

Alaska Salmon Fisheries

**Annual Surveillance Report As Required Under the Marine Stewardship Council
Program
2003 - 2004**

Prepared for: Alaska Department of Fish and Game
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General Information

Certified Fisheries	Commercial Alaska Salmon Fisheries	Alaska, United States
Fishery Agency	State of Alaska, Department of Fish and Game	Capitol Office Park 1255 W. 8th Street P.O. Box 25526 Juneau, Alaska 99802-5526
Fishery Contacts	Doug Mecum	907-465-4210
Species	5 species of salmon	
MSC Registration No.	SCS-MFCP-F-0004	
Certification Date	October 2000	
Certification Expiration Date	October 2005	
Certification Body	Scientific Certification Systems, Inc. (SCS)	2000 Powell St., Suite 1350, Emeryville, CA 94040
Surveillance Team	Chet Chaffee, Ph.D. (SCS)	Project Leader
	Dayton Lee Alverson, Ph.D. (Natural Resources Consultants)	MSC Principle 3 - Fishery Management
	Louis Botsford, Ph.D. University of California, Davis, California)	MSC Principle 1 - Stock Assessment
Surveillance Stage	Annual Surveillance 2003 - 2004	Report Date – 30 August 2004

Summary of Findings

This report describes the annual surveillance audit of the MSC certified Alaska salmon fisheries.

The surveillance found that ADF&G's general management of Alaska's salmon fisheries is being maintained at a level commensurate with that observed during the initial certification assessment.

One important point was raised by a Board of Fisheries member (Dr. Fred Bouse) during this year's surveillance, and therefore was delved into in some detail. SCS takes concerns provided by stakeholders seriously and looks into them in reasonable detail. When a stakeholder raises issues, and shows significant concern over recent management decisions, it highlights for SCS debates within the management system on the appropriate management measures to take in the fishery. As a result, this heightens SCS concerns over the management of the salmon fisheries in Alaska, and suggests that the upcoming re-assessment, should ADF&G decide to maintain its certification, will need to look even more closely at the issues raised in this surveillance report.

Background

The Alaska salmon fisheries were originally certified October 2000 by Scientific Certification Systems, Inc. The requirements of the Marine Stewardship Council (MSC) are that certified fisheries must undergo at a minimum an annual surveillance to ensure the basis of certification is still in place and that the fishery is meeting any conditional requirements from the original certification. At the end of the 5-year certification period, the fishery must complete a re-certification before the anniversary date of the original certification to ensure the uninterrupted use of the certificate and the MSC logo. Should the fishery either fail the surveillance audits or re-certification, the use of the certificate and the MSC logo can be revoked by the certifier and the MSC or may simply lapse.

This report represents the last annual surveillance before the Alaska salmon fisheries are due for re-certification. The issues for the certifier are whether the fisheries have sufficiently met all the required conditions set forth in the original certification report, whether the salmon stock are still as abundant and robust as 5 years ago during the initial assessment, and whether the management system has maintained its robustness over time. It is the certifier's job to determine the answers to these questions and to decide whether to continue the certificate until a re-certification can be completed or to fail a fishery and revoke the certificate.

The continued use of a certificate, or more importantly the loss of an issued certificate, are important and far reaching circumstances that can affect a fishery politically and socially, and most important of all economically. In fact, losing a certificate is probably more problematic than never achieving the certificate in the first place as it affects the entire value chain built up and around the value added use of the MSC logo. That is one

of the great fundamental strengths of the MSC program – the market incentive that drives fisheries to meet standards for good long-term fisheries management.

A number of things can and do happen in a fishery that can support or detract from continued certification. These can range from small inconsequential issues like missing some analyses or timelines for dissemination of information to stakeholders or the MSC to large important issues such as failure to be able to determine the status of a stock or understanding of significant ecological impacts in a fishery. It is the certifier's job to determine whether the type and magnitude of a failure (or non-conformance) is sufficient to warrant the revocation of a certificate.

To ensure that no action is taken lightly, surveillance audits must be taken very seriously, not conducted in haste, and provide thorough reviews of the highest possible scientific and technical calibre. It is these objectives that are of most importance in maintaining the integrity of the MSC system.

The MSC requirement for an annual audit is that certifiers provide a surveillance report no more than 30 days from the time of the audit and that an annual surveillance audit be conducted to coincide with the anniversary date of the original certification. In the case of Alaska salmon, it was agreed after the initial certification that surveillance audits would actually occur and conclude 6-8 months after the anniversary date of the original certification to coordinate the gathering of data on many of the state fisheries. Given that there is a Board of Fisheries cycle already in place that reviews at least one third of the state's salmon fisheries each year, it was most efficient for the MSC annual surveillance to coincide with these reviews rather than require Alaska Department of Fish and Game (ADF&G) to gather, summarize, and report on fisheries in a duplicative manner.

In the case of the Alaska salmon fisheries surveillance, the actual audit process has lasted almost 5 months – from the time of asking the initial questions (April 2004) to the receipt of final materials from the fishery (July 2004). While it would have been possible to perform a perfunctory annual audit in less time, it would not have maintained the value in the MSC system and could very likely have led to missing crucial information and issues in these fisheries. One has to remember that in the state of Alaska there are hundreds of salmon fisheries and thousands of genetically distinct salmon runs. Even reviewing only one third of the state's salmon fisheries each year takes a long time. As an assessment team, we made every effort to fully understand the issues in the fishery so we could properly determine which activities have been successful and which, if any, need further attention. In so doing, we were forced by the sheer bulk of the information to allow additional time for the fishery client (ADF&G) to provide answers to the questions we posed, as well as for our assessment team members to wade through the information. As a result, this assessment report is being completed beyond the timeline initially estimated.

It is also important for all to remember that is an MSC requirement that assessment team members be of significant expertise and scientific standing. Finding and contracting professionals of this calibre in and of itself poses the constant problem of scheduling

time for the review process to be completed while working around people's existing schedules. Each year SCS has allotted additional time and started the surveillance process months ahead of an anticipated completion date. Yet each year the information requirements and work loads have varied and this, combined with scheduling conflicts, have simply required more time than estimated.

SCS will continue to strive to uphold the intent of the MSC process which is to provide a comprehensive and expert assessment of a fishery management system, not just an audit for audit's sake. Anything less would reduce the value of the MSC program in the marketplace for the fishery, the fishermen, stakeholders, and the MSC. In the case of Alaska salmon, this is most certainly true as the outcomes of the Alaska salmon process have affects that reach farther than just Alaska salmon fisheries, but reflect on the processes and potential outcomes for salmon fisheries all along the west coast of the United States and Canada.

Basis of the Surveillance Report

The content of this report deals with the questions posed by the certification team for the annual surveillance as well as follow-up to continued issues from past surveillances.

The annual surveillance audit process (as always) is comprised of four general parts:

1. The surveillance team provides questions around areas of inquiry to determine if the fishery is maintaining the level of management observed during the original certification. In addition, the surveillance team requires that the client provide evidence that the fishery management system has taken the necessary actions to meet all conditions placed on the fishery during the initial certification assessment or any previous surveillance audits.
2. The surveillance/assessment team meets with the client fishery to allow the client to present the information gathered in answer to the questions asked by the surveillance team. The surveillance team can then ask questions about the information provided to ensure its full understanding of how well the fishery management system is functioning and if the fishery management system is continuing to meet the MSC standards.
3. The surveillance team presents its findings to the client fishery at the end of the site visit. The results outline the assessment team's understanding of the information presented and its conclusion regarding the fishery management system's continued compliance with MSC standards. Where indicated, the surveillance team may provide the client fishery with additional time to supplement the information provided if the surveillance team finds that there are still issues requiring clarification. In the Alaska salmon fisheries surveillance, this was the case, which means the actual audit was not over until well into July when the client completed its submission of information to SCS.

4. Where appropriate, the client fishery submits final information to the surveillance/assessment team for consideration in the surveillance findings and report. The surveillance team then reviews the final information and submits a final report to the client fishery and the MSC for posting on the MSC website. If there are continued compliance concerns, these are presented as non-conformances that require further action and audits as specified in the surveillance report.

Reports Reviewed

To facilitate SCS's understanding of the information in the fishery, ADF&G provided a number of reports prior to meeting with SCS. ADF&G then met with SCS in June 2004. At this meeting additional information needs were identified, which ADF&G agreed to provide. SCS received the last of the documents in July 2004 and then set out to review them and incorporate the information in this review.

The major documents made available to SCS are shown in the following table. Additional documents were also reviewed.

Pre-Meeting Submission

ADF&G 2004. Staff Comments on Alaska Peninsula/Aleutian Islands Finsfish Proposals.

ADF&G 2004. Staff Comments on Commercial, Sport, and Subsistence Finsfish Regulatory Proposals for the Bristol Bay Area. December 9-17, 2003.

ADF&G. 2004 (May). Scheduled progress report for Federal Aid Grant E-5-HP, HCP for Alaska Coastal Species: Studies Related to Listed and Candidate Marine Birds.

ADF&G. 2004. Considerations regarding extraterritorial jurisdiction in the Alaska Peninsula/Aleutian Islands Commercial Salmon fisheries. A staff report to the Federal Subsistence Board.

ADF&G. 2004. Open fishing time available to purse seine and drift gillnet gear in the South Peninsula June salmon fishery, 1984-2003, and scheduled fishing time for 2004.

ADF&G. 2004. Petitions for Federal Extra-Territorial Jurisdiction in State Waters of the South Alaska Peninsula for the Protection of Subsistence Fisheries on Federal Lands in Western Alaska. Presented to the Federal Subsistence Board April 2004.

ADF&G. 2004. Summary of Actions by Alaska Board of Fisheries on the June Salmon Fishery in the Alaska Peninsula (Area M.). Submitted to SCS.

ADF&G. Bristol Bay Staff. 2003. Kvichak river sockeye salmon stock status and action plan, 2003. Regional Information Report No. 2A03-26.

ADF&G. History of Area M June Fishery Regulations 1998 to 2004. Provided to SCS June 2004.

Brennan, K. 2001. Kodiak management area commercial salmon annual management report, 2001. Regional Information Report No. 4K01-62.

Brennan, K. 2001. The Cape Igvak commercial salmon fishery. Regional Information Report No. 4K01-63.

Brennan, K., D. Tracy, D. Gretsches, and J. Wade 2001. Perenosa Bay salmon fisheries. Regional Information Report No. 4K01-61.

Burkey, C. 2004. Regional Information Report1 No. 2A03 - 25.

Burkey, C. 2004. South Alaska Peninsula Post-June Salmon Fisheries and Stock Status. Regional Information Report No. 4K04-4.

Burkey, C. 2004. The Southeastern district mainland salmon fishery of Area M, through July 25, the time period of the SEDM management plan. South Alaska Peninsula Post-June Salmon Fisheries and Stock Status. Regional Information Report No. 4K04-3.

Clark, K.J. and K. Bouwens 2003. Chignik fixed-leads monitoring project, 2003. Regional Information Report No. 4K03-55.

Dinnocenzo, J.J. 2003. Aleutian Islands and Atka-Amilia Islands management areas salmon management report. Regional Information Report No. 4k03-64.

Duesterloh, S. and C. Burkey 2003. Alaska Peninsula - Aleutian Islands Management Area Herring Sac Roe and Food and Nait Fisheries Annual Management Report, 2003. Regional Information Report No. 4K03-63.

Honnold, S. and S. Schrof 2001. A summary of salmon enhancement and restoration in the Kodiak management area through 2001. Regional Information Report No. 4K01-65.

Konigsberg, J. 2004. Email to Chet Chaffee. Article in Anchorage Daily News 2 December 2003. DNR Raids Fish and Game Turf.

Murphy, R.L., P. Tschersich, and K. Bouwens 2004. The North Alaska Peninsula salmon report. Regional Information Report No. 4K04-5.

Nelson, P.A., J Hasbrouck, M. Witteveen, K. Bouwens, and I. Vining. 2004. Draft Review of salmon escapement goals in the Alaska peninsula and Aleutian Islands Management Areas. Regional Information Report No. 4K04-.

Pappas, G. 2001. Chignik management area commercial salmon fishery and stock status. Regional Information Report No. 4K01-64..

Pappas, G. and K. Clark. 2003. Chignik management area commercial salmon fishery, stock status, and purse seine cooperative fishery report. Regional Information Report No. 4k03-54.

Sands, T. 2003. Overview of the Bristol Bay salmon fishery 2001-2003. Regional Information Report No. 2A03-27.

Shaul, A.R. 2003. South Unimak and Shumagin Islands June Salmon fishery. Regional Information Report No. 4K03-65.

Wadle, J. and K. Brennan 2001. The Alitak Bay District Commercial salmon fishery. Regional Information Report No. 4K01-60.

Weiland, K. 2003. Summary of Bristol Bay Sockeye salmon Catches By Gear Type, 1965-2003. Regional Information Report1 No. 2A03 - 25

Post-meeting Submission

ADF&G 2003 AYK Test and Project Fisheries

ADF&G 2003. Test Fishery bycatch report. Division of Commercial Fisheries, Westward Region. Bear River 2002 and 2003.

ADF&G Test Fishery bycatch report. Division of Commercial Fisheries, Southeast Region. Hawk Inlet.

ADF&G Test Fishery bycatch report. Division of Commercial Fisheries, Westward Region. Shumagin Islands Immature Salmon.

ADF&G 10 October 2002. Division of Commercial Fisheries. Candidate Stocks of Concern.

ADF&G 11 July 2004. Kuskokwim Bay Commercial Fisheries Update #4

ADF&G 11 May 2004. Memorandum Alaska Department of Fish and Game Division of Commercial Fisheries re: Area M Escapement Goal Recommendations.

ADF&G 19 August 2004. Memorandum. SE Alaska Sockeye and Pink Salmon Escapement Goal Recommendations

ADF&G 2004. Draft of explanation of lesser stocks not directly managed.

ADF&G 23 Sept. 2003. Divisions of Commercial Fisheries and Sport Fish. Memorandum regarding the Evaluation for Stocks of Concern.

ADF&G 30 June 2004. Memorandum South Alaska Peninsula June 7-29 Fishery Brief

ADF&G April 2004. State of Alaska Comments re: Petitions for Federal Extra-Territorial Jurisdiction in State Waters of the South Alaska Peninsula for the Protection of Subsistence Fisheries on Federal Lands in Western Alaska

ADF&G Draft Memo. Board/Department Relations.

ADF&G Sept. 2003. Memorandum from ADF&G to Alaska Board of Fisheries re: AYK Region Candidate Stocks of Concern (File No. AYK 2003 Final Soc.doc)

ADF&G South Peninsula Harvests June 2004.

ADF&G. 2003. Kvichak River Sockeye Salmon Stock Status and Action Plan, 2003. Regional Information Report No. 2A03-26.

ADF&G. 28 May 2004. Alaska Department of Fish and Game Federal Aid Project Annual Performance Report. Grant Number: E-5-HP. HCP Alaska Coastal Species: Studies Related to Listed/Candidate Marine Birds

ADF&G. Division of Commercial Fisheries. 12 July 2004 Norton Sound Salmon News Release. Record Pink and Sockeye Escapements in Northern Norton Sound.

ADF&G. October 2003. Statement of Work: Taku Inlet Hatchery/Wild Chum Interaction Study. Spatial and Temporal Distribution of Wild and Hatchery Chum Salmon in Marine Waters of Taku Inlet and Adjacent Areas.

ADF&G. Southeast Sustainable Salmon Fund
Statement of Work. Survey of operational fishing gear in the commercial and subsistence chinook salmon fisheries on the Yukon River.

Alaska Department of Fish and Game Federal Aid Project Annual Performance Report. Grant Number: E-5-HP Grant Segment: 1 Grant Title: HCP Alaska Coastal Species: Studies Related to Listed/Candidate Marine Birds Project Number: 1.0 Project Title: Short-Tailed Albatross Project Duration: February 28, 2003 to December 31, 2005 Project Reporting Period: February 28, 2003 to February 28, 2004 Project Interim Report Due: May 29, 2004 Location: Statewide

Alaska Department of Fish and Game. January 2004. Escapement Goal Review of Select AYK Region Salmon Stocks. Regional Information Report No. 3A04-01

April 2004 PROPOSAL 172: 5 AAC 05.331 Gillnet specifications and operations and 5 AAC 05.331 Fish wheel specifications and operations.

Board of Fisheries 18 June 2004. Memorandum from YR DFA on comprehensive look at quality of escapement.

Bue, F.J., B.M. Borba and D.J. Bergstrom. 2004. Yukon River fall chum salmon stock status and action plan. A Report to the Alaska board of Fisheries. RIR No. 3A04

Crane, P.A. and L.W. Seeb March 2000. Genetic analysis of chum salmon harvested in South Peninsula Post June fishery, 1996-1997. Regional Information Report No. 5J00-05.

Eggers, D. M. Historical overview of tagging studies South Alaska Peninsula June Fisheries. Power Point Slide Presentation.

Eggers, D.M. Is the North Pacific Ocean Carrying Capacity for Pacific Salmon Limited? Power Point Presentation.

Eggers, D.M. Biological escapement goals for Yukon River fall chum salmon. RIR No. 3A-01-10.

Eggers, D.M. 1996. Second Revision of harvest rates by the South Unimak and Shumagin Islands June Fishery on Northwest Alaska Summer Chum Salmon 1979-1994, and Bristol Bay Sockeye Salmon, 1970-1994. Regional Information Report No. 5J95-05

Eggers, D.M., K. Rowell, and B. Barrett May 1991. Stock Composition of Sockeye and Chum Salmon Catches in Southern Alaska Peninsula Fisheries in June.

Hasbrouck, J. J. and R. A. Clark. 2002. Escapement Goal Review of Chinook Salmon in the Ayakulik, Chignik, and Karluk Rivers. Alaska Department of Fish and Game, Fishery Manuscript No. XX-X, Anchorage.

Joyce, T. and D. Evans Unpublished Manuscript. Recovery of Marked Otoliths Reveals Straying of Hatchery Pink Salmon in Prince William Sound, Alaska.

Mecum, D. July 02, 2004. Email to Chet Chaffee re: AYK fishery update (Kuskokwim, Arctic, and Yukon areas).

Mecum, D. 2004. Email memo to Chet Chaffee re: Area M Fishery Management

Mecum, D. June 25, 2004. Email to Chet Chaffee re: AYK stocks of concern
PROPOSAL 171: 5 AAC 05.331 Gillnet specifications and operations

PROPOSAL 172: 5 AAC 05.331 Gillnet specifications and operations and 5 AAC 05.331 Fish wheel specifications and operations.

Seeb, L. W. and P. A. Crane 1995. Mixed stock analysis of Pacific Rim chum salmon in the 1993 and 1994 South Alaska Peninsula June Fisheries using allozyme and mitochondrial DNA data. ADF&G. Division of Commercial Fisheries, Westward Region. NPAFC Doc. 165.

Shaul, L., S. McPherson, E. Jones, and K. Crabtree. 2003. Stock status and escapement goals for coho salmon stocks in Southeast Alaska. Special Publication No. 03-02.

Shaul, L.D. 1994. A summary of 1982-1991 harvests, escapements, migratory patterns, and marine survival rates of coho salmon in Southeast Alaska. Alaska Fishery Research Bulletin. 1(1): 10-34.

Stewart, I.J., R. Hilborn, and T. P. Quinn. 2003. Coherence of observed adult sockeye salmon abundance within and among spawning habitats in the Kvichak River watershed. Alaska Fishery Research Bulletin Vol. 10, No. 1.

Surveillance Findings

In the 2004 surveillance, there was a mix of new questions coupled with some continuing concerns from the 2002-03 surveillance audit, all of which were presented to the client

(Alaska Department of Fish and Game) for consideration and response. The audit requirements were spelled out in emails and phone conversations in April 2004.

The general areas of inquiry included status of stocks throughout Alaska with special emphasis on the third of the state under Board of Fisheries Review, Area M Management Changes, Stocks of Concern, and lesser stocks without directed fisheries. In addition, SCS continued to inquire about staff changes, budget changes, and regulatory changes that may significantly affect ADF&G's continued management of Alaska salmon. Lastly, SCS monitored ADF&G's progress on meeting imposed conditions from the original certification.

Status of Stocks Statewide

As required in past surveillance audits, we again asked ADF&G to update the table showing the status of all salmon fisheries in Alaska under the management of ADF&G. We asked for updates to the data on directed and managed fisheries, as well as an update that included data on lesser stocks that may not have directed fisheries but are managed through a variety of practical measures meant to identify, assess, and protect these lesser stocks.

Appendix 1 contains the updated tables provided by ADF&G. Each stock is identified and its general status shown with regard to the attainment of its stated escapement goal and the status of the escapement goal (whether historical escapement, biologically based escapement (BEG), or sustainable escapement goal (SEG)).

Focal Stocks for the Annual Surveillance

This surveillance focuses on the third of the stocks under review in the current cycle of the Alaska Board of Fisheries: Arctic/Yukon/Kuskokwim (AYK), Bristol Bay, Alaska Peninsula, and the Aleutian islands.

Bristol Bay sockeye harvests are at levels below their historical levels of the past 30 years (Sands, 2003; Weiland 2004). One significant problem is the Kvichak River stock which has failed to meet escapement goals over the past 8 years and is being elevated from a stock of yield concern to a stock of management concern (Bristol Bay Staff 2003).

Salmon stocks in the Alaska Peninsula and the Aleutians are in somewhat better shape, with escapement goals being met with the exception of a few stocks, e.g., Chignik pink salmon and chum salmon (Pappas and Clark 2003). In many areas coho salmon escapements have not been difficult to estimate each year because of poor weather and other problems. A number of fisheries are interception or passing stock fisheries, hence are managed to take a fixed percentage of predicted returns elsewhere at their eventual destination, rather than an escapement goal. These are often mixed stock fisheries. One of these, the Area M June fishery in the South Unimak and Shumagin Islands, is a source of some contention hence is examined in greater detail herein.

Some salmon stocks in AYK region are in poor shape, with six major stocks of chum and Chinook salmon being listed as stocks of concern (Bue, et al. 2004, Salmonone and Bergstrom 2004, Lingnau and Bergstrom 2003, ADF&G 2003). In addition, some of these have also not met escapement goals over the past several years.

From the point of view of sustainable fisheries, the fact that stocks are at low levels is of course important if they are at low levels due to overfishing. It is doubtful that is the case here. Rather, the lower returns for these stocks may very well be lower due to ocean conditions. Our main concern here is the response of ADF&G to the declines in these stocks, specifically whether and how escapement goals have been modified in response to the decline, and the steps that have been taken to address the declines through the Stocks of Concern process.

Escapement Goals

We reviewed documents regarding changes in management of those fisheries over the past 3-5 years in the context of earlier concerns expressed in the original certification and past surveillances. Concerns we have raised regarding how the State of Alaska salmon management responds to declining stocks such as might be expected from the presumably very favorable ocean conditions over the past 30 years returning to less favorable conditions, are still present. The Alaska salmon fisheries had received high scores in the certification process because they are managed by limiting catches to allow fixed escapement of spawners. These fixed escapements resembled the Limit Reference Points of the precautionary approach to fishery management. Our concerns are associated with the possibility that as ocean conditions decline, the escapement goals may be adjusted downward. This was expressed in our condition for continued certification associated with performance Indicator 1F.

In the first surveillance, we noted that some catches were declining and that many of the escapement goals had been revised to lower values. We expressed our concern at that time, and the response of Alaska Department of Fish and Game was that many of the escapement goals were based on historical information rather than biological analyses, and therefore were not strictly set Limit Reference Points. Instead, escapement goal ranges were used to manage fisheries in such a way that the bottom of the escapement goal range acted as a Limit Reference Point in terms of in-season management. Should fisheries not be achieving at least the bottom of the escapement goal range, management actions would be put in place to limit harvests in order to attain the escapement goals. ADF&G further noted that actual Limit Reference Points (the absolute bottom of an escapement goal range that is biologically based) would be much lower than the escapement goals now in place. ADF&G further noted that they were in the process of developing absolute Limit Reference Points through their EGPIT committee, but that the process had become bogged down due to difficulties in determining just what the biological basis should be for an absolute limit reference point.

Escapement goals for the stocks we focused on in this surveillance have also been re-analyzed on the basis of more recent data, and in some cases using different methods

(Nelson, et al. 2004, Eggers 2001, Hasbrouk and Clark 2004). In some cases escapement goals have declined.

We have also concentrated on how Alaska salmon management reacts to stocks that are obviously declining. Such stocks are handled in the management process by declaring them Stocks of Concern, with stocks initially becoming stocks of yield concern, then, if they do not respond to reductions in catch, becoming stocks of management concern. A number of stocks in the focal areas are Stocks of Concern (e.g., Yukon River fall chum (Bue, et al. 2004) and AYK stocks (ADF&G 2003)). One concern we have with stocks of concern, is that they can be delisted by “lowering the bar”, rather than improving the stock. The Toklat River (Bue, et al. 2004) is an example. In 2000, the BOF classified the Yukon River fall chum salmon stock as a yield concern and the Toklat and Fishing Branch Rivers fall chum salmon stocks as management concerns. In 2003, ADF&G recommended that the Yukon River fall chum salmon stock continue as a yield concern, but that the Toklat and Fishing Branch River stocks be removed as management concerns. The Toklat River remains weak when compared to the optimal escapement goal of 33,000 salmon in regulation. However, this report recommends using the new biological escapement goal (BEG) of 15,000 to 33,000 rather than the OEG of 33,000. Utilizing the recent BEG, the Toklat River does not meet the criteria for designation as a management concern since the goal was achieved in 1998, 2002 and 2003. A second concern is that it appears that some stocks that are at historically low levels, and could be designated as Stocks of Concern, are not listed as stocks of concern because there is not enough information.

In summary, escapement goals continue to decline as a number of stocks decline. It should be kept in mind that the current escapement goals are considered to be above the minimum escapements required for sustainability, i.e. they are higher than Limit Reference Points would be. Nonetheless Alaska is left without absolute Limit Reference Points and the additional precaution they provide and this needs to be addressed in order to continue to protect Alaska’s salmon runs.

In summary, ADF&G has provided SCS with an explanation of how escapement goals are set, what current work is being conducted to improve understanding and implementation of escapement goals, and management practices in place to protect stocks that are seen to be declining over time. SCS is generally satisfied that the policies in place in Alaska continue to allow the management agency to identify stocks that need management actions to reduce harvests and build the stocks. Also, ADF&G is generally working on better methods of defining, setting, and implementing escapement goals so they are more reasonably based on biological parameters and set on a basis that does not require re-analysis or changes over the short-term. However, SCS is concerned that the committee for establishing Limit and Target reference points has bogged down recently. ADF&G needs to take further actions to reinvigorate the process for setting absolute Limit Reference Points (set escapement goals that do not require modifications in the short-term). This will be a critical issue for any attempt at re-certification. The certifier conducting the re-assessment will have to reconcile the historic escapement goals with the modifications made over the past 3-4 years, and determine if the escapement goals

are well founded and of enough substance so that ADF&G is able to withstand political pressure to lower the escapement goals to allow continued harvests if runs decline.

SCS is generally satisfied that the policies and practices explained to SCS address most of the requirements in the original condition for Performance indicators 1E and 1F. However, there are a couple of pieces of information that are still lacking to meet the full set of conditions for Performance Indicator 1F and therefore need to be provided. These are not as essential as the information on the status of the many salmon stocks in Alaska. In addition, it has taken a considerable effort for ADF&G to compile all the information requested. As noted in previous surveillance reports, SCS recognizes that it may have inadvertently placed an unobtainable timeline on ADF&G for the full analysis. As a result, SCS modified the original conditions timeline. SCS is further extending the timeline for the completion of the following conditions until February 2005:

- a) An assessment of the projected distribution of catches over spawning populations, the distribution of fisheries that would be shut down, and the socio-economic impact.
- b) A description of the department's response to poor salmon survival conditions experienced historically including the 3 years in the early 1970s.
- c) A summary of the data in terms of the number of spawning populations, the number of fish, and the economic value of the fishery.

This provides plenty of time after the close of the 2004 season for ADF&G staff to have the ability to perform the analyses.

Unmonitored, lesser Stocks

While we now have a comprehensive table of how the various stocks are managed and monitored, we did not have a quantitative understanding of the spawning salmon populations in Alaska that are not monitored nor intensively managed. For this surveillance, ADF&G began preparation of a document to provide that (Eggers 2004). Virtually all of the spawning streams are listed in the anadromous streams document, which is used for general planning purposes. The spawning salmon populations are monitored in some, while for reasons of lesser abundance or difficulty in monitoring, not in others.

Annual enumeration is listed in tables by region (Southeast Region, Central Region, Westward Region, and AYK Region). ADF&G plans to describe the status of streams by region but thus far has completed only the Southeast Region. Nonetheless it serves as an example of relative numbers. There are 5,400 catalogued streams in the Southeast, with about 3,000 producing salmon. Coho and pink salmon are found in almost all of these, chum salmon are found in a few, sockeye salmon in fewer and Chinook salmon in fewer still. Pink salmon occur in 2,500 streams, and escapements are monitored annually in 718 of them. These serve as indices of abundance in the others because there is a high correlation between escapement in the various streams. Chum salmon appear in 1,200 streams and escapement is annually indexed in 82 streams. Chum salmon are difficult to count when they co-occur with pink salmon. Coho salmon occur in virtually all of the 3,000 streams, with the bulk being in streams with runs of 1,000 or less. Because of

difficulties in counting escapements, only a handful of coho salmon stocks are annually assessed as indicator stocks (four streams with data back to the 1980s, four added in the 1990s and one in 2001). The indicator stock assessment is more comprehensive, with many fish coded wire tagged. There are also some streams with annual escapement counts of coho salmon on foot or by air. Sockeye salmon occur in 200 river/lake or river systems. Escapement is annually counted in 14 of these. Chinook salmon occur in 34 rivers in Southeast Alaska. Escapements are estimated in six of these, and there are aerial surveys of the rest.

This report is a necessary part of the description of the certified populations of Alaska salmon, with much valuable information. It quantifies the fraction of salmon populations not directly monitored, and gives a sense of how well the monitored populations represent them. We recommend that ADF&G complete the report by finishing similar descriptions for regions other than the southeast.

June Fishery in Area M, South Unimak and Shumagin Islands

The fishery for sockeye and chum salmon in South Unimak and Shumagin Islands has a long, complex and sometimes contentious history. We will not review the details of management history here, especially as they concern allocation rather than sustainability. Rather we will focus on the current action and consistency with MSC Principles.

The action taken by the Board of Fisheries in February, 2004 was to double approximately the amount of fishing time in the month of June. This was accompanied by moving the opening date from June 10 to June 7, increasing the periods of continuous fishing and shortening periods of closures, and increasing fishing area in the South Peninsula.

Some concerned stakeholders in the fishery, including Fred Bouse, brought to our attention changes in management of certain salmon fisheries by the Board of Fisheries during the last review cycle. Three of four Board of Fisheries members disagreed with the majority opinion on decisions taken with regard to Area M. Fred Bouse provided the assessment team with a copy of the minority opinion written by the three dissenting members. The minority opinion discusses concerns that the new management decisions could severely and negatively impact the fisheries in the AYK area. In addition, Fred Bouse provided some additional background documents on escapement goal analyses as well as a summary of concerns he has as a stakeholder in Alaska salmon fisheries. SCS reviewed all the information and conducted phone interviews with Fred Bouse and Virgil Umphenower to get a full understanding of the stated concerns. SCS then posed questions to ADF&G to determine why the agency believed that the increase in fishing time in Area M, and the potential increase in catch, would not pose a threat to stocks of concern. SCS was provided a thorough explanation of the data used to make the decisions as well as the discussions that ensued at the Board meetings.

The effect of the new management actions on the stocks, as estimated by ADF&G, would be roughly to double the catch. A 1987 tagging study indicated that a substantial fraction

of the sockeye salmon were intercepted Bristol Bay stocks (84 percent of the South Unimak fishery and 54 percent of the Shumagin island fishery). Determination of the origin(s) of the chum salmon is not as straightforward because of problems interpreting the tagging data, but there are also Genetic Stock Identification studies on which to base conclusions. Roughly a third or more of the chum salmon stocks are bound for northwestern Alaska streams. It is estimated that the harvest rate of this fishery was well less than 5 percent on Alaskan sockeye stocks, and 4 to 7 percent on Alaskan chum salmon stocks. The harvest includes fish from several stocks of concern including Kvichak sockeye, Norton Sound Subdistrict One chum salmon, Yukon River summer chum salmon, and Kuskokwim chum salmon.

The information on which these various percentages and rates are based was gathered prior to 2001, when the fishing regulations were a guideline that sockeye landings be 8.3 percent of the total projected harvest of Bristol Bay sockeye and a cap on the chum fishery. A change by the BOF in 2001 replaced these with a limit of a total of 144 hours of open fishing. The recent change roughly tripled that to 416 hours. During the two years in which the change in 2001 applied (2002 and 2003, there was a strike in 2001), sockeye salmon catches were low and chum salmon catches were at or above the chum salmon catches of 1996-2000 (Shaul 2003).

The justification given in the majority opinion of the BOF, i.e., "The precautionary approach does not require imposition of significant conservation restrictions where the potential impact of a use is likely so minimal as not to be measurable." is consistent with the explanation provided by ADF&G that the low level of exploitation of these stocks will not negatively affect the stocks of concern.

From the point of view of a precautionary approach to fisheries management, increasing the harvest of species that have been identified as being stocks of concern would seem a step away from being precautionary. In most cases, it is precisely when uncertainty occludes the outcome of an action that the move should be toward less fishing, not more. However, ADF&G continues to make the case that there is little risk due to a variety of factors including knowledge of the fishing effort historically seen in the area. The 2004 runs in the region seem strong, suggesting that the management actions taken may have been reasonable. However, additional years will tell if the management actions taken are proper. ADF&G has noted for SCS that certain actions to review the situation in the fisheries of concern have been agreed:

1. The Department of Public Safety will substantially increase enforcement efforts during the South Peninsula June fishery.
2. The Department of Fish and Game (ADF&G) will institute sampling procedures at the processing plants in King Cove and Sand Point as a cross-check against fish ticket data. Sampling will focus on the ratio of sockeye to chum salmon. To the extent practicable and appropriate, data for future analysis for both the Northwest Alaska chum salmon and Bristol Bay sockeye will also be collected at these processing plants for possible use in future research.

3. The Alaska Department of Fish and Game (ADF&G) will, to the extent practicable, conduct test fisheries in the areas where fishing occurs during open periods. The test fishery will be conducted by three vessels, two in the South Unimak fishery and one in the Shumagin Islands fishery. The focus of the test fishery will be the ratio of sockeye to chum salmon. In conducting the test fisheries, ADF&G will also, to the extent practicable, collect scale and genetic samples from chum salmon and for Bristol Bay sockeye salmon for possible use in future research.

4. Overall, ADF&G will monitor the fishery very closely to detect situations that raise conservation concerns and unexpected impacts on subsistence fisheries. If such monitoring demonstrates concerns about the sockeye to chum ratio, the Department will use its influence to request that the fleet move to a different areas or to stop fishing to allow time for a better ratio. The Commissioner reserves the right to exercise his Emergency Order authority under the standards laid out in statute and case law.

5. The State will, no later than September 15, 2004, develop, support and participate in a Work Group composed of representatives from stakeholder groups to seek funding for, and develop further research programs and stock identification studies including programs to gather information about the total fishing mortality of Northwest Alaska chum stocks. The State will take the lead in providing administrative support for the first meeting of the Work Group.

If there is any suggestion that the management actions are having an adverse affect, SCS expect ADF&G and the Board of Fisheries to take immediate corrective action. SCS will watch this activity closely and request an update on the situation at the end of the fishing season. If the circumstance of continued declines in these stocks of concern continues to occur, and if management actions are not modified to reflect added protection for these stocks, the certification of these salmon runs would be in jeopardy and could be revoked.

Changes in management

SCS continued to monitor the change in management regarding the agency responsible for habitat protection. There is no specific evidence that SCS was provided that shows the move has resulted in negative actions to salmon habitat. However, SCS has continued to receive concerns from various stakeholders that the abilities of the Department of Natural Resources are not sufficient to maintain the function. There is no way to determine at this time whether the function can or cannot be properly maintained under the new management arrangement; however, SCS notes in this report this is a significant issue that is better addressed during a re-assessment of the fishery in 2005 should Alaska decide to continue with MSC certification. A re-assessment should cover this area of concern and address it directly to determine if by the time of re-assessment

there have been any problems arising in habitat protection as a result of the new arrangement.

Changes in ADF&G staffing levels.

No significant changes in ADF&G staffing were brought to the attention of SCS that would appear to significantly limit the agency’s ability to manage salmon.

Hatchery production in Alaska.

SCS found no significant changes in process or practice that would change the situation reviewed during the original assessment. However, re-reviewing in total the hatchery policies and the data on hatchery production and wild runs, especially in hatchery intense areas such as Prince William Sound, must be a significant aspect of any re-assessment of the salmon fisheries in Alaska. Specifically, a re-assessment should examine what recent genetic and population research is being conducted to ascertain the ongoing effects of hatchery releases.

Requirements for Continued Certification

Principle 1, Criterion E	Target Reference Points	ADF&G has complied with the request and provided a summary of all managed stocks in Alaska (see Appendix 1). The timeline for responding to the remaining analyses of economic and sociological implications has been extended until February 2005.
Principle 1, Criterion F	Limit Reference Points (Known as Sustainable Escapement Thresholds or SETs in ADF&G)	Adequate progress has been made in terms of identifying the processes for establishing Sustainable Escapement Thresholds (Limit Reference Points) and explaining the management procedures in place and the work being done to better understand how to set an absolute LRP. This meet the general aspects of the condition. However. The time frame required for the additional analyses has been extended until

		February 2005.
Principle 1, Criterion F	Present evidence to the certification body that the joint stock status report for northern coho required by the Pacific Salmon Treaty was undertaken in a timely and cooperative manner.	Accomplished in year 2001-2002 Surveillance. Closed.
Principle 1, Criterion F	Stock management sustainability under PST.	ADF&G provided the certification team with the documents and agreements produced by the PST through June 2003. There has been no negative change in stock status. Although the condition has been met, SCS will continue to review this issue in each subsequent surveillance audit.
Principle 2, Criterion A	Bycatch and Discards	ADF&G has shown SCS what is being done to further examine potential issue with bycatch in the salmon fisheries. Collaborative work with National Marine Fisheries Service, local universities, and US Fish and Wildlife Service is providing ADF&G with a better understanding of potential bycatch and therefore satisfies one aspect of the condition. However, the condition requires that ADF&G provide a full analysis and summary of bycatch in salmon fisheries before the end of the full 5 year certification period. Given the time extension for the other conditions noted above, SCS would expect to get the summary analysis in the same time frame.
Principle 3, Criterion C	Management System Incentives and Subsidies for Sustainable Fishing.	The condition has been partially met. The lack of completion of reviews has been due to legal

		restrictions in Alaska with regard to fishery permit reviews. SCS therefore has extended this timeline as well to coincide with the February 2005 timelines noted above.
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Summary

In general, SCS finds that ADF&G has continued to meet all MSC requirements for maintaining the certificate issued in October 2000. However, there are several more analyses to be completed, where SCS has granted more time and is anticipating that ADF&G can comply by February 2005. Lack of compliance with these extended deadlines could result in loss of the certificate if SCS finds that the analyses originally required are still necessary to meet the MSC standards and nothing has been provided.