



To: Marine Stewardship Council Certification – 2008 Surveillance Audit  
Certification Body: Moody Marine Ltd.  
From: Kenai River Sportfishing Association  
Date: May 16, 2008  
RE: Comments on Cook Inlet Surveillance Audit

Thank you for the opportunity to provide comments on the annual surveillance audit of the Alaska Commercial Salmon Fisheries. Kenai River Sportfishing Association is a 501 c 3 non-profit fishery conservation organization located in Soldotna, Alaska. Through our work in fisheries management and research, we are very engaged in the management and oversight of the Cook Inlet salmon fisheries. We share the Marine Stewardship Council's objective of sustainable and well-managed fisheries. We understand that the MSC identified five (5) areas of concern for Upper Cook Inlet salmon stocks during the 2007 recertification process. Toward that end, we offer the following comments regarding changes in management of the commercial salmon fishery in Upper Cook Inlet that we believe will address Conditions of Certification raised in the recent assessment.

Upper Cook Inlet fisheries are managed under a suite of interrelated management plans which have been approved by the Alaska Board of Fisheries (Board). During the 2008 regulatory meeting of the Board a number of significant changes were made to these plans. These changes included significant liberalization of commercial fisheries for sockeye, chinook and coho, and increased commercial fishery management discretion to implement management measures outside of existing management plans to access large returns of strong Kenai and Kasilof sockeye stocks. These changes raise significant questions regarding the adequacy of protective measures for other less productive (Susitna sockeye) or poorly monitored (Kasilof Chinook, early-run coho) stocks and the consistency with conditions established by the MSC for continuing certification. A detailed description of those concerns follows:

***Condition 35. Complete evaluations of sockeye and assess Kasilof chinook stock composition in fisheries to ensure accuracy of post-season analyses and clarify effectiveness of inseason time and area management. [Upper Cook Inlet]***

#### Sockeye

Genetic stock identification studies for sockeye were implemented in 2005-2007 and initial results were reported in December 2007 (ADFG Fishery Manuscript 07-17). Results highlight the very high power of the SNPs genetic method for accurate stock identification. Initial results suggest that time and area stock composition is substantially different than has been previously assumed. For instance, significant numbers of Susitna sockeye are harvested in some periods in east side set net fisheries while historical run reconstructions assumed that no Susitna sockeye were harvested in this fishery. However, the analysis and results are incomplete. Only a portion of the samples from each year were analyzed and all portions of the fishing season were not evenly represented. Samples do not provide needed information

on some fishing times and areas (e.g. the effectiveness of corridor restrictions for protecting Susitna sockeye). GSI results have not been systematically compared to the long-used age-based stock apportionment method in order to evaluate biases in the historical dataset and run reconstructions that provide the basis for escapement-based management of all UCI sockeye stocks. Further, run timing and fishery patterns during the study period were not typical and may not be representative of other years. The priority and plans of additional genetic stock identification work for UCI sockeye remain unclear.

Completion of previous genetic studies and implementation of an annual genetic sampling program for sockeye stock identification are requisite to accurate assessments of run strength, harvest, and productivity of UCI sockeye stocks.

### Kasilof Chinook

No effective Chinook stock identification methods have yet been implemented for UCI commercial fisheries. East side set net fisheries currently harvest significant numbers of Chinook which are apportioned by historical practice to the Kenai late run. Intensive sockeye commercial fisheries are prosecuted in the Kasilof area with sockeye exploitation rates approaching 70-80% in some years. This fishery has a significant potential of overharvesting the Kasilof late-run Chinook stock. However, harvest of late run Kasilof Chinook is not estimated. Escapement has been estimated with mark-recapture studies in recent years but is not estimated or indexed in-season. Existing escapement and harvest data for Kasilof Chinook does not appear to meet the standard identified by the MSC condition or criteria. Meaningful setnet fishery closure windows would provide an effective alternative to protecting Kasilof Chinook escapement in the absence of accurate escapement or stock identification data. However, current practice allows for closure windows to be set aside to maximize yield of Kasilof sockeye.

***Condition 36. Develop appropriately reliable estimates or indices of escapement for Susitna sockeye and Kasilof Chinook and incorporate into fishery management practices. [Upper Cook Inlet]***

### Susitna Sockeye

ADFG has implemented a series of Susitna sockeye escapement studies (weirs, mark-recapture) that indicate Yentna (Bendix) sonar counts are significant underestimates of actual escapement but appear to be an effective index based on significant correlations with juvenile sockeye abundance in sockeye rearing lakes. In addition, Didson sonar technology is being evaluated as an alternative for the old sonar system. It is expected that continuing work will provide a reliable basis for Susitna sockeye enumeration.

We have concerns with the way Department staff is making application of these results to management. For example, sonar systems within the Kenai River utilize Bendix technology as does the system on the Yentna. These systems have a proven track record of indexing escapements well. The fact that mark recapture estimates for Yentna river sockeye suggest an undercount by the (Bendix) sonar is entirely consistent with the performance on other river systems and is not cause for dismissing the need to manage for, and attain, management targets based on sonar counts. And yet, that is precisely the tact being taken by Department managers.

## Kasilof Chinook

Kasilof Chinook mark-recapture studies have been conducted in several years but information is not adequate for in-season management purposes.

To date there remains no escapement based management objective for these stocks and no long term monitoring program has been designed or implemented to provide those objectives. Kasilof Chinook remain largely absent from the suite of interrelated UCI salmon management plans, leaving a void of management objectives and direction.

***Condition 37. Review stock status of Susitna sockeye and develop an action plan intended to ensure achievement of Susitna sockeye escapement goals. Action plan should provide specific goals and an anticipated timeline for achieving the goals (see condition under Principle 3 for Indicator 3.4.1.2 [Upper Cook Inlet])***

The 2008 Board of Fisheries reviewed current stock status information provided by ADFG and designated Susitna sockeye as a stock of yield concern based on a chronic inability to maintain expected yields above the escapement needs. This stock has now failed to reach minimum sustainable escapement goals in 6 of the last 9 years including 2007.

The best available scientific information from recent research indicates that, while sonar counts underestimate actual escapement, they are an accurate index of escapement and an appropriate basis for existing escapement goals as adopted by ADFG. The BOF adopted an action plan that described existing management plans, recent research aimed primarily at evaluating the accuracy of historical escapement estimation and a series of proposed stock assessment and limiting factor research projects. The BOF also clarified that meeting the low end of the Yentna sockeye escapement goal takes precedence over not exceeding the top end of the Kenai and Kasilof escapement goal ranges, but at the same time, provided increased flexibility for the commercial fishery manager to prosecute more aggressive fisheries on Kenai and Kasilof sockeye. These commercial fisheries occur before significant numbers of sockeye reach the Yentna counting station and before Susitna sockeye run strength can be accurately assessed.

The action plan fails to include specific measures for restoring depleted Susitna sockeye populations, goals, or a timeline schedule for restoration as specified in condition 37. Given that current management plans are the same as those that have resulted in a chronic inability to meet minimum escapement goals, we remain concerned whether the current action plan will provide adequate protection to ensure that escapement goals are consistently met. Based on past practice, our fear is that the commercial fishery will continue to be managed to maximize harvest of the strong Kenai and Kasilof stock at the expense of the weaker Susitna stock.

We suggest that a more effective action plan would include:

- 1) mandatory corridor restrictions of drift net fisheries during early-mid July to protect northern district fish;
- 2) exploitation rate or effort limitations on east side set net fisheries to avoid excessive harvest of northern district sockeye which research has shown to be harvested in significant numbers during some years;
- 3) in-season genetic monitoring of sockeye stock composition in the ongoing test fishery to assess Susitna sockeye run strength and timing; and

- 4) continuing annual genetic stock identification studies of the upper Cook Inlet commercial sockeye harvest in order to accurately assess harvest and productivity by stock.

***Condition 38. Develop a method for specifically setting an LRP that is comparable to the SET (Sustainable Escapement Threshold) outlined in the Sustainable Escapement Goal Policy (see Condition under Principle 3, Indicator 3.1.1) [Upper Cook Inlet]***

Alaska's sustainable salmon policy identifies a Sustainable Escapement Threshold but SET's have not been identified for any stock in Alaska. "Sustainable Escapement Goal Thresholds" have been defined for some Prince William Sound stocks but these are merely the lower end of a yield-based escapement goal range rather than a conservation-based threshold. However, considerable work and attention has gone into the effects of sockeye escapements exceeding escapement goal ranges. Concern for foregone yield from large escapements continues to be a driving force in UCI commercial fishery management. Limit reference points are intended to identify critical low escapement levels below which fishing does not occur. The lack of an effective LRP for the less productive Cook Inlet salmon stocks including Susitna sockeye continues to favor strong-stock management for Kenai and Kasilof sockeye at the risk of significant conservation and sustainability concerns for other stocks harvested in these mixed stock fisheries.

***Condition 39. Evaluate appropriate existing age-sex-size information to determine if fisheries are exerting significant selectivity; continue ASL sampling in fisheries and several spawning stocks to continue a database for long-term evaluation of potential fishery selectivity. [Upper Cook Inlet]***

Fishery selectivity for different stock components remains a significant concern for Cook Inlet sockeye fisheries. Genetic data for sockeye, coho, and Chinook has repeatedly shown that each Cook Inlet stock is an aggregate of substocks returning to many different watersheds with often different run timings. Recent sockeye telemetry studies in the Susitna and Kenai have highlighted a widespread distribution, tremendous life history diversity and complicated metapopulation structure of these runs which continue to be treated as single aggregate stocks for fishery management purposes. At the same time, a recent ADFG review of statewide sockeye production has found that Kenai and Kasilof sockeye are among the most heavily-fished sockeye runs in the state (Clark et al. 2007, Special Publ. 07-17). At estimated exploitation rates of 70-80% on these stocks, fishery selection for different portions of the run means that some subcomponents are being fished at higher rates which risk long term effects on the substock diversity and productivity. It may well be this effect explains at least part of the apparent decline in productivity of Susitna sockeye which are among the most diverse in the inlet. Upper Cook Inlet fishery management plans include prescribed commercial fishery closure windows designed to provide conservation benefits by distributing escapement throughout the duration of the run, as well as providing a regular supply of fish to in-river fisheries. However, recent management plan changes and current management practice sets aside the fishery closure windows to maximize yield in years of large returns of Kenai or Kasilof sockeye. This is a clear case of fishery yield objectives trumping conservation concerns and appears directly contrary to the precautionary management principles identified in Alaska's Sustainable Salmon Fishery Policy.

We offer these questions and suggestions with the objective of developing a clear and effective path toward continuing certification of the Upper Cook Inlet commercial salmon fishery. The commercial fishery has long been an integral part of the social fabric and economy of Southcentral Alaska. Sustainable salmon fishery management is an objective fundamental to all Alaskans.

Thank you for the opportunity to provide these comments.