

Indicator 1.1.2.3.3. Stock assessments explore sensitivities to assumptions, parameters and data, and key sensitivities are taken into account in the harvest strategy.

Condition: To improve the deficiencies in performance for this indicator, SCS requires that:

1. Consideration be given by the SSC to raising GOA pollock to Tier 1 so that the harvest strategy is more responsive to uncertainties in the assessment.
2. The Bayesian analyses already undertaken for GOA pollock be used to better present the uncertainties in the assessment, including confidence intervals on stock biomass trajectories, and probabilities that biomasses and exploitation rates exceed target and limit reference points.

APA's Plan for Condition #3: *Given the developments since the assessment team's final evaluation of the GOA pollock fishery (see a brief summary below), within three months of the issuance of the GOA pollock certificate APA will provide the certification body with a written summary (along with all pertinent background documents) on the progress which has already been made in addressing this Indicator's (1.1.2.3.3) conditions. At the same time, APA will also arrange for the certification body*

conducting the surveillance audits to discuss with the GOA pollock assessment authors additional ongoing actions that may further work to satisfy the conditions.

If it is determined that the information provided to the certification body does not adequately satisfy all aspects of the condition, APA will provide within 30 days of the surveillance report, which is due within 30 days of providing the information to the certification body, a revised action plan for how and when the remaining work necessary to meet the condition will be completed. If the proposed time requirements for meeting the condition fully should exceed one year after issue of the certificate, APA will include milestones at a minimum of every six months up to the proposed completion date.

APA Summary of Existing Information

It is our belief that many of the activities that have occurred since the assessment of the fishery may well satisfy the requirements of this condition. With regard to giving consideration to raising the GOA pollock stock assessment to Tier 1, the Bayesian analysis included in Appendix C to the 2003 stock assessment shows estimated stock-recruitment curves for GOA pollock for the commonly used Beverton-Holt and Ricker stock-recruitment models (Figure 33). Fits of the models to the stock-recruitment estimates were similar, with estimated posterior distributions of the "steepness" parameters differing only marginally from their prior distributions. This result led the authors to conclude that the stock and recruitment estimates for GOA pollock are not very informative about the shape of the true stock-recruitment curve. The SSC reviewed this work at their December 2003 meeting.

A second issue associated with raising GOA pollock to Tier 1 (integrating an estimate of the stock-recruitment relationship into the assessment) concerns the concomitant change of stock biomass target to B35% for Tier 1 from B40% for Tier 3. The B35% stock reproductive biomass target is smaller than the current B40% target, and all else constant, would likely allow more aggressive harvest rates than currently permitted under Tier 3.

With regard to the provision of confidence intervals on stock biomass trajectories, the Ecosystem Considerations chapter of the 2004 AFSC SAFE includes a section on recent advances in developing predictive multi-species assessment and ecosystem models. In addition, the SSC and Groundfish Plan Team members convened a "Special Session Modeling Workshop" at the February 2005 NPFMC meeting which focused on standardized methods for predicting future stock biomass trajectories. The workshop developed in response to SSC concerns about the need to come up with a consistent set of standards to be used for projections of all stocks and areas. These concerns were motivated by NMFS' recent approval of BSAI and GOA Fishery Management Plan Amendments 48/48, which require that BSAI and GOA groundfish specifications be made for two years ahead instead of one.

Some of the probabilities that stock biomasses and exploitation rates could exceed target and limit reference points has already been provided in the GOA pollock stock assessments. The 2004 GOA pollock SAFE included a) confidence intervals for recruitment and spawning stock biomass (Fig. 1.22), b) uncertainty in the estimates of the 1999 and 2000 year classes (Fig. 1.26), c) uncertainty in projected spawning stock biomass and probability of the stock dropping below B20% in 2005-2008 (Fig. 1.27). Probabilities of exceeding fishing mortality limit reference points have shown in previous assessments (e.g. Fig 1.32 of the 2001 GOA pollock SAFE).

MSC Principle Two.

Condition #4—

Indicator 1.1. There is a management plan with ecosystem considerations that identifies impacts of the fishery on the ecosystem and sets reasonable upper bounds for the identified impacts.

Condition: To improve the deficiencies in performance for this indicator, the fishery is required to specifically and explicitly develop and implement a plan for using the information contained in the Ecosystem Chapter of the SAFE document to develop ABCs for the pollock fisheries.

Fisheries science is still developing methodologies for introducing environmental parameters into fisheries models and the state of current scientific knowledge remains insufficient to accommodate the conditions required under this indicator without further such development, and so some time is required to allow the necessary developments (see below).

The plan must show how the authors of the 'Ecosystem Considerations' chapter explicit recommendations will be used in setting limits on ABCs based on each of the ecosystem data sets under review in the chapter where the data indicate that a constraint on pollock harvest may be an appropriate response to the pattern displayed by the data set. The evaluation team would request consideration of introducing more use of scenario planning in developing management strategies that are robust under several possible futures.

APA's Plan for Condition #4: *This Condition and Action Plan response are identical for the BS/AI and GOA. The certification report notes that the "state of current scientific knowledge remains insufficient to accommodate the conditions required under this indicator without further…development (of fisheries science)". Importantly, the Final Report also notes repeatedly that management in the North Pacific is widely viewed as progressive and precautionary. Recognizing that the AFSC is consistently*

recognized for its leading edge practices, APA proposes this step-wise approach to meeting the Condition.

APA will have a qualified individual, including contracting with an outside expert if necessary, review the literature to evaluate what constitutes state of the art practices in incorporating ecological indices into estimation of ABCs. Furthermore, APA will assess the extent to which AFSC incorporates such information into its annual SAFE report recommendations for groundfish fisheries, including recommendations on the pollock ABC. Based on its review of existing knowledge and methodologies, APA will identify in what areas, if any, AFSC's analysis could be enhanced. APA will have the report peer reviewed by at least one expert chosen in consultation with the certification body. APA will present its findings to the certifier at the first annual audit, and if the certifier agrees that the report is appropriate, APA will share its findings with AFSC and urge the agency to consider including such revisions in its annual SAFE reports. Furthermore, prior to the first annual audit APA will meet with AFSC staff to better understand the resources available to the agency and developments in ecological theory and provide to the certifier an assessment of the AFSC's long-term plan for further incorporating ecological indices in the ABC setting process.

Condition #5—

Indicator 1.2.1. Assessments are conducted to identify and estimate impacts of the fishery on habitats, especially on essential fish habitat (EFH) or critical habitat for protected, endangered, threatened or icon species, which are necessary to manage the fishery to minimize identified impacts.

Condition: To improve the deficiencies in performance for this indicator, the fishery must improve assessments of impacts on habitats as follows:

1. Provide the certification body with information on ongoing research projects to determine the impact of pollock fishing, if any, on SSL critical habitat with particular emphasis on the effects of fishing, if any, on foraging sea lions.
2. Meet Condition 3.1 – thus provide a thorough written review of gear loss from pollock fishers and its impacts on habitats
3. Provide a thorough written review of discarding from pollock fishing as a food supply affecting scavenging seabirds. We require that the certification body be provided a summary of the current state of knowledge on the identified issue areas of concern and that targeted, clearly defined research programs be undertaken, if necessary, after consultation between the certification body and the fishery based on the findings of the written reviews.

APA's Plan for Condition #5: *With the exception of the reference to fur seals in the BS/AI report, this Condition and Action Plan response for the BS/AI and GOA are*

identical. Within 12 months, APA will provide to the certification body a comprehensive report documenting research completed since summer 2002 on the effects of pollock fishing, if any, on SSL critical habitat as well as discussion of ongoing research projects relating to the impact of pollock fishing, if any, on foraging sea lions. AFSC informs APA that the agency conducted research in 2004 (the so-called Chiniak study) on this specific issue. The report will include also discussion of research results reported in 2004 indicating that localized depletion of Pacific cod was not evident in an AFSC experiment that included control areas and areas in which cod trawling occurred.

APA believes that it would be beneficial also to provide to the certifier an update on research on competing, and perhaps more salient, hypotheses relating to SSL populations, including the effects of "regime shifts" and killer whale predation on SSL populations.

APA will also provide a written review prior to the first annual audit by the certifier of the effects, if any, of the de minimis amount of fish discarded by GOA pollock fishing vessels on scavenging seabirds. AFSC reports that Dr. Ann Edwards, a post doctoral fellow from the National Research Council, will be conducting relevant research on this topic. APA will provide to the certifier progress reports prepared by Dr. Edwards as well as the project's findings. Additionally, APA is participating in a seabird study that will include an inquiry into seabird foraging activities and potential interactions with pollock catcher/processor vessels. This study is partially funded through a grant by NMFS. APA will present the results of this NMFS-funded research program to the certifier prior to the first annual audit.

Condition #6—

Indicator 1.2.3. Research is carried out to allow impacts of the fishery on the biodiversity and structure of invertebrate and vertebrate communities in relevant habitats to be identified, measured, and understood in terms of functional relationships.

Condition: To improve the deficiencies in performance for this indicator, research must be implemented to describe:

1. Relationships between Steller sea lion (especially as this relates to foraging economics or sea lion foraging distribution) and pollock prey abundance at the regional scale related to stock size and stock geographical distribution;
2. Relationships between Steller sea lion foraging behavior (especially as this relates to foraging economics or sea lion foraging distribution) and pollock prey abundance at the local scale related to putative fish school disruption in localized areas caused by trawling;

3. Plans for these research projects will be sent to the SCS team for review, and then initiated no later than the following calendar year. Where research leads to new information relevant to management, appropriate changes in management will be required.

APA's Plan for Condition #6: *This Condition and Action Plan response are substantially the same for the BS/AI and GOA pollock fisheries. APA will provide a thorough written report to the certification body within 6 months of the issuance of the certificate on the status of research relating to SSL foraging behavior and pollock prey abundance at the regional and local scales. While the Condition calls for research to be "implemented," APA believes that the accounting of NMFS' research program provided under APA's responses to other Conditions will satisfy this Condition. APA will include in its report an assessment of work on this issue funded by the FY 2005 appropriations bill for NOAA, which was enacted in late November 2004.*

APA proposes that the certifier focus on this issue at the first annual audit. APA will request a meeting with relevant AFSC staff, the certifier and APA so that the certifier can understand fully the agency's program with regard to this issue.

Tasks performed under other Conditions will be coordinated with the response to Condition #6.

Condition #7—

Indicator 1.3.3. Data on spatial and temporal variations in abundances of animal populations and communities have been synthesized into a set of internally consistent explanatory hypotheses that can provide the basis for making predictions about future system states and consequences of management actions.

Condition: To improve the deficiencies in performance for this indicator, the fishery must provide the SCS team with information on ecosystem modeling being carried out to investigate whether increases in jellyfish or arrowtooth flounder are likely to be due to reductions in pollock biomass consequent to fishing.

Concerns regarding the relationship between the pollock fisheries and SSLs are dealt with under Indicator 2.3.1.

APA's Plan for Condition #7: *Within six months of the issuance of the GOA pollock certificate APA will meet with the authors of the GOA food-web model and request that a sensitivity analysis be carried out whereby perturbations to the pollock biomass, similar in scale to historic fishery removals, are analyzed with regard to their possible effects on arrowtooth and jellyfish biomass in the GOA. Prior to the first annual audit, APA will provide the certification body with a summary of the analyses conducted*

by NMFS. If the certification body determines that the information does not adequately satisfy the condition, APA will within three months of the annual surveillance provide a revised action plan to the certification body outlining how and when the condition will be fully met.

APA Summary of Existing Information

APA believes that research carried out since the completion of the original assessment may well satisfy the condition. With regard to whether increases in jellyfish or arrowtooth flounder are likely to be due to reductions in GOA pollock biomass consequent to fishing, ecosystem modeling in the GOA has advanced since the certification team first examined the pollock fisheries. In particular, researchers at the AFSC have now parameterized a stock-scale food-web model of the GOA. The model consists of 130-140 functional (species) groups, including lower trophic levels, fish, birds, and mammals. The purpose for developing the model is to provide stock assessment authors with information and biomass time trends appropriate for identifying possible predator, prey, or bottom-up forces that might be influencing fish-stock growth and distribution patterns (2004 AFSC SAFE Ecosystem Considerations for 2005, pp. 35-36). The GOA model includes pollock, arrowtooth flounder, and jellyfish as species groups and could be used to investigate whether increases in jellyfish or arrowtooth flounder are likely the result of reductions in GOA pollock biomass due to fishing.

In addition, the 2004 GOA pollock assessment includes a new section on ecosystem considerations that draws on results from the GOA food-web model to evaluate potential first-order trophic interactions between pollock and other ecosystem components. These results indicate that arrowtooth flounder is the most significant predator on both juvenile and adult walleye pollock, with predation of adult pollock by arrowtooth flounder estimated at more than twice the level of the trawl fishery (Figure 1.31). Further, gelatinous zooplankton are believed to comprise very small fractions (less than five percent) of the diet of both juvenile and adult walleye pollock (Figure 1.30). As such, it is difficult to imagine potential trophic linkages that would allow the adult pollock biomass to control either arrowtooth flounder or jellyfish biomass in the GOA.

Condition #8—

Indicator 2.1. The fishery is conducted in a manner, which does not have unacceptable impacts on biological diversity at the genetic, species or population level of endangered, threatened or protected species.

Condition: To improve the deficiencies in performance for this indicator, the fishery must:

1. Adjust management as described in the Conditions under Indicator 1.1.
2. Improve published reports by management agency on bycatch taken by the pollock fishery by structuring the reports to show data by species, vessel type, location of hauls, time of hauls, relationship to SSLCH, and by quarters, while protecting the rights afforded fishers under the law to protect against the release of certain proprietary information.

APA's Plan for Condition #8: *This Indicator and Condition have identical wording to the BS/AI report. The Action Plan response for the GOA has been amended to reflect the differences in the two fisheries. Item #1 of this Condition is discussed in Condition #4 of the Action Plan. Item #2 above contains an apparent contradiction by requesting that NMFS publish information on bycatch in the pollock fishery on a vessel-by-vessel basis while noting that such action would violate confidentiality rights provided to fishers under the Magnuson-Stevens Act. The reports correctly note the de minimis discard levels in the BS/AI and GOA pollock fisheries and note that the agency maintains an excellent pollock catch data programs as part of NMFS' precautionary approach to minimizing the impacts of fishing on the environment.*

APA will request that NMFS prepare a report within 12 months that meets the issues raised in provision #2 of Condition #8. APA will provide the report to the certification body. APA will request a meeting with NMFS and the certification body to determine the utility of such report, and if it is found to be useful, determine the feasibility of the agency preparing such a report on an annual basis.

Condition #9—

Indicator 2.2.1. The management system keeps impacts of the fishery on protected species within agreed and reasonable bounds, and keeps impacts on threatened or endangered species within the limits set by the Endangered Species Act.

Condition: With regard to Steller sea lion (SSLs), current management measures regulating fishing in SSL critical habitat were developed, in large part, based on satellite telemetry data collected to define important SSL foraging areas. To improve the deficiencies in performance for this indicator, the team calls for rigorous peer review of the telemetry data analysis given the significant role of the telemetry data in setting the regulatory regime. Given these considerations, the evaluation team sets for the following conditions:

1. The analysis of the satellite telemetry data and results used to justify the 2001 BiOp should be subject to external peer review and the results of such review shall be available to the certifier within 6 months of issuance of the certificate for the GOA fishery. NMFS should submit the telemetry data analysis to the Center

of Independent Experts (CIE). The University of Miami's CIE administers a review process, drawing from a formal pool of qualified scientific experts, ensuring the selection of a panel free from the influence of either NMFS or other groups with a vested interest in the review's findings. It is very important that the panel should contain 2 or members with expertise in the analysis of PTT data from marine vertebrates.

2. The management system should consider the input received from the CIE review and act appropriately.

APA's Plan for Condition #9: *With the exception of references in the BS/AI report to northern fur seals, this Indicator, Condition and Action Plan response are the same between the two reports.*

APA believes that significant internal and external peer review of the referenced telemetry data has occurred since the initial drafting of this Condition in 2002, including reviews conducted under the auspices of the Center for Independent Experts (CIE). Should the CIE reviews not be published by the first annual audit, APA will request of NMFS that the certification body be allowed to review draft reports or that NMFS provide a presentation to the certification body summarizing the CIE findings. APA will also submit to the certification body reviews conducted under the CIE program when such reviews are published. APA will also provide summaries of other relevant papers, articles or other published material relating to this subject. APA will consult with the certification body on the findings and determine whether follow-up discussion with AFSC is necessary.

As a side note, the certification body should also be aware that presentations by NMFS' scientists at a September 2004 Sea Lions of the World Conference in Anchorage reported promising results of increases in sea lion populations in the BS/AI and GOA areas. Noting the National Research Council's 2003 report determined that fishing activity is a second-tier hypothesis proposed to explain the decline of SSL populations and recent NMFS reports of increasing SSL populations, the certification body might consider re-evaluating the scope of work required under this and other similar Conditions after reviewing scientific findings since 2002.

Condition #10—

Indicator 2.3.1. Assessments are conducted to identify and estimate impacts of the fishery on protected, endangered, threatened or icon species.

Condition: To improve the deficiencies in performance for this indicator, the fishery must design and carry out experiment(s) to test the possible impact of the pollock fishery on Steller sea lions by comparing outcomes of regulated levels of fishing in experimental and control areas on SSL behavior, breeding and population trends. The NRC report

(Committee on the Alaska Groundfish Fishery and Steller sea lions, 2002) recommends that the fishery should design and carry out an experimental test of the hypothesis that fishing influences SSL population dynamics. We support the goals and objectives of the NRC's prescribed action, but appreciate that it would be inappropriate to suggest increasing pollock fishing intensity to levels that increase jeopardy (in the legal sense) to SSL populations and that there are complex scientific and legal issues involved. Therefore, it will be necessary to design this experiment in such a way that comparison can be made between areas where fishing intensity is reduced with areas where it is maintained at levels comparable to those in the recent past (but perhaps within this limit still increased by as much as the decrease in harvest lost to industry from reduced fishing areas). The hypothesis to test would then be that SSL numbers or productivity in reduced fishing areas would show a positive deviation relative to values in fished areas, and the null hypothesis that performance of SSL would be no different between areas. Such an experiment should be underway no later than 2006.

APA's Plan for Condition #10. *This Condition is identical for the BS/AI and GOA pollock fisheries; however, the certification body required changes from the version approved for the BS/AI Pollock Action Plan. The Final Reports on BS/AI and GOA Alaska pollock recognize the legal and practical impediments identified by fishery management authorities and scientists to conducting the controlled area experiments proposed by the National Research Council (NRC) in 2002. In addition, NMFS' scientists have provided fishery management authorities with a detailed analysis of the substantial cost of such experiments, the decades-long commitment required for such a program and the likely prospect that the findings would be inconclusive.*

Notwithstanding the issues identified above, APA is aware that AFSC is in its fourth year of research testing the localized depletion hypothesis and will continue with its program if FY 2005 funding is available through Congressional appropriation. (See discussion under Condition #5 above.) NMFS' previous work on possible fishing effects on SSLs has examined fisheries for Alaska pollock, Pacific cod and Atka mackerel. APA will request a meeting with AFSC and the certifier within six months to review research results to date and to discuss ongoing research. APA will consult with the certifier and AFSC prior to the meeting to ensure all issues relevant to both groups are addressed at the meeting. APA and the certifier conducting the post-certification audits have agreed that the members of the original assessment team shall be consulted as well. In addition, APA will propose that the meeting include a thorough discussion on the current state of research on hypotheses relating to possible effects of pollock fishing on foraging sea lions, including agency-sponsored research and research projects conducted under the auspices of the Alaska SeaLife Center, the Pollock Conservation Cooperative Research Center, the North Pacific Research Consortium, and other noted authorities such as the recent work by Dr. Marc Mangel contracted by NMFS through MRAG Americas Inc.. A review (summary of the meeting result) will be prepared by APA. In specific, the review will contain a thorough analysis of how the current research meets the condition, which is to conduct a direct experiment. APA will prepare and provide this report to the

certification body detailing actions and timelines for meeting the objectives of this condition should the results of the meeting between APA, NMFS and the certification body identify continuing research needs to meet the condition.

Tasks performed under this Condition will be coordinated with the responses to Condition #5, Condition #6 and Condition #7.

Condition #11—

Indicator 3.3. There are sufficient data, and understanding of functional relationships, to determine what changes in fishery management are necessary to recover depleted populations of impacted species.

Condition: To improve the deficiencies in performance for this indicator, it is important that the fishery be able to determine the effects of pollock fishing on other species in the area other than Steller Sea Lions. Specifically, SCS is requiring that the fishery also collect data on harbor seals, kittiwakes and murres, when conducting the work required under Condition 2.3.1.

APA's Plan for Condition #11: *With the exception of the reference in the BS/AI report to fur seals, the Condition and Action Plan response are identical. The tasks identified under Condition #5, Condition #6, Condition #7 and Condition #10 are relevant to this Condition. The tasks performed in meeting those Conditions will be completed in such manner as to fulfill obligations identified under Condition #11.*

MSC Principle Three.

Condition #12—

Indicator 2.2. The fishery is managed and conducted in a manner that respects domestic law *[Relates to MSC Criterion 3.16]*

Condition: To improve the deficiencies in performance for this indicator, the fishery is required to remain in compliance with the pertinent outstanding orders of the U.S. District Court for the Western District of Washington and the settlement reached before the U.S. District Court for the District of Columbia in the EFH controversy. The fishery must, in particular, meet the terms of the Order dated April 1, 2003, which sets specific deadlines in 2003 and 2004 for completion of ESA- and NEPA-related analyses and procedures. That Order requires NMFS to revise its 2001 Steller sea lion biological opinion not later than June 30, 2003 and to issue the final PSEIS (and a decision based on the analysis) not later than September 1, 2004. The revised Steller sea lion biological

opinion was signed on June 19, 2003.[1] As of May 2004, NMFS reports that it expects to release the final PSEIS in June 2004, and will issue a final Record of Decision based on the EIS not later than September 1, 2004.[2]

The assessment team advises that it will be strongly inclined to reconsider the score for this indicator if harvest regimes are set for upcoming years that have the result of placing harvest activities in areas of designated critical habitat for ESA-listed species unless the impacts of those activities on listed species are analyzed and documented in a manner consistent with the high standards of scientific technique and public involvement of which the fishery management system is capable. The scoring of this indicator will be revisited, and likely revised downward, if a court finds that the fishery is being managed in a manner that fails to comply with any significant provision of applicable law, whether or not the issue in question has been the subject of prior disputes.

APA's Plan for Condition #12: *The Condition and Action Plan response is identical for the BS/AI and GOA pollock fisheries. On August 26, 2004, NMFS issued a Record of Decision documenting its decision to select the Preferred Alternative set forth in the Alaska Groundfish Fisheries Final Programmatic Supplemental Environmental Impact Statement (PSEIS) for the management of the BS/AI and GOA groundfish fisheries. Within 2 months of the issuance of a certificate, APA will provide to the certifier all pertinent Court and agency documents. We believe that this material will demonstrate to the certifier that the Condition has been met. APA will also organize a meeting between APA and the certification body to review the materials and determine if further actions are required to meet the condition.*

Condition #13—

Indicator 3.1. The management system solicits and takes account of relevant information *[Relates to MSC Criterion 3.2]*

Condition: To improve the deficiencies in performance for this indicator, the fishery must take affirmative steps to ensure that information and opinions submitted by stakeholders who do not represent the interests of the commercial fishing industry are given fair, professional, and transparent evaluation at all levels of the management system. The assessment team requires that the management system, ideally NMFS or the Council, commission, publish, and openly review an independent evaluation of the manner in which non-industry stakeholder information and opinions have been addressed in a representative set of circumstances identified by stakeholder interests. The evaluation should identify opportunities for procedural and substantive improvements, including measures to provide greater transparency and accountability to the process.

[1] http://www.fakr.noaa.gov/protectedresources/stellers/biop2002/703remand.pdf
[2] http://www.fakr.noaa.gov/sustainablefisheries/seis/news13.pdf

The assessment team believes that the North Pacific Council and NMFS both would benefit from a candid evaluation of the quality and character of the procedures and practices by which the various layers of the management system invite and accommodate information that challenges the status quo. The management system should consider this type of inquiry to be fundamental to achieving continual improvement in the quality of its management practices and, thus, its service to the public. Though not a requirement, the assessment team recommends that the independent review consider the recommendations for improvement in Council processes proposed by the Heinz Center in 2002, the Pew Oceans Commission in 2003, and the U.S. Commission on Ocean Policy in 2004.

The evaluation required by this condition must be performed and published not later than 18 months following finalization of this assessment report. The North Pacific Council must consider and discuss in a regularly-scheduled public meeting the evaluation report, including all recommendations, not later than 6 months following publication of the report. The Council's actions, if any, in response to the report will weigh heavily in future reviews of the fishery management system and may significantly affect the score for this indicator.

APA's Plan for Condition #13: *The Condition and Action Plan response are identical for the BS/AI and GOA pollock fisheries. There are few Conditions where APA disagrees more with the certification body's action than on this matter. In its original submission, APA noted that the Magnuson-Stevens Act, the Administrative Procedure Act, the National Environmental Policy Act, the Endangered Species Act and numerous other federal laws provide extensive opportunities for stakeholder participation and comment in the fishery management process. At the regional level, environmental stakeholders participate in standing and ad hoc council committees and are provided extensive opportunities for influencing Plan Teams, the SSC and the Council. Moreover, the culture in NMFS at the national and regional level is to encourage dialogue with all stakeholders, and the legitimate concerns of stakeholders are weighed equally.*

Unfortunately, certain environmental stakeholders are not content when NMFS or the Council declines to adopt stakeholder recommendations that are not supported by science. The assessment team should not be surprised that certain environmental stakeholders, particularly those funded by the Pew Trusts ocean campaign, criticize the management system when their views are not adopted wholesale by managers. Remember, these are the same organizations that petitioned the MSC to bar the Alaska pollock fisheries from being assessed under the MSC program. Also, when the assessment team and peer reviewers, who were selected from a list of candidates agreeable to environmental stakeholders, did not endorse many of the same unsupportable positions previously put to the management authority, environmental stakeholders continued bad faith efforts to undermine the sustainability determination.

Nonetheless, the certification body raises issues of transparency and accountability in the management system. As with issues raised in other Conditions,

there have been significant developments to consider since this Condition was drafted. Most prominently, the Pew Trusts' oceans campaign is lobbying aggressively to take away the authority from regional councils to develop conservation and management measures. Legislation was introduced in Congress in June 2004 that would accomplish Pew's goal, and while it was not enacted, it is likely that such legislation will be offered in the upcoming Congress.

In September 2004, the U.S. Commission on Ocean Policy (USCOP) published its final report with recommendations intended to strengthen U.S. ocean policy, including improving fisheries management. Among other recommendations, the USCOP would enhance the authority of Councils' scientific panels and require governors to nominate non-fishing representatives as council candidates.

Congress is expected to begin work early in 2005 to reauthorize the Magnuson-Stevens Fishery Conservation and Management Act. With Congress poised to consider proposals that could dramatically transform the council system, it would not be a useful exercise to review the existing system. APA will provide quarterly updates to the certification body on Congressional action relating to Magnuson-Stevens Act reauthorization, specifically, legislative activity focusing on the structure and authority of regional fishery management councils.

If for some reason, the Magnuson-Stevens reauthorization process is not moving forward, APA will meet with the certifier as soon as practical after receiving a quarterly update that reports such information, and determine the appropriate course of action for meeting the objective of this Condition.

Condition #14—

Indicator 5.1. The management system provides for internal assessment and review *[Relates to MSC Criterion 3.3]*

Condition: To improve the deficiencies in performance for this indicator, the fishery must demonstrate the existence of a periodic, candid and authoritative internal review process for pollock fishery management procedures and outcomes and publish the results of such a review process. The initial review must address the issues expressed and implied by the five questions posed above. A subsequent review must be performed not later than two years following the initial review. The managers may wish to consult with the U.S. Institute for Environmental Conflict Resolution or other entities with expertise in dispute resolution in the context of natural resource management. The terms of this condition must be fulfilled within one year after final approval of this assessment report.

APA's Plan for Condition #14: *The Condition and Action Plan response is identical for the BS/AI and GOA pollock fisheries. APA will meet with NMFS officials*

within 6 months of the issuance of the certificate to discuss the feasibility of the internal review proposed in this Condition, including the availability of funding and the practicality of incorporating additional internal reviews into the management process. At the first annual audit, APA and the certification body will discuss the outcome of APA's consultations with the agency. APA will then submit a revised action plan and timelines within 3 months of the first annual audit ensuring that the objectives of this condition are met by the second annual audit. APA will also provide the certification body with a progress report at 6 months after the first annual audit detailing work to date on meeting the condition.

Submitted by the At-Sea Processors Association

By: Jim Gilmore, APA

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